

SERVICE OPERATIONS MANAGEMENT

FIFTH EDITION



Pearson

ROBERT JOHNSTON, MICHAEL SHULVER,
NIGEL SLACK AND GRAHAM CLARK

Service Operations Management



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Robert Johnston

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Brief contents



Preface	xii
New features for this edition	xv
Case examples and exercises	xvi
Authors' acknowledgements	xx
About the authors	xxi

Part I

Framing service operations 1

1 Introduction to service operations	3
2 The world of service	36
3 Service strategy	63
4 The service concept	95

Part II

Service people 123

5 Customer relationships	125
6 Service quality	163
7 Designing customer experience	198
8 People in the service operation	230
9 Service culture	269

Part III

Delivering service 297

10 Service supply networks	299
11 Designing the service process	335
12 Managing service performance	377
13 Service resources and capacity	420

Part IV

Improving service operations 461

- 14 Service innovation 463
- 15 Service improvement 500
- 16 Learning from problems 545
- 17 Learning from other operations 572

Index 599

Publisher acknowledgements 607

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- A downloadable Instructor's Manual
- PowerPoint and Keynote slides that can be downloaded and used for classroom presentations
- Instructional video screencasts by the author team showing you how we approach the subjects in our own teaching
- Lesson plans
- Opportunities to network, share ideas and provide feedback
- ...and much, much more.

Contents



Preface	xii
New features for this edition	xv
Case examples and exercises	xvi
Authors' acknowledgements	xx
About the authors	xxi

Part I

Framing service operations 1

1 Introduction to service operations 3

Learning objectives 3

- 1.1 What is 'service'? 4
- 1.2 What is service operations management? 7
- 1.3 What are service operations managers responsible for? 18
- 1.4 Why is service operations management important? 22
- 1.5 Challenges for service operations management 24
- 1.6 Summary 30

Discussion questions and exercises 32

Case exercise: European Airlines Group 32

Further reading 34

Notes 35

2 The world of service 36

Learning objectives 36

- 2.1 Services are everywhere 37
- 2.2 Services are what we do and consume 47
- 2.3 Services are the way of the future 51
- 2.4 Summary 57

Discussion questions and exercises 58

Case exercise: Servitisation at Sterksteen 58

Further reading 61

Notes 62

3 Service strategy 63

Learning objectives 63

- 3.1 What is service strategy? 65
- 3.2 Why is it important to have a service strategy? 68
- 3.3 The process of service strategy formulation 72
- 3.4 How can service provide a competitive advantage? 78
- 3.5 How can service performance objectives be converted into operations priorities? 82
- 3.6 How can a strategy be sustained? 88

- 3.7 Summary 90
- Discussion questions and exercises* 90
- Case exercise: Corks Nightclub – an overnight success?* 91
- Further reading* 93
- Notes* 93

4 The service concept 95

- Learning objectives* 95
- 4.1 What is a service concept? 97
- 4.2 What is the structure of a service concept? 100
- 4.3 How can managers use the service concept? 106
- 4.4 Summary 114
- Discussion questions and exercises* 115
- Case exercise: Trialing new concepts at Capes & Latimer* 116
- Further reading* 121
- Notes* 121

Part II

Service people 123

5 Customer relationships 125

- Learning objectives* 125
- 5.1 Customers – who are they? 126
- 5.2 What are the benefits of retaining good customers? 135
- 5.3 How can managers develop good customer relationships (B2C services)? 138
- 5.4 How can managers develop good business relationships (B2B services)? 150
- 5.5 Summary 156
- Discussion questions and exercises* 157
- Case exercise: P-Mecxx Cyber Services (P-Mecxx)* 158
- Further reading* 160
- Notes* 161

6 Service quality 163

- Learning objectives* 163
- 6.1 What is customer satisfaction? 166
- 6.2 What influences expectations and perceptions? 175
- 6.3 How can expectations and perceptions be 'managed'? 179
- 6.4 How can service quality be operationalised? 185
- 6.5 How can managers discover customers' expectations? 190
- 6.6 How can a service be specified? 192
- 6.7 Summary 193
- Discussion questions and exercises* 194
- Case exercise: The Northern Breast Screening Unit* 194
- Further reading* 196
- Notes* 197

7 Designing customer experience 198

- Learning objectives* 198
- 7.1 What is 'customer experience'? 200
- 7.2 Servicescapes – their effect on the customer experience 204
- 7.3 Designing the customer journey 207

7.4	Managing the total chain of processes	214
7.5	What is the role of technology in shaping the customer experience?	221
7.6	Summary	224
	<i>Discussion questions and exercises</i>	225
	<i>Case exercise: Elena's customer experience</i>	226
	<i>Further reading</i>	228
	<i>Notes</i>	228

8 People in the service operation 230

	<i>Learning objectives</i>	230
8.1	Why is service delivery a pressurised task?	232
8.2	How can organisations manage service staff?	237
8.3	What is an appropriate level of employee discretion?	251
8.4	How can customers be 'managed'?	259
8.5	Summary	262
	<i>Discussion questions and exercises</i>	263
	<i>Case exercise: Superstore plc</i>	264
	<i>Further reading</i>	267
	<i>Notes</i>	267

9 Service culture 269

	<i>Learning objectives</i>	269
9.1	What is organisational culture?	271
9.2	What is service culture?	273
9.3	Culture frameworks, typologies and taxonomies	276
9.4	How do national cultures vary?	287
9.5	Can culture be managed?	289
9.6	Summary	292
	<i>Discussion questions and exercises</i>	293
	<i>Case exercise: Modularity, AI and culture change at Dexan Consulting</i>	294
	<i>Further reading</i>	296
	<i>Notes</i>	296

Part III

Delivering service 297

10 Service supply networks 299

	<i>Learning objectives</i>	299
10.1	How can service supply networks be described?	301
10.2	How can supply networks be configured?	309
10.3	Managing supply networks on an ongoing basis	317
10.4	Summary	327
	<i>Discussion questions and exercises</i>	328
	<i>Case exercise: Holmart and Wersa – the food waste partnership</i>	330
	<i>Further reading</i>	333
	<i>Notes</i>	334

11 Designing the service process 335

	<i>Learning objectives</i>	335
11.1	What is service process design?	337
11.2	What are the main types of service process?	340

11.3	How can managers 'engineer' service processes?	354
11.4	Repositioning service processes	361
11.5	Technology in service process design	364
11.6	Summary	369
	<i>Discussion questions and exercises</i>	370
	<i>Case exercise: The GDP Central Estimation Service</i>	372
	<i>Further reading</i>	375
	<i>Notes</i>	376

12 Managing service performance 377

	<i>Learning objectives</i>	377
12.1	What is 'performance management'?	379
12.2	Setting the vision, mission and strategic objectives	383
12.3	What is 'performance' in service operations?	385
12.4	Performance measurement	388
12.5	Performance reporting	400
12.6	Setting performance targets	402
12.7	Achieving consistency	404
12.8	Performance and control	405
12.9	Summary	411
	<i>Discussion questions and exercises</i>	413
	<i>Case exercise: Chilli Airways</i>	414
	<i>Further reading</i>	419
	<i>Notes</i>	419

13 Service resources and capacity 420

	<i>Learning objectives</i>	420
13.1	What is resource and capacity management?	422
13.2	Long-term resource and capacity management	427
13.3	Medium-term resource and capacity management	431
13.4	Short-term resource and capacity management	437
13.5	How do services manage bottlenecks and queues?	440
13.6	What happens when managers can't cope with demand?	446
13.7	How can organisations improve their capacity utilisation?	450
13.8	Summary	454
	<i>Discussion questions and exercises</i>	455
	<i>Case exercise: Treegrove Holiday Village</i>	456
	<i>Further reading</i>	459
	<i>Notes</i>	460

Part IV

Improving service operations 461

14 Service innovation 463

	<i>Learning objectives</i>	463
14.1	What is innovation?	464
14.2	What is different about service innovation?	470
14.3	What is the process of service innovation?	477
14.4	What resources are necessary for service innovation?	487
14.5	Summary	493

<i>Discussion questions and exercises</i>	494
<i>Case exercise: Developing the County Workhouse</i>	495
<i>Further reading</i>	498
<i>Notes</i>	498

15 Service improvement 500

<i>Learning objectives</i>	500
15.1 How can 'value' drive improvement?	502
15.2 Should improvement aim to be better or different? Incremental or radical?	505
15.3 How is improving service operations different?	509
15.4 What are the main approaches to improvement?	514
15.5 How can managers sustain continuous improvement?	529
15.6 Summary	533
<i>Discussion questions and exercises</i>	534
<i>Case exercise: Fermat Numérique</i>	535
<i>Further reading</i>	543
<i>Notes</i>	543

16 Learning from problems 545

<i>Learning objectives</i>	545
16.1 Why do problems occur?	546
16.2 How can complaining customers be dealt with?	548
16.3 How can managers use problems to drive improvement?	555
16.4 How can managers prevent problems occurring?	559
16.5 Summary	565
<i>Discussion questions and exercises</i>	566
<i>Case exercise: 'One-Stop' Protection Service</i>	567
<i>Further reading</i>	569
<i>Notes</i>	570

17 Learning from other operations 572

<i>Learning objectives</i>	572
17.1 What is benchmarking?	574
17.2 What are the different types of benchmarking?	576
17.3 How do organisations go about benchmarking?	584
17.4 How can quality awards and general benchmarking studies help?	592
17.5 Summary	594
<i>Discussion questions and exercises</i>	595
<i>Case exercise: Mumbai Private Bank</i>	596
<i>Further reading</i>	597
<i>Notes</i>	598

Index	599

Publisher acknowledgements	607

Preface



Introduction

This text is about how to manage and improve the operations in service organisations. The service sector is the largest part of most economies, and is growing. Furthermore, service is an idea that is not confined to the service sector; it has important implications for all types of organisations. And of all aspects of service, its operations activities are especially important. They are the parts of the organisation that create and deliver service to customers. The service could be that delivered to customers inside an organisation, such as staff in other functions, or the service provided by public sector organisations, voluntary organisations, mass transport services, professional services, business-to-business services, retailers, internet services, tourism and hospitality. In this text we do not focus on any particular type of service, but seek to cover the many decisions faced by operations managers in all these organisations. To illustrate this diversity, we have provided examples from many different types of service organisations and from many parts of the world.

Service operations management is *important*. Operations managers are, more often than not, the people who are responsible for most of the costs in an organisation and most of the revenues. After all, they manage most of the people and physical assets. Operations managers deliver the ‘profit’ (monetary or ‘social’). In this text, we refer to many aspects of ‘business performance’, not simply profit. Although many organisations are motivated by profit, most operations should also be assessed on broader criteria such as long-term costs, revenues, risk, adherence to budgets, customer loyalty and technological leadership.

Service operations management is also very *challenging*. We have captured many of the challenges that operations managers face every day, and the text is structured around how to deal with those challenges. Managing operations is also *exciting* because it crosses many conventional disciplines. Service operations often have to deal directly with customers, often in real time, so part of the excitement comes from the immediacy of operations; dealing with the needs of a stream of customers, managing the staff and making operational decisions to ensure the delivery of an appropriate quality of service at an appropriate cost.

The aim of this text

The aim of this text is to provide a clear, authoritative, well-structured, easy-to-read and interesting treatment of service operations management. But conventional management disciplines and functional boundaries are, to some extent, artificial. This is why the reader will find ideas and theories that come from marketing, strategy and human resource management, as well as conventional operations management. Our objective in writing this text is to help students and managers understand how service performance can be improved by studying service delivery and associated management issues. Service delivery is the focus of this text, yet we recognise that success depends not only on the obvious territory of operations in managing processes and resources, but also in understanding how operations managers must be involved in aspects of the organisation’s strategy, the service concept, organisational culture, and the way employees and customers are motivated and managed.

How well a service is delivered reflects the ability of the organisation to pull all these strands together, providing a service that meets the demands of its various stakeholders and providing appropriate and achievable service to customers while meeting required financial targets.

The Covid-19 pandemic

This publication was written before the COVID-19 pandemic had its impact on the world and, significantly for this text, on the nature of many service operations. As we go to press, it is not possible to forecast with any degree of confidence how much the pandemic will have affected service operations. That there will be some impact is certain. Exactly what the impact will be, or how much it will affect the day-to-day lives of service operations managers, is less certain. By the time you read this, many service operations practices may have changed. Some ideas that, at the time of writing, were assumed to be fundamental, may have to be adapted. Some types of operation may even no longer exist in their old form. So, if there are the occasional ‘gaps’ between what we have written and current reality, please forgive us. However, be assured that the underlying philosophy of how service operations should be managed, and the central importance of the service sector, will not have altered.

Who should read this text?

This is intended as a text for those who want to build on knowledge of the basic principles of operations management. It will also serve as a handbook for operations managers in service organisations as they seek to develop and implement operations strategies. Specifically, it is intended for:

- *Undergraduates* on business studies or joint studies degrees, or those specialising in hospitality, tourism or the public sector, for example, who wish to enhance their understanding of service operations management.
- *MBA students* who are managing service organisations and want to stretch their understanding of the area, and assess and improve their operations.
- *Executives* who want to focus on certain aspects of service delivery, such as customer experience, process design, capacity management, improvement, creating high-performance teams, performance measurement, world-class service or service strategy development, in order to challenge and change their own organisations.

Distinctive features

- *Operations focused.* This text has a clear operations focus and is concerned with managing operations. It explores operations-based issues, problems and decisions. It exposes students to the problems faced by service operations managers and helps practising managers deal with those issues. Each of the main chapters addresses how to deal with a particular problem or challenge.
- *Frameworks and tools.* Each chapter provides tools, frameworks and techniques that will help students and managers not only analyse existing operations but also understand better how they can deal with the issues that operations managers face. The frameworks, approaches and techniques will vary from topic to topic and will include, for example:
 - a list of key points to bear in mind when making decisions in a particular area;
 - a diagram or chart showing the relationship between two variables, or sets of variables, to help position an operation or help identify the nature of the relationships;
 - a list of questions, checks or tests that can be applied to a situation;
 - ways of quantifying or assessing qualitative variables;
 - the key stages in undertaking a particular activity.

- *Real-world illustrations.* Operations management is an applied subject, so each chapter includes a number of short illustrations – case examples – from around the world that show how organisations have either identified or dealt with the particular issues being discussed.
- *International.* The real-world illustrations – examples in the text, case examples and case exercises – are drawn from many countries to show the diversity and international nature of operations issues and activities. (We have included a list of the case examples later.)
- *Underpinned by theory.* Appropriate theoretical underpinning and developments are included and we have tried to explain them in an unobtrusive and accessible way. References, web links and suggestions for further reading are provided for anyone wishing to undertake more work in a particular area.
- *Managing people.* A key task for operations managers is managing people, and so this text contains a significant ‘managing people’ element. This includes not only employees but also customers, as well as managing and changing the culture of the organisation as a whole.
- *Technology-based service.* Rarely have technologies had such an impact on services, so information and communications-based technology services are integrated into the text and their operations implications explored.
- *State of the art.* The text contains some of the most recent ideas and information, covering in particular world-class service, performance management, service concept, the customer experience and service processes.
- *Summaries.* Each chapter concludes with a checklist summarising the key points, structured using the main chapter sub-headings.
- *Discussion questions and exercises.* At the end of each chapter there are some questions aimed both at students and at practising managers. We hope that these questions will encourage readers both to test their understanding and to apply the material in the chapter.
- *Further reading.* The topic keeps developing, so we have also provided some suggestions for further reading that should both develop the basics of the topic further and extend its scope.
- *Case exercises.* Each chapter concludes with a case exercise suitable for class discussion. The cases are short but focused on the topic and are a rich source of material for debate and development.
- *Instructor’s manual.* An instructor’s manual is available to lecturers adopting this text. It can be downloaded from www.servops.net and provides detailed questions to go with the cases and bullet-point answers to the questions.
- *Servops.net* is the instructor’s companion website for our text. Besides the instructor’s manual it provides a range of presentations in PowerPoint and Keynote formats to suit a range of teaching styles, experience and time constraints. The site also makes available a series of video screencasts in which the authors explain their approach to teaching each topic. **Servops.net** also gives instructors a series of lesson plans and handout designs.

Feedback and ideas

We would welcome feedback and suggestions to help us develop our text. In particular, we would like to know how you use the text, and if you have any suggestions for web links, readings or case examples. Please do not hesitate to contact either Michael Shulver at michael.shulver@me.com, or Nigel Slack at nigel.slack@wbs.ac.uk

New features for this edition



Since the previous edition of this text, sadly our dear friend and colleague, Bob Johnston, has died. His inspiration and support are missed by all who worked with him. But his enthusiasm and love for service operations management is, hopefully, reflected in this new edition. We have incorporated some new topics and updated the content in several ways, many of which Bob was actively working on.

To help us with this task we welcome Professor Nigel Slack to the author team for this fifth edition of the text. Nigel worked with Bob for many years and brings a wealth of experience in authoring his market-leading texts in operations management and operations strategy.

The previous edition of this text was published in 2012 and the subjects of service operations management and service management have advanced in that time. As a result, we have made quite a few changes to this edition. In particular, we have changed the chapter order to reflect a more up-to-date and logical structure – our apologies in advance to those classes who are still using the fourth edition. This has allowed us to expand our coverage, especially of the topics that have become more prominent since the previous edition. There are more things we want to do in future editions and we always appreciate and welcome the feedback we have had, which has led to many of the changes we have made. In summary, the changes have included:

- A new chapter structure based around four groupings of topics – framing service operations, understanding customers, delivering service and improving service operations. Following on from which:
- A new, more helpful structure diagram.
- More emphasis on how the topic being discussed is applied specifically in service organisations.
- Coverage of the growth in the service sector generally, and the various types of service organisation.
- A new chapter on service innovation.
- Although a few of the more relevant case examples from the previous edition are retained, most case examples are new, while others have been updated.
- We have added ‘worked examples’ in most chapters to help understand how the concepts can be applied.
- The addition of ‘counterpoint’ features in most chapters that provide comments or criticisms of conventional theory and/or practice.
- Fourteen new end-of-chapter case exercises (the old ones from the previous edition can be accessed at servops.net).
- A new look and format.

Case examples and exercises



Chapter	Topic	Feature	Organisation	Location	Page number
Chapter 1	Introduction to service operations	Case example	Sara Davies is the Team Manager at Scarlets Rugby Club – a service operations manager	Wales	12
		Case example	English National Opera	UK	20
		Case example	Two award-winning airlines with different strategies	International	26
		Worked example	Long Ridge Gliding Club	UK	28
		Case exercise	European Airlines Group	Europe	32
Chapter 2	The world of service	Case example	The problems of managing service in charities – Oxfam International	International	43
		Case example	Apple's move towards services	USA	49
		Case example	The Apple Store experience	International	52
		Worked example	ZPZ Systems' focus on customer experience	International	53
		Case example	Michelin – from selling tyres to providing tyre management services	International	55
		Case exercise	Servitisation at Sterksteen	Netherlands	58
Chapter 3	Service strategy	Worked example	Buxtain Security Services	UK	67
		Case example	IKEA and its 'big box' retail strategy	International	69
		Case example	Is Ocado really a technology service?	UK	71
		Case example	Service strategy at Singapore Airlines	Singapore	76
		Case example	Many different strategies for cruise companies	International	79
		Worked example	Amfring Transport	UK	87
		Case exercise	Corks Nightclub – an overnight success?	UK	91
Chapter 4	The service concept	Case example	The implicit service concept at Ramblers Walking Holidays – 'professional, passionate and knowledgeable'	UK	99
		Case example	Designing a new hairdressing concept in Japan	Japan	110
		Case example	The Lapworth Museum of Geology, Birmingham, UK	UK	111
		Worked example	TECLAN Translation Agency	UK	113
		Case exercise	Trialing new concepts at Capes & Latimer	UK	116

Chapter	Topic	Feature	Organisation	Location	Page number
Chapter 5	Customer relationships	Case example	The Prison Service	General	135
		Case example	Harley Owners Group (H.O.G.)	International	142
		Worked example	Site Steward Archaeological Tours	UK	147
		Case example	IKEA's customer training	International	148
		Case example	Revenge of the taxi driver	International	150
		Case exercise	P-Mecxx Cyber Services (P-Mecxx)	Europe	158
Chapter 6	Service quality	Worked example	Europa Conference Centres (ECC)	Europe	165
		Case example	Guestology at Optiker Söderberg	Sweden	166
		Case example	uSwitch	UK	171
		Case example	Le Berceau des Sens	Switzerland	171
		Case example	Banged up	UK	173
		Case example	Campwagen Conversions	UK	188
		Case exercise	The Northern Breast Screening Unit	UK	194
Chapter 7	Designing customer experience	Worked example	North Healey Building Society	UK	201
		Case example	More than a cosmetic difference	UK	202
		Case example	Is there an appropriate servicescape for prisons?	Europe	206
		Case example	The acute patient's journey	UK	208
		Case example	Left or right? The dynamics of crowd movement	International	220
		Case example	Would you bet your life on technology?	International	223
		Case exercise	Elena's customer experience	UK	226
Chapter 8	People in the service operation	Case example	It's not part of the job – Co-op's 'Safer Colleagues, Safer Communities' campaign	UK	235
		Case example	Caring for your players	Wales	242
		Worked example	Astell Mortgage Society (AMC)	UK	244
		Case example	Teamwork at Alain Ducasse's restaurant at the Plaza Athénée	France	245
		Case example	The many roles of a tour leader	International	247
		Case example	You're on camera, smile!	International	260
		Case exercise	Superstore plc	UK	264

Chapter	Topic	Feature	Organisation	Location	Page number
Chapter 9	Service culture	Case example	Why 'Googlifying' Yahoo was not enough	USA	275
		Worked example	Using the cultural web to think about culture change	General	283
		Case example	Weta Workshops' clan culture	New Zealand	285
		Case example	McDonald's – the exemplar of a hierarchy or control culture	International	286
		Case example	Making space for national culture at Four Seasons	International	289
		Case exercise	Modularity, AI and culture change at Dexan Consulting	Ireland	294
Chapter 10	Service supply networks	Case example	The lunch delivery service of Mumbai	India	308
		Case example	Vodafone brings back call-centre jobs	South Africa and UK	311
		Case example	Dark kitchens disrupt the restaurant industry	International	314
		Worked example	Caterof and Hotspace	Germany	321
		Case example	The Hoxby Collective	UK	326
		Case exercise	Holmart and Wersa – the food waste partnership	UK	330
Chapter 11	Designing the service process	Case example	Shouldice Hospital changes its position on the spectrum	Canada	346
		Case example	Managing the 'platform–train interface' with crowd control	Japan and UK	353
		Case example	The Queen Mother Hospital for Animals	UK	362
		Case example	Service technology also influences professional services	International	364
		Case example	Robot receptionists? Robot carers?	Japan	368
		Case exercise	The GDP Central Estimation Service	International	372
Chapter 12	Managing service performance	Case example	DPD uses visual performance systems in its depot	UK	381
		Case example	Measuring if you are happy (or not)	International	390
		Worked example	Ess Pannanservice (EP)	Scandinavia	399
		Case exercise	Chilli Airways	USA	414
Chapter 13	Service resources and capacity	Case example	Demand fluctuation on London Underground	UK	422
		Case example	PortAventura World Parks & Resort	Spain	430
		Case example	Working in the gig economy	International	435
		Case example	Karolinska Hospital improves resource utilisation	Sweden	439
		Case example	Border-line unreasonable	International	442
		Case exercise	Treegrove Holiday Village	UK	456

Chapter	Topic	Feature	Organisation	Location	Page number
Chapter 14	Service innovation	Case example	IDEO, service innovation and design	International	466
		Case example	Monzo Bank	UK	473
		Case example	The Icehotel	Sweden	475
		Case example	McDonald's Innovation Centre	USA	481
		Case example	Singapore Zoo	Singapore	485
		Case example	NHS Innovation Challenge Prize – Breathe Arts Health Research	UK	490
		Case example	If one customer wants it, maybe more do?	UK	491
		Case example	DHL innovation workshops	International	492
		Case exercise	Developing the County Workhouse	UK	495
Chapter 15	Service improvement	Case example	Using available passenger space in aircraft	International	503
		Case example	Four Seasons and Zara	International	505
		Case example	Six Sigma at Wipro	International	518
		Case example	St Göran's Hospital	Sweden	520
		Case example	Pixar's creatives use lean principles	USA	521
		Case example	Kaiten-zushi restaurants	Japan	523
		Worked example	Value stream mapping at PoPaws	Australia	525
		Case exercise	Fermat Numérique	France	535
Chapter 16	Learning from problems	Case example	Where are my bags?	International	551
		Case example	MTR Corporation, Hong Kong	Hong Kong	553
		Case example	The Slack recovery approach	International	557
		Case example	<i>Poka yoke</i> in healthcare	International	560
		Case example	A service guarantee for aviophobes	UK	561
		Case exercise	'One-Stop' Protection Service	UK	567
Chapter 17	Learning from other operations	Worked example	Macy–Helston Foot Care	UK	574
		Case example	Acuity and HouseMark	UK	578
		Case example	John Lewis deprives retailing of an industry benchmark	UK	580
		Case example	The benchmark that nobody wanted	USA	581
		Case example	Benchmarking the NBA – bouncing accepted wisdom	USA	582
		Case example	A 15-day turnaround time	UK	586
		Case example	School performance tables	UK	591
		Case exercise	Mumbai Private Bank	India	596

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Michael Shulver, Nigel Slack and Graham Clark

About the authors



The late **Robert (Bob) Johnston** was Professor of Operations Management at Warwick Business School. He had a management degree from the University of Aston and a Ph.D. from the University of Warwick. Before moving to academia, Bob held several line management and senior management posts in a number of service organisations in both the public and private sectors. He maintained close and active links with many large and small organisations through his research, management training and consultancy activities. Bob taught both undergraduate and postgraduate courses and had global experience in executive education with leading companies. His research interests included service transformation, service excellence and leadership, service recovery, complaint management, performance management, service design and service strategy. He published over 150 papers, books and chapters, and wrote over 100 case studies. Bob served as Deputy Dean of the Business School, the Academic Director of the Warwick MBA and Head of the Operations Management Group. He also served on the editorial boards of ten leading journals. He was a member of several international advisory boards, an Honorary Fellow of the European Operations Management Association and a Vice President of the Institute of Customer Service.

Michael Shulver is a Senior Lecturer in the Information, Decision and Operations Division at Bath School of Management, where he is the Director of Online Teaching. Michael has an astrophysics degree from the University of London, and MBA and Ph.D. degrees from the University of Warwick. Before his time in academia, Michael was an aircraft engineer. Michael has also worked as a consultant in performance management. In this role, Michael worked with the UN, Syngenta and BP. Michael's teaching portfolio includes operations management, service management, performance management and service sector innovation/design management. Michael has delivered lectures and workshops in these fields at Executive, MBA and Undergraduate levels at Warwick Business School and Birmingham Business School and has taught as a visiting lecturer for Stockholm School of Economics, Vlerick Gent Management School, The Danish Technology University, Templeton College, Oxford and the UBS Business University. Michael set up and ran the world's first accredited wholly online MBA Programme at University of Birmingham and continues his interest in online learning at Bath School of Management.

Nigel Slack is Emeritus Professor of Operations Management and Strategy at Warwick Business School and an Honorary Professor at Bath University. Previously he was the Royal Academy of Engineering Professor of Service and Support Management at Cambridge University, Professor of Operations Strategy at Brunel University in London and a lecturer in Management Studies at Oxford University. He worked initially as an industrial apprentice in the hand-tool industry and then as a production engineer, production manager, distribution manager and as an operations director in the engineering and consumer durable industries. He is a consultant, researcher and teacher with wide experience in many sectors, including financial services, oil and gas, utilities, retail, professional services, general services, aerospace, FMCG and engineering manufacturing. He is the author and co-author of many publications in the operations management area, including: *The Manufacturing Advantage*; *Making Management Decisions*; *Service Superiority*; *Cases in Operations Management*; *Operations Strategy* (with Michael Lewis); and *Operations and Process*

Management: Principles and Practice for Strategic Impact. His best-known publication is the market-leading text, *Operations Management* (with Alistair Brandon-Jones), now in its ninth edition (2019), published by Pearson – a book that has been translated into several languages. His latest works include *Essentials of Operations Management*, again published by Pearson, *The New CFO* and *The Operations Advantage*, the latter both published by Kogan Page. He is a Chartered Engineer and an Honorary Fellow of the European Operations Management Association.

Graham Clark is a Visiting Fellow at Cranfield School of Management, having been a member of the Operations Management Faculty for nearly 30 years. He served as Director of Cranfield's MBA programme for over 12 years. He has a degree in Mechanical Engineering from Leeds University and a Masters degree in Operations Research and Management from Imperial College London. Prior to moving to Cranfield University in 1986, Graham managed manufacturing and customer support operations in the aerospace and power engineering sectors. He was the co-author of *Customer Service and Support* (with Colin Armistead) and *Inspired Customer Service* (with David Clutterbuck and Colin Armistead), before collaborating with Bob Johnston on editions 1 to 4 of *Service Operations Management*. Graham's passion lies in service leadership and consulting with organisations to help them create and implement effective service strategies. He served as a non-executive director of the UK's Institute of Customer Service during a time of significant change in strategy. Graham's principal focus lies in delivering operations strategy and leadership development programmes for Cranfield's clients, most recently across Europe and the Middle East. He also works with Samaritans, as a volunteer, as director of the local branch, and also providing training and development across the charity's network.

Part I

Framing service operations

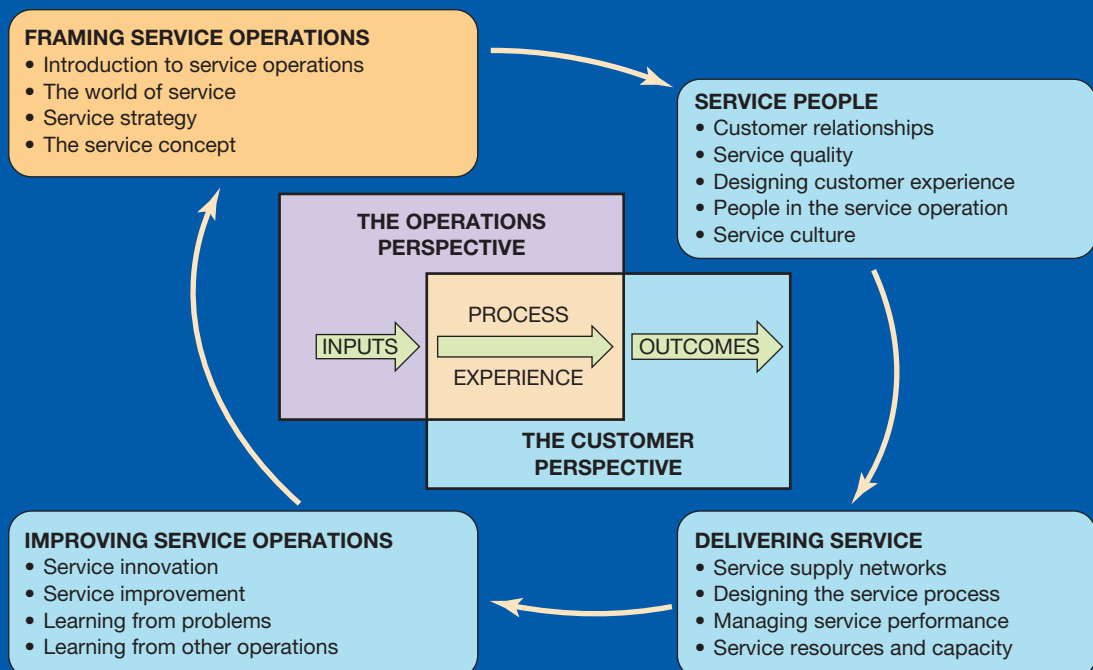


The aim of Part I is to introduce some of the fundamentals of service operations that will form the foundation of later topics.

This part consists of four chapters:

Part I Contents

- 1 Introduction to service operations
- 2 The world of service
- 3 Service strategy
- 4 The service concept



Chapter 1

Introduction to service operations



This introductory chapter starts by exploring what is meant by service, as distinct from the manufacturing of physical goods, and then looks at the general contribution of operations management before exploring what is distinctive about operations management in service organisations, what its responsibilities are and why it is so important.

Learning objectives

- To define the characteristics of services and understand the implications and limitations of these characteristics
- To be able to explain what service operations management is
- To understand the importance of service operations management
- To be able to understand the multiple perspectives on service operations management
- To gain an appreciation of the challenges faced by service operations managers

Introduction

We all use service operations. Almost certainly we use them every day, and almost certainly they are important in our lives. Service operations treat us when we are ill, transport us to wherever we need to go, serve us meals, sell us goods, connect us to social media, entertain us and (hopefully) educate us. Service operations are everywhere, and we are their customers. Many of us are also responsible for serving others, not only as part of our jobs, but also as part of daily life for our friends and families; providing cooking and cleaning services, ‘taxi’ services, organising holidays and providing emotional support services when needed. But if service is both widespread and important, why aren’t the services that we consume, as customers, better? Why do we wait too long to be seen at a doctor’s surgery? Why are we asked for the same information twice (or more) by the same organisation? Why does the parcel not arrive when it should?

As customers, we all have stories of those times when we have been let down by services and, hopefully, we also have stories of those times when services have delighted us. The difference between good and bad service is how well the services have designed, organised and run their service delivery operations. When service is poor, it is often because those responsible for creating and delivering service have not used their organisational resources effectively. In other words, it is a failure to deploy the principles of service operations management. That is what this text is about – the nature, character and challenges of managing service operations. The principles of service operations management that we describe in this text apply to all types of service organisation, indeed any organisation that uses resources in order to provide some form of service. We give detailed coverage of the main issues and challenges for service operations, and provide the tools and frameworks that managers can use to understand, assess and improve the performance of their operations. While the development of operations management as a discipline has its roots in production management,¹ this text concentrates on those operations issues that are particularly relevant to service organisations.

However, every organisation, without exception, is involved in service to some degree, and so a knowledge and understanding of service operations management can make a real difference to their success. Many of the concepts are equally relevant to manufacturing organisations because all manufacturing companies provide services, such as after-sales service and customer training, and internal services such as HR or IT support. Furthermore, manufacturing organisations are increasingly under pressure to differentiate by enhancing the service aspects of their offering and to increase service revenues. The later sections and chapters of the text deal specifically with these challenges, but first we will introduce several key concepts, starting with what we mean by ‘service’.

1.1 What is ‘service’?

It may seem like an easy question, but answering ‘what is service?’ has proven to be remarkably difficult. One might reasonably reply, ‘as opposed to what?’. Most early definitions of ‘service’ took the question to mean, ‘what is a service, as opposed to a manufactured product?’. From the early 1980s, the main distinction between services and products (now disputed) was that services are characterised by the following:

- Intangibility, in that they are not physical items.
- Heterogeneity, in that they are difficult to standardise.
- Inseparability, in that their production and consumption are simultaneous.
- Perishability, in that they cannot be stored.

These four features of services are known as the ‘IHIP’ characteristics. They are worth studying, even though they have been the subject of some considerable academic debate.

Intangibility

The most obvious characteristic of a product, as opposed to a service, is that it has physical form – one can physically touch a motor vehicle, a garment or a burger. By contrast, a pure service, such as theatre performance, a consultation with a doctor or financial advice, cannot be touched as such. The resources that carry out these services may be tangible, palpable and material, but not the service they provide. As one authority put it, ‘a service is something that can be bought and sold, but which [you] cannot drop on your foot’.² Certainly, when compared to physical products, it can be difficult to define the ‘boundary’ of a service. What a product is, and what it is not, is a relatively clear distinction, whereas the limits of what constitutes a service may need constant maintenance. Which is why service operations are frequently at pains to educate customers as to what they can and cannot expect from their services.

However, there are several problems with the idea that all services are intangible. First, many services have a tangible element as part of what they are offering. A motor vehicle service often involves (physical) replacement parts; meals and drinks are an essential element of an air journey; education services may include the provision of physical supplementary material such as (hopefully) books. Second, if we accept the argument that service is intangible, even if the resources providing the service are not, this does not mean that those physical resources are unimportant to how customers view the service. The life-support equipment in an intensive-care unit of a hospital is vital to the service provided, as is the state of the aircraft to an air journey. Third, and related to the last point, customers are unlikely to distinguish between the intangible and tangible elements of service. In fact, for many services, such as some retail services, the quality of service may be judged mostly on the tangible elements of the service. Finally, it could be argued that services involve some kinds of changes to customers (or their surrogates, such as their parcels sent by courier), and customers are certainly physical.

Heterogeneity

Heterogeneity means that each time a service is delivered, it will be different because the needs and behaviour of customers will, to some extent, vary. Customer behaviour is never totally predictable. No matter how well a service is designed, customers may still request a service beyond the limits of the service provider. Ask the operator of a bank’s contact (call) centre, or of a technical helpdesk, or emergency service, and they will report on customers asking for service well beyond their scope. Yet such services are directly exposed to their customers’ requests, and they must be dealt with. Moreover, when any service involves an interaction with the service staff of a provider, the exact nature of the contact will inevitably vary each time an interaction takes place. Even with considerable staff training, different staff will probably deal with different customers and their requests in different ways. In fact, neither customer nor service staff behaviour is either totally predictable or controllable, all of which makes achieving standardisation difficult. Yet there are significant cost efficiencies for any operation if it can achieve some degree of standardisation. However, heterogeneity is not exclusively a characteristic of services. Many physical products are valued for their variation. Customised products are valued for their lack of standardisation, as are craft or artistic products, which are idiosyncratic by nature.

Of course, service operations will attempt to reduce the range of possible interactions. They will signpost what a service can and cannot do, they will transfer ‘non-standard’ customers to a more appropriate service and they will provide guidance for staff, all of which can reduce, but not completely eliminate, variety. Such heterogeneity makes the full standardisation of services particularly difficult. Yet technology can help. For example, many years ago, financial services realised the value of ATMs in standardising service (in an admittedly limited way), after which the use of online (internet) banking allowed some scope for inappropriate requests to be filtered out. It is also worth noting that in some services, heterogeneity is welcomed because it can provide avenues for potential development of the service. For example, a customer request could provide the stimulus for a new variant in an organisation’s service offering, or perhaps even the development of a brand-new service.

Inseparability

Inseparability, in this context, means that the production of services and their consumption occurs simultaneously. In other words, the service provider (who ‘produces’ the service) is often physically present when its consumption by a customer takes place. In education services, a tutor explains concepts while students (attempt to) comprehend them, doctors listen to their patients, diagnose them and recommend treatment with the patient present, consultants provide analysis and guidance directly to their clients, and so forth. This is distinctly different to physical products that can be first produced and then consumed by the customer. The implication is that, unlike physical products, services cannot be consumed asynchronously, which, in turn, means that businesses that want to meet all demand for their services must have sufficient capacity in place to meet that demand *as it occurs*.

Yet, while this inseparability is true of those personal services such as some types of education, healthcare and consultancy, it has never been true for services where it is a customer’s possession or resources that are the ‘recipient’ of the service. So, for example, many widely used business or consumer services, such as transporting freight, laundering clothes or performing routine cleaning, are most commonly performed in the customer’s absence.³ Furthermore, technology has worked to reduce this characteristic in many services. In education, lectures can be recorded and viewed independent of their creation and student queries can be posted online, to be answered at a later time. Healthcare websites can help customers understand their conditions and advise on further diagnosis or treatment. Most organisations now understand the power of FAQs to decouple the production and consumption of information-based elements of service, and so on. For many services, the ubiquity of asynchronous communication tools such as SMS and email mean that previously face-to-face and immediate communication is now separated in time, to the mutual benefit of the server and the customer. (Asynchronous communications can be sent at any time, without regard to whether or not the receiver is ready.)

Perishability

A further consequence of the difficulty of storing service, and the idea of inseparability, is the characteristic of perishability. It means that services, in effect, have a very short ‘shelf life’. They may even perish in the very instant of their creation: the jokes in a stand-up comedian’s performance perish as they are told. Even if she tells the same joke on the next night, the performance and reaction could be different – it is a different service. Similarly, if a hotel room is not sold for a particular night, it has perished. The same room for sale on the next night is a different service. This means that matching capacity with demand, or managing demand to fit capacity, becomes particularly important to avoid underutilised resources and lost revenue. Often, ‘dynamic’ pricing is used to manage demand. So, for example, hotels will discount their rates in quiet times, or the comedy venue might offer discounted drinks and reduce entry fees in order to fill up demand in the early part of an evening.

However, again there is criticism of this characteristic. Whether one accepts the idea of perishability partly depends on what one regards as ‘stored services’, and partly on how one views the consumption of a service. First, let us deal with the issue of whether services can be stored. For example, the hotel’s ‘room for a night’ cannot be stored, but what is a hotel but a ‘store’ of rooms? All service operations ‘store’ many of the resources that they use to create their services. The resources do not necessarily ‘perish’. Hospitals ‘store’ medical technology, universities ‘store’ knowledge and so on. Second, what is meant by the ‘consumption’ of a service? If ‘consuming’ the performance of a stand-up comedian is simply experiencing the moment of the performance, then that particular service has indeed perished. However, if one treats the utility of the performance, say, in how it makes one feel, then the utility or value of the performance lasts longer. It might make one feel better for weeks or months. It might even change one’s life forever. Medical treatment may be over in hours or minutes, but the effect could sustain for far longer. So, perishability depends on whether it is treated as a time-defined issue, or by judging the continued benefits from a service.

Table 1.1 Summary of the IHIP characteristics of service

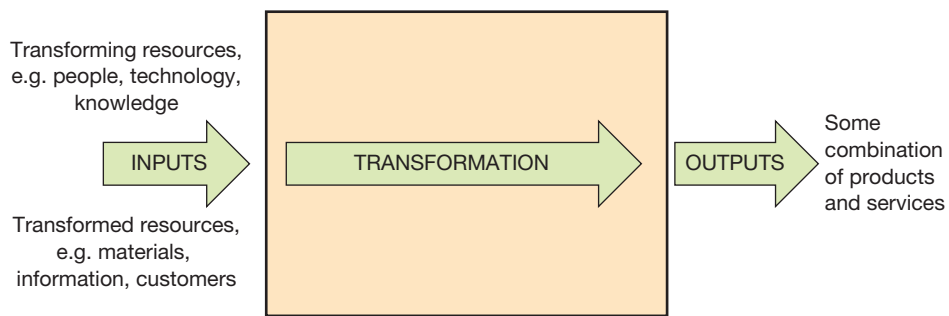
IHIP service characteristic	Meaning	Example	Definitional problems with the characteristic
Intangibility	Not having physical or material form	Education services (e.g. universities) enhance students' (intangible) knowledge	Many services include tangible as well as intangible elements The resources that provide the service are important and tangible 'Tangible' customers are transformed by services
Heterogeneity	Every service is different, difficult to standardise	Primary healthcare services should respond to each customer's (patient's) individual requirements and treat/advise accordingly	Heterogeneity is not only a characteristic of services
Inseparability	Production and consumption are simultaneous	When attending a live theatrical performance, the value lies in the 'immediacy' of its presentation	May be true for personal services but has never been true for services where it is a customer's possession or resources that are the 'recipient' of the service
Perishability	Service ceases to have value after a relatively short time	If a passenger train service is half empty for a journey, in effect half of that service has 'perished'; it cannot be used if it has not <i>been</i> used	Even if the activity of performing a service cannot be stored, the resources can The value of a service can endure far longer than its consumption

Table 1.1 shows a summary of the IHIP characteristics of service, with an explanation of what each means and some of the definitional criticisms of using each characteristic to define service. From this, and the previous discussion, two points become clear:

- None of the IHIP characteristics is unique to services as opposed to physical products. They are all definitionally questionable to some extent, which explains why a very considerable amount of academic discussion has been generated by them. However, if one is concerned 'broadly' and 'generally' with how services are different to physical products, and the implications of those differences, then the characteristics are a reasonable starting point.
- Technology has had a significant effect – both on the extent to which the IHIP characteristics apply and how the limits that they place on service operations can be overcome. In particular, the development of information and communication technology has opened up many new types of service offerings. And although these technologies may have diluted the applicability of the IHIP characteristics, of far more importance is the potential they give to the development of services. (We deal with service technology in both Chapters 7 and 11.)

1.2 What is service operations management?

The principles of operations management (in any kind of organisation, service or non-service) are broadly the same. Essentially, operations management is concerned with transforming a set of inputs into outputs. This is usually illustrated as an input–transformation–output model, as shown in Figure 1.1. Some of these inputs, such as people (employees), technology and knowledge, are 'transforming resources', and they act on other inputs, such as materials, information

Figure 1.1 The general input–transformation–output model of operations management

and customers, that are ‘transformed resources’. The purpose of this transformation process is to produce some combination of products and services. Within the transformation process (which is normally referred to simply as ‘the operation’), transforming resources are organised into an interconnected network of processes, through which transformed resources progress.

However, note two important points about an operation’s resources. First, they include not just internal resources, but also those that can conveniently be accessed (usually through suppliers). This means that an operation need not necessarily own the resources that it uses. It could have supply agreements that allow it to access resources as and when there is the need. Second, an operation’s resources are more than the buildings, technology, equipment and facilities that form the physical fabric of the operation. They even include more than the physical presence of the people that staff the operation. They include all the intangible elements, such as skills and knowledge, together with the intrinsic capabilities, relationships and understandings that have developed, such as those with suppliers and customers. In other words, although the easily quantified resources such as technology, facilities and staff are clearly important, it is the knowledge, skills and capabilities that they embody that can be even more important. This concept of the centrality of service resources, and how they create value, is a fundamental principle in the idea of service dominant logic (SDL), which we will describe in the next chapter. SDL distinguishes between operant resources (skills and knowledge that are usually invisible and intangible) and operand resources (tangible assets). SDL views knowledge and skills as the primary basis of a firm’s competitive advantage.

Resources and processes

Resources and processes are the two vital ingredients of all operations, and much of operations management is concerned with how they are managed. Both resources and processes are fundamental to how any enterprise creates value. However, it is the interaction between resources and processes that is key to the effectiveness of any operation. They are not physically separate things; they are simply a way of thinking about what goes on in an operation. More importantly, resources and processes impact on each other. An operation’s resources will constrain what its processes are capable of doing. Just as important, the experience gained over time by an operation’s processes can add to the capability of its resources. This mutual dependency of resources and processes is a particularly important point that helps us understand how operations improve their capabilities over time. It is also a point that we shall return to when we examine service operations improvement (see Chapter 15).

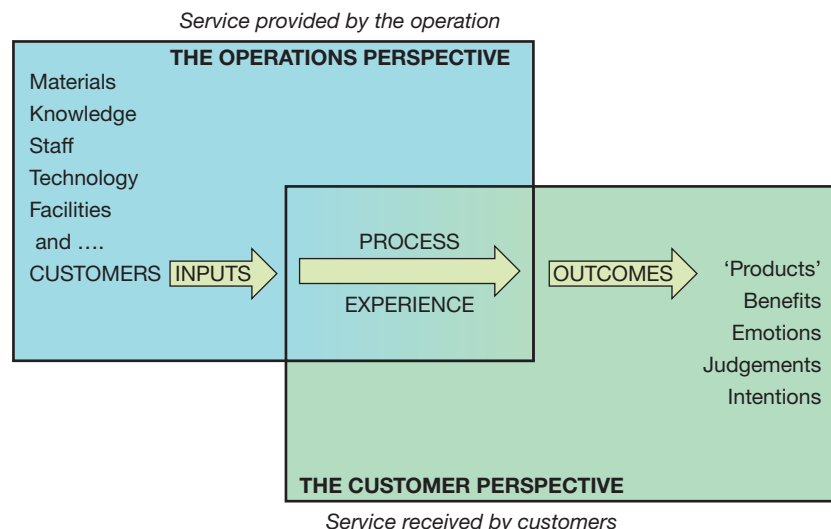
How any principles, or any models, are applied in practice will depend on the context in which they are applied. A common principle (for example, that the quality of a product/service should be judged by how it affects its intended customers) can be interpreted in very different ways depending on the nature of the customers being served (for example, their expectations, previous experience, etc.).

How is service operations management different from general operations management?

The input–transformation–output model is a broadly applicable generic model that applies to all types of operation, whether service or manufacturing. So, what is it about service operations that is different? Put simply, it is the relative importance of the various inputs to the transformation process. Whereas in the generic model of operations management, the transformed inputs are classed as some combination of materials, information and customers, service operations management is characterised by the importance of the customer (or the customer’s surrogate) as the central input to the transformation process. So, service operations, such as entertainment, healthcare, education, passenger transport, banking contact centres and hairdressing, ‘transform’ their customers directly. Customers have some degree of ‘presence’ as the service is ‘produced’. These services change something about the customers themselves – for example, their state of mind, physical or mental health, knowledge, location, security or appearance. Other service operations still add value for their customers, but do so by working on (transforming) their customers’ surrogates. For example, most of the operations effort in banks consists of working on their customers’ financial information, mail and parcel delivery services move customers’ letters and packages and garages repair their customers’ vehicles. Because the work on customers’ surrogates does not make them any less of a service, their customers will still judge the performance of their operations in much the same way as in more direct services. Nevertheless, the degree of ‘visibility’ of the service that customers have is an important factor in how a service is managed, and we shall be returning to the issue.

If it is the importance of the customer’s presence in the operation that makes service operations management distinctive, it follows then that ‘service’ will mean different things depending on the type of customer being served and the nature of the service that is being provided. The service provided by a local restaurant or gym will be quite different to that provided by a large cloud computing service, such as Microsoft, to its business customers. Therefore, it is useful to consider service operations not just from the perspective of the operations resources and processes themselves, but also from the perspective of the customers who receive the service. This means that the generic operations management input–transformation–output model needs reconfiguring to reflect both operations and customer perspectives and, just as crucially, the overlap between them. This idea is shown in Figure 1.2. We will deal with each perspective, and then how they overlap.

Figure 1.2 The input–transformation–output model of operations management interpreted to reflect the high customer-contact nature of service operations management



Service – the operations perspective

All operations tend to be complex. Service operations managers need to manage the interaction between all the various input resources and shape them into processes. For example, a hospital employs large numbers of staff (or employees – we use the terms interchangeably), with a variety of skills, from cleaners and porters to transplant surgeons. It will care for hundreds of patients each day, through many different specialist departments, each providing a range of treatments. Managing this type of service operation is extremely challenging, not only because managers are dealing with life-and-death situations every hour, but also because of the complexity of the operation. The complexity is in part due to the volumes of patients and the wide range of treatments available, but also due to the fact that, as with many service organisations, hospitals comprise an internal ‘ecosystem’ of many different service processes that must be coordinated and linked together. In effect, a hospital is an extended network of services and processes. For the hospital, these processes include reception services, scanning and diagnostic services, pharmacy services, operating theatres (where procedures are carried out), catering, physiotherapy and so on. In addition, there are the support processes that may not deal with customers (patients) directly, but which indirectly contribute to the smooth running of the hospital. These processes include information systems support, equipment and building maintenance, human resource services, training and finance. Externally, the hospital interacts with other service organisations such as the local ambulance service, social care organisations, voluntary organisations, specialised laboratories and so on.

Services have different characteristics

The consequence of the customer (or surrogate) being present within the service and therefore having some visibility of the operation’s activities can be summarised by the IHIP characteristics that we described earlier. These are:

- Intangibility, in that they are not physical items.
- Heterogeneity, in that they are difficult to standardise.
- Inseparability, in that their production and consumption are simultaneous.
- Perishability, in that they cannot be stored.

And, although these characteristics are not ‘pure’ in the sense that all types of service fully conform to them, they do indicate some of the ways services are different to products.

Table 1.1 showed a summary of the IHIP characteristics of service, with an explanation of what each means and some of the definitional criticisms of using each characteristic to define service. Table 1.2 extends this to show some of the implications for service operations and how any potential negative impact could be limited for each characteristic.

But not all services exhibit these characteristics to the same extent. In fact, different services delivered by the same operation can vary considerably in how they conform to the IHIP characteristics. For example, a university might use a variety of ‘learning experiences’ to educate its customers (students). These might include:

- Conventional, non-interactive lectures, where a relatively large number of students listen to a lecturer give a lecture that she has (probably) given previously and where students take notes as they listen.
- Pre-recorded sessions, where an expert ‘talks to camera’, maybe including some illustrative material. Students can access these sessions online at their convenience.
- Small group tutorials, where students work on exercises and discuss them among themselves, guided by a tutor.
- Individual ‘counselling’ tutorials, where an individual student discusses their learning with a tutor who explores possible gaps in the student’s understanding.

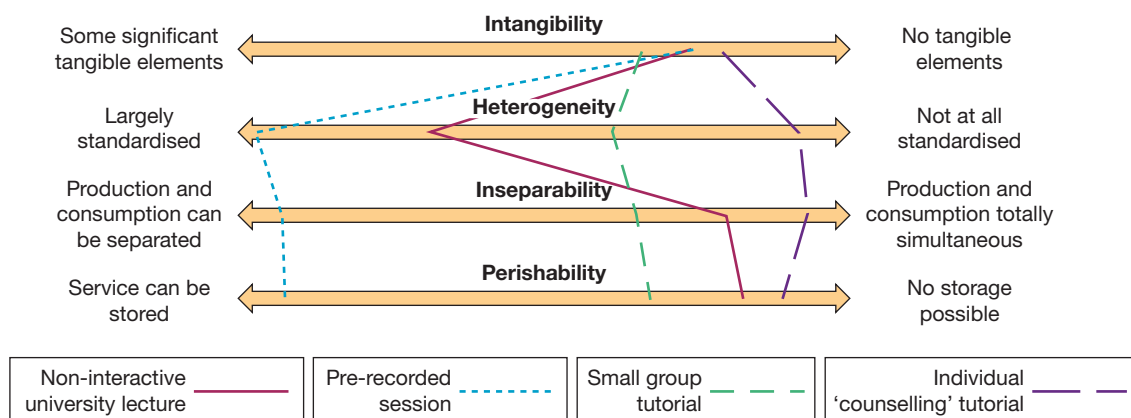
The characteristics of these four services are illustrated in Figure 1.3. In none of the services are there many, if any, tangible elements, although notes may be available online that some students

may prefer to print. However, on the other characteristics, the services differ widely. At one extreme, individual counselling tutorials are not at all standardised, occur when student and tutor are together and cannot be stored. They are a customised experience. By contrast, each pre-recorded session is totally standardised, students can experience it whenever they want and it is always available in its 'stored' state online. It is a 'product-like' service.

Table 1.2 Some implications of the IHIP characteristics on service operations management

IHIP service characteristic	Meaning	Implications for managing service operations	Ways of limiting the operations impact
Intangibility	Not having physical or material form	Difficult to define the 'boundary' of intangible elements of service	Manage customers' expectations as to what the service comprises
Heterogeneity	Every service is different, difficult to standardise	Customers could ask for elements of service that are difficult to predict and may be outside the operation's capabilities Difficult to achieve the significant cost efficiencies that result from some degree of standardisation	Manage customer expectations Staff training to cope with a wide variety of requests Transfer of 'non-standard' customers to a more appropriate service
Inseparability	Production and consumption are simultaneous	Services cannot be easily stored To meet all demand, service operations must have sufficient capacity in place to meet demand <i>as it occurs</i>	The use of technology may be able to separate production and consumption Customer guidance can reduce the need for contact (e.g. the use of FAQs on a website)
Perishability	Service ceases to have value after a relatively short time	Services cannot be easily stored Matching capacity with demand (or vice versa) is important to avoid either underutilised resources or lost revenue	Accurate demand forecasting helps to plan service capacity Capacity and/or demand management helps to match capacity and demand (e.g. through dynamic pricing)

Figure 1.3 The 'IHIP' characteristics applied to four learning services at a university



What is significant about this type of analysis is not simply that different services are, well, different, it is the implications of those differences that is significant. In this case, the pre-recorded session requires the provision of production and editing technology as well as the ability to view the session at any time and on any medium. The individual ‘counselling’ tutorial, by contrast, requires little, if any, technology, but does call for significant diagnostic and counselling skills from the tutor. Planning the availability of the pre-recorded sessions is largely a matter of scheduling their accessibility at the appropriate time to be viewed by students. However, planning the individual tutorials will be more complex. Many tutorials can be scheduled with students in advance, but there will always be the need to allow for ‘emergency’ tutorials for those students with problems. The tasks that operations managers need to engage with if they are to manage the competing requirements of different services include choosing and implementing appropriate technology and facilities, selecting and developing the people who staff the operation, making sure that there is sufficient capacity to meet some level of demand, designing the processes through which customers receive their service and running day-to-day activities.

Case example

Sara Davies is the Team Manager at Scarlets Rugby Club – a service operations manager⁴

It is enjoyed by millions, but managed by a few. Sport is a mass service that needs managing like any other service, and it has one of the most attentive and passionate groups of customers (fans) who are devoted to the team or individuals they support, sometimes fanatically. Managing this type of service requires dedication.

Sara Davies is the Team Manager at Scarlets Rugby Club, and she is a service operations manager. She was prepared for what is a demanding role, partly by her sports development and coaching degree but also by her early experiences in ‘Young Farmers’.⁵

I was a member of Young Farmers from eleven – so the things I learned there about public speaking, taking minutes, doing competitions, and so on, have been very helpful. Also, being club secretary for my university rugby team has been just as helpful as my formal education. I read for a Sports Development and Coaching degree because I thought I wanted to be a Rugby Development Officer, but I never dreamed that I’d be working in professional rugby. As I developed through my university days I was carrying out more of the off-field roles and really enjoyed them. What I like most about the job is the pressure. I may be calm on the outside, but, like the proverbial swan, I’m

paddling away like mad underneath. In one of the early meetings with our coach, Brad Mooar, Brad asked us why we do what we do. Most people came back and said, ‘because I love it’, and that is true for me. It would be impossible to deal with the pressure, and the long hours, unless we loved what we do.’

The Scarlets are one of the four professional Welsh rugby union teams and are based at Parc y Scarlets stadium in Llanelli, South Wales. They play in the Pro14 and European Rugby Challenge Cup competitions. Scarlets’ 54-strong squad of players is supported by the head coach and his back-room staff, including playing coaches, strength and conditioning coaches, physiotherapists and analysts. The job of ensuring that the match squad, coaches, support staff, medics and the ‘kit man’ get to every fixture in one piece, in good condition and ready to play, falls to Sara. While the biggest part of Sara’s role concerns travel planning and logistics, and general administration, she is also responsible for player welfare, budget control, match day and match build-up operations, and scheduling player appearances, both for the team and for individual players.

Logistics is particularly important. About 50 per cent of the club’s fixtures take place ‘away’ (from home), with many Pro14 fixtures involving journeys

to northern parts of the United Kingdom, Ireland and South Africa. European Challenge Cup fixtures could involve trips to anywhere in mainland Europe.

Nearly all flights are with regular commercial airlines but we will charter if we need to. Luckily most of the clubs that we play against in the Pro14 are adjacent to quite good airports, and we can reach these from Cardiff. We're always looking for 'high performance' first, and if there is anything about the travel arrangements that might detract from that aim, then we will seek alternative arrangements such as a charter. Obviously, another aspect of the away fixtures is booking accommodation, meals, accommodating specific diets and so on. For the overseas games, all the equipment has to be packed onto the aircraft, and an important implication of flying with the equipment is that everything has to be inventoried in case the airline or airport security want to inspect any particular bag.

Sara manages several budgets, the biggest of which is for travel to fixtures.

I have my travel budget, but exactly how I spend it is up to me in terms of travel and logistics. I am also aware of staff and player salaries and the medical budgets, which vary considerably from season to season. For example, last season we had a huge number of game-related injuries, most of which we could not predict. However, there are some types of injury that we can predict to some extent, and we try to intervene to prevent these. These include training-based muscle pulls and strains. To try and keep our players in optimum physical condition, we try to mirror the same patterns and levels of activity in the non-playing and playing seasons.

Throughout the year, a great deal of Sara's time is absorbed by coordinating 'player appearances'. The range of player appearances is broad and complex. Players may appear at such events as TV interviews,



Gruffydd Thomas/Sport/Alamy Stock Photo

public-speaking occasions, kids' camps, local charity events, commercial (hospitality) events, shaking hands, kissing babies, leading mascots on to the field and so on.

On every match day we have 'the match day 23' (a mix of players and coaching staff) who are involved in meeting children, signing photos, posing for selfies, meeting commercial partners and speaking at pre-match events. The public expectations around player appearances can be challenging. Nearly everyone on the street thinks they know the players, and that the players know them. Many players are good at remembering the names of the fans, but not all. A smile is often not enough, and a 'not now' to a selfie request is perceived as rude. This kind of interaction with fans can be especially difficult when the team has lost.

Everything that Sara and the team does has to be carefully planned and scheduled.

Google Calendar is our shared scheduling tool. I find I am literally routinely inputting every day manually all scheduling information into our calendar. Surprisingly, in the playing season things are simpler, because each week is very similar, but pre-season there is a greater variety of activities to be planned. We put in all this data and the schedule shows up on everyone's phone. Normally, we schedule backwards from a game day. So we have, game day

minus 1, game day minus 2 . . . , etc. For example, game day minus 1 is 'captain's run' and a team meal. Game day minus 2 is double rugby, Game day minus 3 is a recovery and rest day, and so on.

On game day there is the formal handing in of 'match cards' to the referee. (Each team must fill in a match card listing the players' and replacements' names. The match cards are given to the referee prior to the commencement of the game and then held by the fourth official during the game.) During half time, and sometimes during play, Sara may be

called by the live TV commentary team to speak about progress of the game. Even after the game, Sara's job is not finished. There is a post-game management catch-up to organise, mostly looking at medical issues, and a 'ward round' to ensure that everyone is OK. This information is important because it will impact on Sara's plans for the following week. She also has to ensure that players have their after-match meal, meet sponsors, etc. On a match day, depending on kick-off time, it can be 11.00 pm or later before Sara finally finishes work for the day.

Service – the customer perspective

It is the customer experience that gives service operations management its essential nature. By customer experience we mean the customer's direct and personal interpretation of, and response to, their participation and interaction in the service process and its outputs. The experience involves the customer's journey through a series of contact points and process steps. An experience is perceived purely from the point of view of an individual customer and is inherently personal, existing only in the customer's mind. This means that no two people can have the same experience. And, while customers often experience service in social or work groups, the experience is essentially an individual one.

The customer experience is made up of many different aspects. Partly, it is a response to the degree and nature of personal interaction with service staff. Yet individual customers may also interpret a service based on the reaction of the social or work group within which they receive service. If your work group likes a service, it could influence your reaction to it. Customers will also react to their perception of the responsiveness and flexibility of customer-facing staff. Another influence on the customer experience is the perceived degree of intimacy with the service. Even those service settings that are mediated by information technology and which seem impersonal, such as internet-based services, may try to promote a convincing illusion of intimacy and service. Finally, the extent to which the customer feels valued by the service organisation can have a profound impact on the service experience. Value may be demonstrated by 'qualifying behaviours', such as the courtesy and competence of staff, but also in signals of friendliness and pleasure at serving the customer. A simple 'Hello Mrs Phillips, nice to see you again!' can be powerful in building positive service experiences.

Service outcomes

Service outcomes describe, from the customer perspective, the results of being processed and of having their 'state' (mental and/or physical) changed by their experience. The main categories of outcome are 'products', benefits, emotions, judgements and intentions (see Figure 1.2):

- **Products.** The qualifying outcome of service is the 'functional' output of the process and experience. Products are outputs such as the food and drink provided by a restaurant, or the ability of a delegate on a training course to construct a spreadsheet, or the new heart for the transplant patient. Products are qualifying in the sense that unless they are delivered up to a baseline or threshold level of performance, then the other outcomes are largely irrelevant.
- **Benefits.** Provided the service product is delivered confidently under specification, then the next outcome on which the customer judges service are the benefits provided. Benefits are one of the main reasons why a customer will have chosen the service provider. Benefits inform the

customer perception or judgement on whether and to what degree they have ‘profited’ or gained from the service provided, their experience of it and the ‘products’ provided. The customer makes a judgement as to how well their requirements and needs have been met. Ultimately, the perception of benefits is a judgement about quite a broad conception of value. The patient who has undergone the heart operation will benefit from a longer and more active life. The benefits for students will be better job prospects or higher salaries and/or new capabilities and skills. The benefit of using a firm of consultants may be reduced costs and/or greater commercial success. The judgement about benefits includes consideration of the financial cost of invoking the service, the time committed by the customer and the relative and sometimes long-term advantage accrued.

- *Emotions.* Experiencing a service results in the customer feeling emotions, of which there are many hundreds, including joy, surprise, love, fear, anger, shame and sadness. In a hospital, the patient hopefully experiences a well-managed stay, where they feel at ease and assured throughout, with minimal pain and inconvenience. A student at a university may have an enjoyable and challenging experience, with some memorable lectures and seminars and exciting extra-curricular activities. A senior manager employing a firm of consultants will hopefully feel assured, with increased confidence to pursue a particular strategy. The latter example is quite important, as it is too easy to consider emotions only in the context of business-to-customer services. Recipients of internal service and business-to-business service can and will have feelings about their service provider, which in turn are derived from their experiences.
- *Judgements.* As was indicated in our earlier discussion of benefits, an outcome of the service from a customer’s point of view will be their conscious or unconscious assessment of the service provided, their experience and the perceived benefits gained. The customer will make judgements about their perceived value of the service received, but also about issues such as fairness (or equity). The idea of value is complicated, but here we will define it as the customer’s assessment of the service provided, their experience and the benefits derived, weighed against all the costs involved. These assessments and feelings, conscious or unconscious, will then be manifested as a feeling of satisfaction or dissatisfaction (an emotion) about the overall service as well as individual elements of it.
- *Intentions.* The customer’s judgements, good, bad or indifferent, will result in intentions such as the intention to repurchase or not, the intention to recommend the received service to others, or the intention to complain or not. These intentions may or may not result in action.

The outcomes described above are not mutually exclusive. The customer’s evaluation of any one component will have an influence on other outcomes. (This was implicit in viewing the product as a ‘qualifying’ outcome.) There is a hierarchy building through the outcomes, and customers’ judgement in one area can reinforce but also detract from (or balance) the judgement of other outcomes. For example, an inspirational learning experience may help a student better understand their subject material and thus benefit from greater knowledge and confidence. However, outcomes may conflict – for example, when a patient feels disappointed that the outcome of their operation was unsuccessful (of no benefit for the patient), yet the patient is nevertheless highly satisfied with the way they were treated during their hospital stay (the experience). Often customers are unable to make informed judgements about certain outcomes (as in the case of this patient). Customers may feel uncertainty about whether a garage service is doing ‘appropriate’ things under the hood of their car. Most people have little idea what is going on in the innards of their vehicles. Therefore, those things that the customer *can* understand often inform the judgement of outcomes. In the case of garage, it might be the comfort of the sofa in the waiting room, or the quality of coffee from the coffee machine.

The outcomes discussed above are those that can be directly perceived and/or experienced by the customer. There is also another set of outcomes that may or may not be visible to and appreciated by the customer, but are important because if they are not achieved to a satisfactory level, the more direct customer outcomes would not be achieved either. For example, a hospital may have clinical targets such as waiting times, numbers of operations to be performed and recovery rates. They are also likely to have operational targets such as theatre utilisation rates, and financial targets such as

adherence to budgets. These overarching organisational outcomes are concerned with meeting targets and objectives. To be successful, an operation has to meet both its desired customer outcomes and organisational outcomes. Service operations management plays a vital role in achieving both these aims.

Where the operations and customer perspectives meet

An understanding of both the operations and customer perspectives is important for service operations managers. Yet the core of most services is where these two perspectives meet. Indeed, customer participation is the very nature of service. One of the most important, intriguing and challenging aspects of managing service operations (certainly when compared to manufacturing operations) is that service operations ‘process’ customers or their surrogates. The theme park cannot physically provide the rides unless customers turn up, a nurse cannot give an injection unless the patient is physically in the same place. This means that the customer’s experience is an intrinsic part of the operation’s process (as was implied in Figure 1.2). As a result, the customer sees much of the process and, in many cases, plays a key role in the process itself, as well as receiving the service – thus service is a two-way flow between operation and customer. However, it is important to note that customers may not see and/or experience the whole of the process; they will only be involved in the ‘front office’ (the overlapping section in Figure 1.2). The ‘back office’ contains tasks that are carried out usually unseen by the customer, such as cooking the food in restaurants, or baggage handling at an airport. This overlap of the process and the customer’s experience, together with the direct involvement of the customer in many services, makes the job of a service operations manager particularly challenging, exciting and, at times, frustrating.

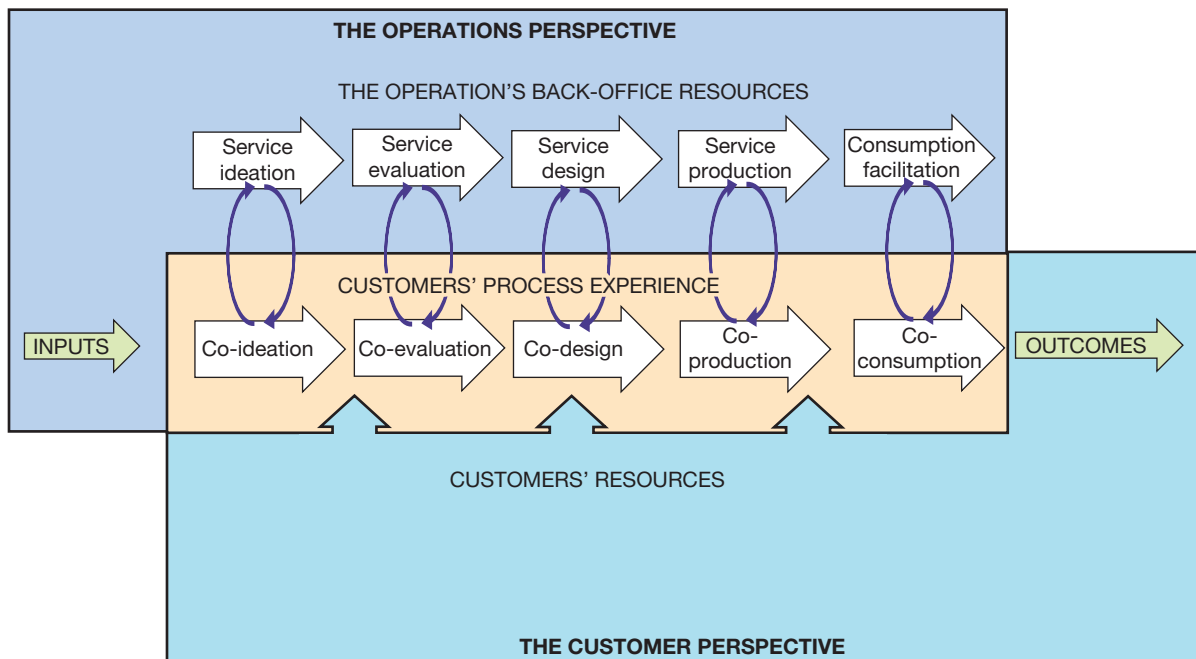
Co-production and co-creation

The terms ‘co-production’ and ‘co-creation’ are used to indicate those circumstances when customers collaborate with the service operation to produce/create value. This was an idea that emerged over 40 years ago, originally describing the way citizens could get more involved in public sector services.⁶ It is not unusual for customers to play a central part in the services they receive. They take themselves around the supermarket shelves, pick the items, take them to the check out, sometimes scan them, then pack them and transport them to the car. Alternatively, they could reduce the extent of their participation and go for a home delivery service that lets the retailer pick, pack and deliver the goods, though customers still have to get involved in ordering online. Similarly, patients visiting the doctor with an ailment are required to describe their symptoms and discuss alternative treatments.

This idea of customer involvement is important because, in effect, the distinction between the traditional roles of ‘producer’ and ‘consumer’ are blurred. The term co-creation comes from the verb ‘to create’, which means bringing something into existence, together with ‘co-’, which simply means together with another or others. However, there is some considerable terminological confusion in how these terms are used. Service writers use the terms co-production and co-creation in different ways. Some authorities use ‘co-creation’ of services as the term to describe all types of customer involvement, engagement, participation or collaboration with the service provider, in one or all of the stages of the service process.⁷ Others use the terms co-creation and co-production as indicating a spectrum, with customer participation in the design stages of service development being called co-creation and the later stages termed co-production.

The various stages of the development/delivery of a service can be represented in various ways. In Figure 1.4 the stages are: conceiving the idea for the nature of the service (ideation), evaluating the proposed service, designing the details of the service process and actually producing it, prior to its consumption by the customer. Each of these stages can be undertaken with the active collaboration of customers.

- At the *ideation* stage, customers can contribute original service ideas, maybe based on their own needs. For example, on a clothing retailer’s online customer forum, customers can not only vote for the clothing designs that they would like to see produced, but also propose their own designs.

Figure 1.4 Co-creation/co-production occurs at the interface of the operations and customer perspectives

- Customers can also be involved in the *evaluation* of ideas for new services. One company that develops measurement software uses its online community of customers to collaborate in judging how well its services can solve members' problems.
- During the *design* stage, customers can be asked to comment on the detailed service process. For example, DHL (the mail and logistics company) runs co-creation workshops with its customers.
- As regards *co-production* of a service experience, it is a central tenet of service operations management that, unlike physical goods, services are always 'co-produced'. Failure to recognise this unique character of a service and its implications will limit any attempt to improve service delivery.
- '*Co-consumption*' is a slightly more difficult concept – one where terminological confusion is especially marked, and one that is closely related to 'peer-to-peer' activity. There are many different terms and definitions to describe it, including 'collaborative consumption', the 'sharing economy', 'crowd-based capitalism', 'access-based consumption' and so on. Much of this activity takes place through platforms that allow renting, sharing, lending, swapping, sharing or gifting. However there are also opportunities for commercial providers to develop services that promote sharing – for example, vehicle-sharing services. IKEA, the furniture and home-ware retailer, has also engaged in co-consumption. It noticed that some of its customers were selling their used furniture through second-hand retailers, so it developed its own site where its customers can sell their used IKEA furniture. Even if it does not profit directly, IKEA is creating value for its customers by contributing to a 'second-hand community' for its products.

It could be possible for every stage to be carried out with the total involvement of customers, without any 'behind the scenes' work away from the customer; however, this is unlikely. Although, in the collaborative process, both the operations and their customers bring resources (time, effort, knowledge, etc.) to the joint effort, the operations will almost certainly have either taken the initiative to collaborate, or have managed the collaboration. And, while collaboration could take place at any stage, for most services it is difficult to avoid in the production stage. For participation in services such as haircuts, medical consultations or concerts, customers are typically present, as their physical presence is required to provide the information that is necessary for the service to be successfully delivered.

Counterpoint

The concept of co-creation and co-production has been challenged, both at a practical and a theoretical level. It can certainly confuse service 'ownership'. If a service goes wrong, who should take responsibility? The operation or the customer? The answer must presumably be 'the operation', but could the co-creation concept provide an excuse for poor service operations managers to avoid their responsibility? Also, few customers will be as skilled (or experienced) as professional service staff. Relying on customers for significant parts of a service could both make it less efficient and/or increase the chances of perceived poor service quality. Customers may even perceive their loyalty to be exploited. Other criticisms of co-creation include that it reduces radical innovation and increases the job stress of service employees.⁸ Moreover, while successfully performed co-creation can

potentially improve service outcomes, unsuccessful implementation could destroy value. For example, the British 'Natural Environment Research Council' (NERC) ran an open co-creation contest to find a name for its latest polar research ship, but the NERC online poll was flooded by inappropriate propositions, and the overwhelming winner was *Boaty McBoatface*. NERC eventually named the vessel the RSS *Sir David Attenborough*.⁹ At a more theoretical level, the whole idea of the inevitability of co-creation in services has been challenged as the logic for value creation. It is not that customers must always become co-creators of value, say its critics, but rather that firms when performing as service providers get opportunities to become co-creators of value with their customers, but only if direct interactions between service provider and customers exist.¹⁰

1.3 What are service operations managers responsible for?

Overall, service operations management is concerned with the control of resources and processes that deliver value. And although it might be tempting to limit the scope of the subject to exclude all physical 'goods production', we do not do that because, as we have argued previously, service exists even in environments that are predominantly concerned with tangible goods. So, service operations management encompasses the activities, decisions and responsibilities of managers in all organisations that provide service. It is worth noting, however, that service operations managers are often just called 'operations managers', though many other titles are used, such as managing partners in consultancy firms, nursing managers in hospitals, head teachers in schools, fleet managers in transport companies, call centre managers, customer service managers, restaurant managers and so on. Service operations managers may be responsible for managing either 'front-office' operations (the parts of the process that a customer might see), or the 'back-office' operations (the parts of the operation invisible to the customer), or indeed both. This distinction between front- and back-office operations can be important and we will be returning to it. For example, the back-office operations of a resort hotel could include a wide range of activities such as water treatment plants, laundry, catering, etc., all of which are largely hidden from the guests' view. The front-office operations include restaurants, accommodation and water sports, for example.

More specifically, service operations managers have a number of common responsibilities, including:

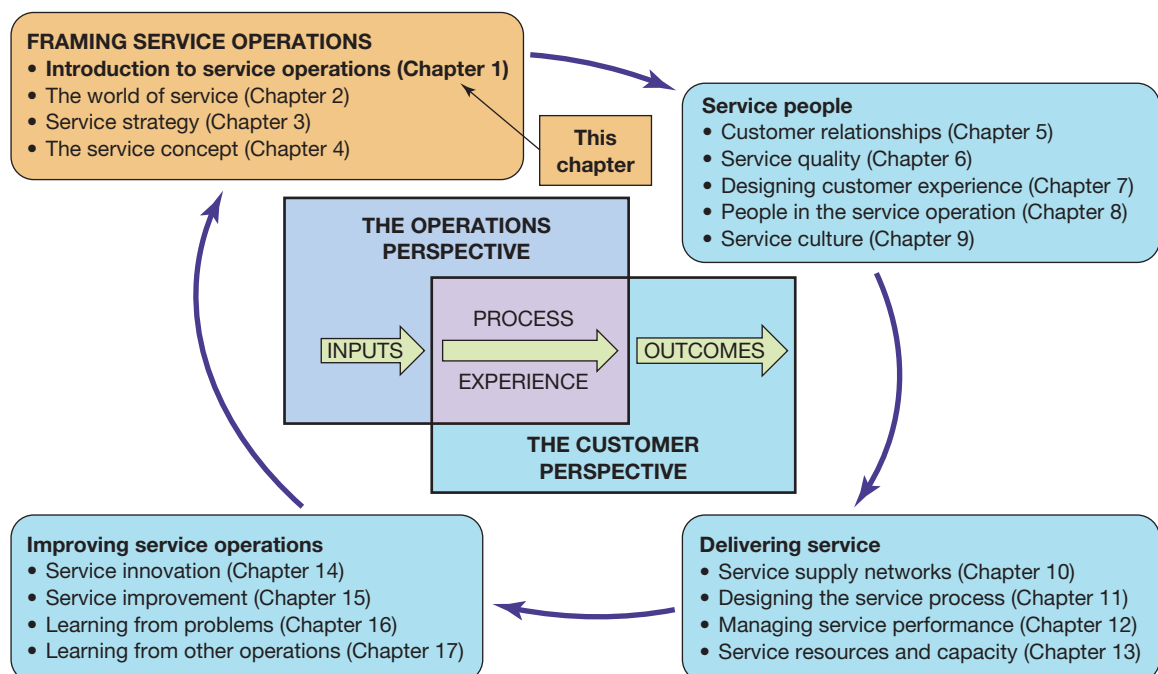
- Understanding the trends in how service is developing in different industries (covered in Chapter 2).
- Setting a sound strategic direction in which their operation can develop (covered in Chapter 3).
- Clarifying their 'service concept' and harnessing it in the development of their services (covered in Chapter 4).
- Looking after the organisation's customers (sometimes referred to as clients, users, patients or students, etc.) or surrogates, such as their parcels or orders (covered in Chapter 5).

- Managing service quality by shaping their customers' expectations over what service they will receive and in shaping their customers' perceptions (covered in Chapter 6).
- The design of the service operation's resources and how they impact on their customers' experience (covered in Chapter 7).
- Developing service staff and ensuring their welfare (covered in Chapter 8).
- Shaping the culture of the organisation in such a way as to provide an ethical framework as well as encouraging innovation and improvement (covered in Chapter 9).
- Developing the relationships with suppliers and customers in their supply network and shaping its configuration (covered in Chapter 10).
- The detailed design of their service processes that provide service for the customer (covered in Chapter 11).
- Managing the operation's performance on an ongoing basis (covered in Chapter 12).
- Managing the match (if appropriate) between an organisation's capacity to serve its customers and the demand for its services (covered in Chapter 13).
- Innovating in the development of new services in partnership with other parts of the organisation (covered in Chapter 14).
- Continually striving to improve the value the operation gives to its customers and the organisation (covered in Chapter 15).
- Learning, both from their ongoing activities and from other organisations, in order to improve their services (covered in Chapters 16 and 17).

In order to make sense of all the various responsibilities of service operations managers, in this text we classify them under four headings, as illustrated in Figure 1.5.

- Framing service operations includes chapters on the types of service, their characteristics and the trends in service operations, the meaning and role of service strategy, and the nature of the service concept and development.
- Understanding service people, including the staff who provide service and the customers who consume it, and the relationship between them, is the subject of this section.

Figure 1.5 The tasks of service operations management can be classified as those that configure service operations, understand people (staff and customers), deliver service and improve service operations



- Delivering service looks in more detail at the design of the service process, and how all services should be viewed in the context of their network, the importance of ongoing management of service performance and service resource capacity.
- Improving service operations examines the ideas of new service development and principles of continuous improvement, as well as improvement by learning from problems and learning from other operations.

Back and front 'offices'

A distinction that we will keep returning to at several points in this text is that between what are known as 'back-office' and 'front-office' service operations or processes. Put simply, back-office processes are those that are necessary for the whole operation to work effectively, but are usually not fully visible to the customer. Front-office processes are those that the customer sees. Almost all service operations have both back and front offices, and service operations managers are usually responsible for both. The various service operations within the English National Opera (ENO, see the case example) provide a good example of this.

Case example

English National Opera¹¹

The English National Opera (ENO) is based in London and is one of the two principal opera companies in London, along with the Royal Opera at Covent Garden. The company stages a wide range of shows, not just the classical opera repertoire. It has produced several Broadway and other musical shows, including *The Lion King*. It is also busy. In a typical week, three shows will be on stage, three will be in rehearsal and two or three shows undergoing design and development.

The ENO's artistic director chooses the exact productions, and then appoints a producer for each project. At the ENO, the producer is more of a project manager, and works alongside the artistic director to see the whole development process through from the beginning of planning to the first night. Although customers to the ENO obviously come for the performance itself, without a whole network of back-office services working together the productions could never be staged. These services are under the charge of the ENO's technical director, who is responsible for all technical and production departments. His teams provide technical service and support to currently running productions, as well as guiding new productions from conception through to the first performance night. These 'back-office' processes involve a wide range

of disparate activities, from stage management, prop design and construction, provision of food and drink for the artists and staff, to lighting design and installation, the provision of costumes and many others . . . all hidden from the view of the customer. Here are some of them:

The drawing office. The drawing office is an integral part of the company. They will draw up the plans for the construction workshop as well as producing a model of the final production environment. The model is the reference that the director and designer will use to visualise what they want in each scene.

Set designers. Once the model has been built, the technical production team works with the in-house teams and external construction companies to ensure that the design is built to the director's requirements. The design has to fit a budget and has to fit into the theatre!

Lighting. The lighting of the production has to be designed and then managed for each run. Lighting design has to consider the soloists, chorus, the props and of course has to be responsive to the music. Lighting can make or break a production as it establishes the atmosphere of the production in the minds of the audience.

Stage management. After four to six weeks of rehearsals, the show gets closer to the first night. The first night can be an exciting but scary time, because if anything goes wrong, there is a very small amount of time to get it right. Everything that happens technically and that the audience sees in a live performance is 'queued-up' by the stage manager, one of the most pressured of back-office jobs. They have to be a person who thrives on high pressure and be able to cope with the possibility of things going wrong – and then responding quickly when they do.

Sound design. It is the soloists, the chorus and the orchestra that generate most of the sound in a production, but there is also a need for other sound effects such as the sound of weapons, explosives, birdsong, waves, etc. The sound design team provides all of these. Increasingly, shows incorporate multimedia. For example, the ENO's production of *The Magic Flute* had a sound effects artist (called a foley artist) and, unusually, a video effects artist in charge of live video effects.

The props workshop. The props workshop has a team of both employed and freelance makers, but is also able to call on subcontract production companies. The in-house workshop has to coordinate with the subcontractors and liaise with all in-house departments (designers, prop supervisors and art directors), as well as supporting live productions and those in development. The props workshop is also responsible for the curation and reuse of older props.

The show team. This is one of the largest back-office service teams. The show team is the group who move giant props on and off the stage and sometimes around the stage. In a production of the opera *Billy Budd*, the ENO needed 25 people just to do one set move within a scene. When it came to the very dramatic battle scene in the opera, the stage crew was in full costume being part of the action.

Wigs and make-up. The wigs and make-up team also handle the prosthetics used by the artists. It includes several permanent hairdressers, make-up artists, prosthetics designers and colourists. In addition to their core job making wigs, the hairdressers



Robbie Jack/Corbis Entertainment/Getty Images

also provide an interpersonal service counselling and supporting artists.

Millinery (hats). One surprisingly large technical department, is the millinery department, who look after not only hats but also masks and prop costumes. Like the props workshop and the costume department, the millinery team provides an ongoing service to the company in live productions, a project role in production design and development, and also a curation job looking after the vast store of hats and masks held in humidity-controlled storage.

The costume department. The costume team oversee the whole process of costume production, use, re-use and curation. It works from drawings provided by the production designer, and is responsible for sourcing individual items of clothing and fabrics that can be incorporated into costumes. This involves visits to many vendors to inspect and obtain fabric samples for the design team. These vendors are not confined to traditional fabric manufacturers. For example, table lamps and placemats have been used for headdresses and shoulder pads in one production of *Aida*, and potato sacks to make jackets for another.

The joint efforts of all the teams come together on opening night – an occasion that can cause mixed emotions for ENO staff. There is relief that at last the first night has arrived, and there is also excitement at the eventual fulfilment of all their efforts. It is not uncommon for staff to be moved to tears by the general emotion of the moment, especially after working on a production for two years.

1.4 Why is service operations management important?

By now it is becoming clear that service operations managers have an important and responsible role because they:

- are responsible for managing the design and delivery of services to an organisation's customers, and therefore its success at generating revenues or achieving its social goals;
- are responsible for managing most of the organisation's resources, and therefore costs and investments; and
- have a significant impact on the ability of the organisation to innovate and improve its performance.

Given the nature of service operations management and the far-ranging responsibilities of service operations managers, clearly their success is not simply derived from performing a good technical task, such as educating a student, delivering a project on time, or providing a holiday. Good service operations management is critically dependent on good technical performance, but just as importantly is dependent on provision of good experiences. Good experiences make technical delivery, and in fact the whole service, better for the customer, better for staff, better for the organisation and also better for society and the environment.

Good service operations management is better for customers

Customers will be satisfied, even delighted, if they are provided with the right service, a good experience and the desired outcomes. However, one problem for service managers is that the customer's idea of what represents value may well vary from customer to customer and may shift through time, and even from day to day. For example, thrifty customers may think of value as getting more for their money. Other customers will perhaps be prepared to pay more in order to receive a higher-specification service. Still others will value the – possibly illusory – boost in social standing from broadcasting that they are able to afford to be customers of high-status services (even though the specification may be no better than for a lower-priced service). The service operations manager must be aware of the full range of influences on the customer's assessment of value, and indeed on the range of definitions of value itself. An important ingredient in gaining this understanding is appreciating the relationship between the service brand values, as communicated to the customer, and the reality of customers' experience. The service operations manager has to be alert to potential mismatches in communicated and real brand values.

Good service operations management is better for staff

Good service operations management and the provision of the right services, experiences and outcomes for the customer will also mean a better experience for service staff:

- Customers will be friendlier and easier to deal with if they are satisfied and the service and experience met their needs than if the opposite were the case. Who doesn't want a happy and friendly work environment?
- When the service operation works well and generates the right outcomes, there will be fewer problems (with consequent rework) and therefore less hassle and disruption for the staff, and fewer (unpleasant) complaints to deal with.
- Customers who are generally satisfied tend to be more tolerant, so when things do go wrong they are much more accepting than they might otherwise have been, again making life easier for the staff.
- A smooth operation with contented customers sends clear signals that things are going well, thus staff are more likely to have pride in both the job they do and the organisation they work for.

Good service operations management is better for the organisation

Delivering the right service and experience through good service operations management delivers many organisational benefits:

- Satisfied customers who perceive value from the service are more likely to return. Such customers are also more likely to provide positive word of mouth and recommend the organisation and its services to others, thus generating more revenue. In non-profit domains, positive word of mouth can ensure healthy funding streams such as government grants and charitable donations, and also strengthen the organisation's legitimacy and 'license to operate'.
- Better service operations management means improved processes that should be more efficient and so cheaper to run, in turn reducing the organisation's costs.
- Increased revenue and/or reduced costs will improve the profitability and/or viability of the organisation. In the non-profit domain, increasing demand for the organisation's services will not deliver increased revenue, but will be a powerful component of arguments for increased funding. Similarly, efficient and effective use of resources provides evidence that the organisation can be trusted with scarce funding, ensuring long-term viability.
- Better services nearly always provide the organisation with a source of competitive advantage. In many areas of this text we in fact argue that service is probably the most important differentiator among competing offerings.
- Better and more efficient services will enhance the organisation's reputation and brand. By the same token, poor service can quickly damage reputations that may have taken several decades to establish. Many forms of risk can be mitigated, and often insured against, but this is not the case with brands and reputations.

Good service operations management is better for society and the environment

Like any type of operation, service operations have a responsibility to consider how their day-to-day activities impact on society and the environment. They must accept responsibility for the impact they have on society and balance the external 'societal' consequences of their actions with the more direct internal consequences, such as profit. Some ways that operations can impact the social bottom-line performance, both positively and negatively, include the following:

- Customer safety (directly or indirectly) from services.
- Employment impact of an operation's location.
- Overselling to customers, or providing inaccurate information.
- Repetitive or alienating work for service staff.
- Workplace stress on staff.
- Reducing transport-related energy.
- Noise pollution, fume and emission pollution.
- Recovery to minimise impact of service failures, including complaint handling.

Delivering the right services and experiences should also enable the organisation to achieve its goals, objectives or mission, and so support the achievement of the organisation's strategic intent. Good service operations management that thinks both reactively and proactively about service should be able to help shape and develop the organisation's future intent, and develop skills and competencies that will support future development of the organisation.

1.5 Challenges for service operations management

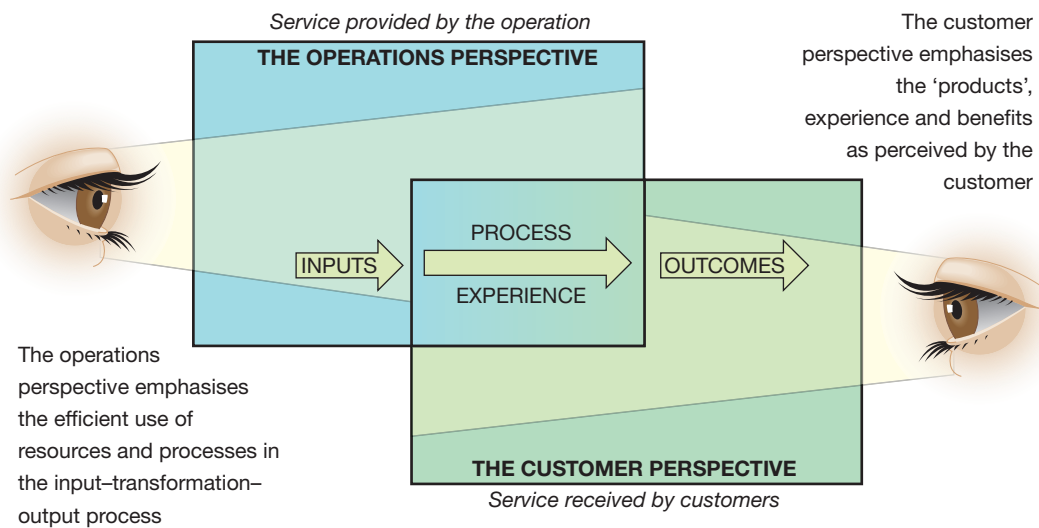
All aspects of management present challenges: marketing managers must impose a segmentation view of their markets that tries to make sense of often intrinsically confusing markets; accounting managers must try to allocate costs and revenues so that one can gain a realistic reflection of investment returns; and IT manager must deal with technical complexity. Generally, operations managers face challenges related to their breadth of responsibility and complexity. The issues faced by service operations managers are similar to those faced by any operations manager, but also have specific characteristics related to the nature of service itself. Service staff often have to deal with customers ‘face to face’ and cope with their, sometimes unreasonable, requests with courtesy and efficiency. Service technology is not only developing rapidly, but also can puzzle customers. The service processes have to be designed so as to create the right perceived experience for the customers while generating the right outcomes, both for the customer (‘products’, benefits and emotions) and the organisation (revenue, cost management, achievement of strategic aims, etc.). In this section, we will cover some of the main problems and challenges facing service operations managers; while each operation has its own particular demands, there are a number of key challenges faced by most, if not all, service operations and service operations managers. These challenges are:

- Balancing the operations and customer perspectives.
- Managing multiple customer groups.
- Managing tactically and strategically.

Balancing the operations and customer perspectives

No operations manager in any industry can ignore the views of their customers. But in service operations, once again it is the intimate degree of customer contact that makes how customers experience, and react to, the operation’s resources and processes a prime consideration. A key challenge (and sometimes a difficulty) for many managers in service operations is that they see things from an internal, organisational viewpoint. They are on the inside of the organisation, looking out at the customer. And, although taking an operations perspective helps to understand the ‘technical’ nature of the *service provided*, it can overly focus on the inputs that have to be managed. This includes the customer, who is often seen as a simple ‘input’ to be processed, rather than as a person. There can be too much of a focus on making sure that all the processes are working well to the exclusion of customers’ feelings. Managers, quite naturally, spend their time worrying about managing their resources and processes, managing capacity, scheduling people, meeting performance targets and financial goals (see Chapters 10 to 13).

However, the customers will see (the same) things from a very different ‘outside’ perspective (see Figure 1.6). They are interested in the *service received*, their experience and the outcomes such as how they feel, the ‘products’ they receive and how they benefit from the service. Customers of the service are less concerned with the management of resources and processes; they want a good experience, they want to have a good outcome and to benefit from the service. This difference in perception can lead to conflicts in operating practice that have to be reconciled by service operations managers. For example, nursery staff in a childcare facility may see their key activities as child development and education, whereas the parent (as customer) may see it as an expensive babysitting service while s/he is at work. These different views may cause conflicts that must be managed. For example, if a parent is delayed at work, they may expect the childcare service to wait a while for them, whereas the staff may (reasonably) expect the parent to be on time or make alternative arrangements should they be late. The childcare service may try to manage this conflict by, say, educating customers to let the staff know when there is the possibility of them being late, charging for any extra time, etc. But whatever ‘solutions’ are adopted, service operations managers have a responsibility to understand and manage their relationship with the customer (Chapter 5), manage customer expectations and perceptions (Chapter 6) and deliver the customer experience (Chapter 7). All are significant challenges in managing service operations.

Figure 1.6 Service operations management must reconcile the operations and customer perspectives**Table 1.3** The operations and customer perspectives

Service	The operations perspective		
	Inputs	Processes	Outputs
Surgery	GP, nurses, surgeon, bed, operating theatre	Diagnosis, operation, aftercare	Hip replacements
Education	Lectures, library, computers, seminar rooms	Timetabling, lectures, exams, marking	Information, slide packs, degrees
Consultancy	Consultants, information, skills, knowledge	Data collection and analysis	Presentations, reports
Service	The customer perspective		
	Experience	'Products'	Benefits
Surgery	Easy, empathetic and pain-free treatment	A working hip	Greater mobility
Education	Memorable and useful lectures/seminars	Knowledge, confidence and skills	Better job prospects/capabilities
Consultancy	Helpful and timely discussions and advice	Solutions	Reduced costs and greater commercial success

Seeing things from a customer point of view can be surprising and revealing in service organisations. Table 1.3 illustrates these two perspectives for three different services: hip replacement surgery, education and consultancy.

Recognising both of these perspectives is important. Operations managers need to manage their operations to create their services; they need to manage their suppliers, people, facilities, processes and technology (see Chapters 8, 10, and 11), but at the same time they need to recognise how their efforts create value for the customer, which in turn creates value for the organisation. Indeed, some people argue that the customer is the ultimate arbiter of the value an organisation creates and delivers. While value is delivered through the process and the service, it is located in the customer's experience and the outcomes for the customer.¹²

There are many organisations that talk about developing a ‘customer focus’ or becoming ‘customer oriented’, and an obvious way to start this process is to develop a better understanding of the customer perspective. Yet, no service operation can afford not to work out how it should reconcile its customer and operations perspectives. An important influence on this will be the overall strategy of the organisation (see the following case example, ‘Two award-winning airlines with different strategies’).

Case example

Two award-winning airlines with different strategies¹³

People can have strong opinions about air travel, and it is not a new phenomenon. The first UK civilian aircraft departed from the UK’s first airport, Hounslow Heath Aerodrome in Middlesex, over 100 years ago (it only went to Lympne in Kent). The UK’s first daily international service was to Le Bourget, near Paris. Even then, there were complaints. On one of the first Paris flights, it was so bumpy and uncomfortable that, between them, the only two passengers drank a whole bottle of brandy, apparently to calm their nerves. It was also expensive. The two-and-a-half-hour journey in a converted biplane bomber cost £21 (about £1,000 in today’s money). And it is still these two factors, the quality of service and the price of a flight, that largely govern airlines’ success today. Two of the airlines that regularly feature in passenger surveys’ ‘top ten’ rankings in their respective categories are easyJet and Cathay Pacific. But their strategies, and their balance between operations and customer perspectives, are very different.

easyJet

easyJet is a UK-based low-cost, point-to-point airline, established in 1995 by Greek Cypriot businessman Stelios Haji-loannou. It operates a fleet of Airbus A320 family aircraft. It uses the now well-established low-cost model first developed by Southwest Airlines in the USA. It is based on using one type (or family) of aircraft, resulting in operating and maintenance benefits, and what it calls ‘cutting out the things that don’t matter to keep it lean’ and ‘making it [its processes] easy’. This means keeping costs low by not selling connecting flights or providing free food on board. It also means maintaining high aircraft utilisation, and working on achieving quick turnaround times on the ground. Its relatively young fleet (reducing ownership and maintenance costs) have a configuration that gives a higher number of seats per aircraft than some equivalent airlines.

easyJet’s focus on efficiency is a clue to its emphasis on the operations perspective of service operations management. It says that it constantly drives efficiency and invests ‘only where it matters most to our customers and our people’. Of course, this does not mean that the company ignores how its customers view its service. Far from it. It is very much aware of the importance of customer loyalty. easyJet says that it understands that its customers have increasing choice and their expectations are rising, which is why it strives to give customers reasons to choose to spend more with easyJet, including offering a compelling customer loyalty programme. However, it also stresses that it will continue to ‘invest in efficiency, developing customer solutions that drive operating efficiencies while meeting customers’ evolving needs’.

Cathay Pacific Airways

Cathay Pacific Airways is an international airline based in Hong Kong, offering scheduled passenger and cargo services to around 230 destinations in 53 countries or territories. The airline owns Dragonair and is also a major shareholder in Air Hong Kong, an all-cargo carrier operating in the Asian region. Cathay Pacific and its subsidiaries and associates employ over 32,400 people worldwide, with around 20,000 staff in Hong Kong, making it one of Hong Kong’s biggest employers. The airline is a founder member of the ‘oneworld’ global alliance, whose combined network serves almost 700 destinations in 150 countries worldwide. It operates a mixed fleet including several types of both Airbus and Boeing aircraft. The company’s vision is to make Cathay Pacific the most admired airline in the world by:

- Ensuring safety comes first.
- Providing ‘Service Straight from the Heart’.
- Encouraging product leadership.
- Providing rewarding career opportunities.



Vytautas Kielaitis/Shutterstock



Philip Pilosian/Shutterstock

As a ‘full-service’ airline, customer service is particularly important to Cathay Pacific. Its ‘Service Straight from the Heart’ strategy addressed this. It stressed that Cathay staff had to be resourceful, and be able to find practical on-the-spot solutions to customer requests. They needed to be proactive in finding opportunities to excel and serve their customers. Staff were also expected to show the highest standards of care and professionalism, and be ‘fully committed to create an experience that makes customers feel “welcome, comfortable, appreciated and above all, reassured”’.

While initiatives such as Cathay’s ‘Service Straight from the Heart’ are clearly an expression of the customer perspective of service operations management, this is not to imply that airlines such as Cathay are not interested in the efficiencies that come from taking an operations perspective. In fact, when Cathay reported its first ever back-to-back annual loss in 2017, it was reminded of the importance of keeping costs down without jeopardising its reputation for customer care. After a three-year ‘transformation programme’, it returned to profitability.

Managing multiple customer groups

Many service organisations do not serve a homogeneous group of customers; they often serve, in different ways, different types of customers. The needs and expectations of different customer groups can be complex. They may receive service singly some of the time, but in social or work groups at other times. They may even occupy different roles at different times in the service process. And while the difficulty of separating the various needs of customers is a common issue for all types of business, the high-contact nature of service can raise extra difficulties. If a manufacturer has two products, it could make each in separate factories or departments where each could focus on whatever skills are needed for their product. In service operations, it is often the same resources and processes that are exposed to different customer needs.

For example, a major museum, such as the Natural History Museum in London, has to accommodate the needs of leisure visitors coming to the museum singly and in small family groups. It also has to look after schoolchildren visiting in large groups during the weekdays. In the evenings there might be corporate hospitality events in which visitors are entertained and fed among fossilised dinosaurs. Then there are the professional scientists (archaeologists, etc.) who may require the attention of specialised staff. All of these types of customer have different needs, yet all use more or less the same resources. Even if the more basic needs of these groups are similar, their ‘higher-level’ specific needs will probably be very different. The dilemma for any service operations manager is how to respond to the specific needs of particular groups without detracting from the ability to serve other groups. Very often, this means making some difficult choices about how a service is designed and run. (See the worked example on the Long Ridge Gliding Club.)

Worked example

Long Ridge Gliding Club¹⁴

Long Ridge Gliding Club is a not-for-profit organisation run by its members. Its location makes it an ideal place to practice ridge soaring and cross-country flying. The club steward provides a bar and basic catering services and inexpensive bunkrooms are available for club members wishing to stay overnight. It has a membership of around 150 pilots, some of whom have their own gliders, but the club has its own fleet available to its members. The club also offers trial flights to members of the public by selling 'trial flight gift vouchers', often bought as presents. These 'casual flyers' can book flights in advance or just turn up and fly on a first-come, first-served basis. The club's website encourages people to:

Experience the friendly atmosphere and enjoy the thrill of soaring above Long Ridge's dramatic scenery. You could soon be in the air. Our knowledgeable staff will be happy to advise you, and our team of professional instructors will make this a really memorable experience.

If the conditions are right, the casual flyers may get a relatively long flight – although at busy times the instructors may feel under pressure to return to the ground to give another lesson. Even when the weather is poor, the instructors still do their best to get people airborne but they are restricted to a 'circuit': a take-off, immediate circle and land.

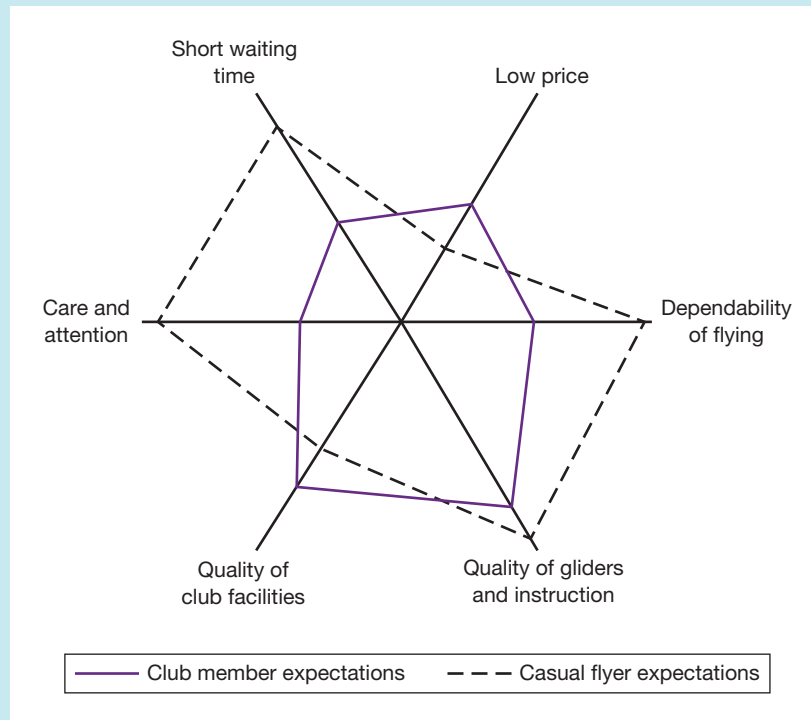
Essential tasks such as maintaining the gliders, towing them to the launch point and staffing the launching winches, is done on a voluntary basis by club members. It takes a minimum of five experienced people (club members) to be able to launch one glider. Among the club's membership are qualified instructors who provide instruction both for the club's members and the casual flyers. Club members are expected to help each other and any casual flyers to get airborne while they wait their turn to fly. Even when a flight has been pre-booked, casual flyers may then be kept waiting for up to two hours before their flight, depending on how many club

members are present. The casual flyers are encouraged to help out with the routine tasks but often seem reluctant to do so. This was one of the many problems caused by the club offering its services to casual flyers.

What the club did

As the club chairman said:

We were under pressure from members to end trial flights for casual flyers because they reduce the number of flights members can have in a day. Some members complained that they sometimes spend most of their day working to get these people into the air and miss out on flying themselves. Yet casual flyers brought in useful income. The issue was that the needs and expectations of the club members were really quite different from those of the casual flyers. [Our analysis is shown in Figure 1.7.] Members are enthusiasts who want to develop their skills in the sport; casuals tend to be one-time thrill seekers. Club members just get on with the job and know what to do whereas the casuals need customer service – friendliness, attention, explanation and reassurance. We didn't want to end trial flights, but we couldn't continue as we were because we were alienating our members. Nor could we create two separate sets of resources to look after the two types of customers – we just weren't big enough. What we did was try to change our processes to deal better with the casuals without unduly affecting the members. We made sure that there was always someone to 'meet and greet' them and give a thorough flight briefing and a minimum flight time. We changed our website to manage the casuals' expectations in line with the service delivered. We made it clear that they may have to wait and may only get a short flight in bad weather. We also 'sold' the idea that helping with winching, and glider preparation, was 'part of the package'. With club members, we stressed the financial importance of casuals and the need to give them a good experience.

Figure 1.7 A comparison of club members' and casual flyers' expectations

Managing tactically and strategically

A consequence of the high levels of customer contact in most service operations, where the customer is an input to, and involved in, the service process, is that operations management is characterised by its immediacy. In fact, a significant part of the excitement of managing service operations is the necessity to solve problems in real time. Customers can be dissatisfied if their request or complaint is not dealt with promptly. A passenger wanting to purchase a ticket for immediate travel may not be willing to return if the agent is busy. Streams of aircraft coming in to land cannot easily be put on hold while equipment is serviced or controllers take a break. Children screaming for attention or in danger of hurting themselves in a nursery likewise cannot be ignored. Furthermore, during a service encounter it is not always possible to undo what has been done or said in the heat of the moment. Customers will remember promises made that cannot be kept. Unlike in manufacturing organisations, where it is possible to scrap defective products and remake them, in service there is no 'undo' or 'rewind' button. There is the constant challenge of dealing with the needs of a stream of customers, managing the staff and making operational decisions to ensure the delivery of an appropriate quality of service at an appropriate cost. It is understandable, therefore, that many service operations managers concentrate their time and effort on managing these tactical day-to-day operations.

First, the pressure on the operation to deliver its day-to-day services may leave little time for medium-term operations improvement activities or longer-term strategic thinking. For example, it is difficult for a head teacher to put time into dealing with solving major underlying problems, such

as poor facilities, inadequate funding or high levels of absenteeism, when they are heavily involved in ‘the now’. The head teacher is distracted by more pressing tasks such as trying to find part-time staff to cover for sudden absences, recruiting new staff to vacant posts, processing the many queries and requests that land in the email inbox each day and dealing with any student behavioural problems.

Second, service operations managers, because of the nature of the job and often their background, tend to feel more comfortable with the unambiguous and rational nature of many short-term tactical decisions. The more intuitive processes required for strategic thinking are quite different, and excuses are found to put them to one side. The head teacher is likely to have been promoted through the profession and they may get a ‘buzz’ and feel more comfortable in dealing with students and the curriculum. They may be less inclined to put time into the ‘less exciting’ and ‘less pressing’ tasks of data collection, analysis, report writing and high-level debate and discussion with various parties to try to resolve underlying and longer-term issues.

The danger of the immediacy of dealing with high-customer-contact issues is that it can lead to an exclusively short-term focus. As a result, the development and strategic aspects of operations management are frequently neglected and a disproportionate amount of time is spent on managing the day-to-day operations. In some organisations this problem is perpetuated by not giving senior service operations managers a seat at the boardroom table (or its equivalent). Given they are responsible for most of the organisation’s assets, people, costs and revenue, this omission would seem shortsighted.

Effective service operations managers are those who can pay attention to, and create time in their day for, both strategic issues and day-to-day operations. This calls for them to have something of a split personality. They do need to focus on detail: to have a grasp of what is happening, and what should be happening, within the operation. Yet, at the same time, they also need a more strategic vision that sets the resource and process decisions that make up the bulk of an operations manager’s role in a wider and longer-term context. Much of what makes anyone a successful operations manager is how these strategic and operational perspectives are brought together.

Again, the tendency of operations managers to over-focus on the short term is not limited to service operations. It is a general one, but arguably it is more prominent in service operations because of the nature of service. Working at the overlap between operations and customer perspectives, service operations managers also have a unique view of how short-term problems can be caused by longer-term strategic decisions. After all, they are the people who make things happen, they are the people who implement strategy. Not only that, but because of their experience in dealing directly with customers, they are the person likely to be most aware of the problems in current service delivery. This means that there is often significant potential for service operations managers to contribute in the form of process and market innovations. In fact, customer dissatisfaction is usually more than just a signpost of an unmet customer need, it is the stimulus for longer-term service innovations (see Chapter 16 on learning from problems).

1.6 Summary

Why study services? – We all use service operations every day. They are important in our lives: treating us when we are ill, transporting us, serving our meals, selling us goods, connecting us to social media and so on. Many of us are also responsible for serving others, either as part of our jobs, or as part of daily life for our friends and families. Yet, if service is so important, why does service often disappoint? It is often because of a failure to deploy the principles of service operations management. And, although the development of operations management as a discipline has its roots in production management, service operations management concentrates on those operations issues that are particularly relevant to service organisations.

What is ‘service’? – Most early definitions of ‘service’ focus on its difference compared with manufacturing. Often, the main distinctions between services and products were seen as:

- Intangibility, in that they are not physical items.
- Heterogeneity, in that they are difficult to standardise.
- Inseparability, in that their production and consumption are simultaneous.
- Perishability, in that they cannot be stored.

These features of services are known as the ‘IHIP’ characteristics, and have been the subject of considerable academic debate because:

- None of the IHIP characteristics is unique to services as opposed to physical products.
- Technology has had a significant effect on the extent to which the IHIP characteristics apply and how the limits that they place on service operations can be overcome.

Service operations management – The principles of operations management in any kind of organisation are broadly the same. It is concerned with transforming a set of inputs into outputs. This is usually illustrated as an input–transformation–output model. Resources and processes are the two vital ingredients of all operations, and much of operations management is concerned with how they are managed. It is the importance of the customer’s (or customer surrogate’s) presence in the operation that makes service operations management distinctive. So, service operations management needs to reflect both operations and customer perspectives, and the overlap between them. Not all services exhibit the IHIP characteristics to the same extent, and different services delivered by the same operation can vary considerably in how they conform to the characteristics. From the customer perspective, ‘service outcomes’ describe the results of being processed and of having their ‘state’ changed by their experience. The main categories of outcome are ‘products’, benefits, emotions, judgements and intentions. Both the operations and customer perspectives are important, but it is where the two perspectives meet that is the core of most services. This has led to the concepts of ‘co-production’ and ‘co-creation’, both of which are used to indicate those circumstances when customers collaborate with the service operation to produce/create value.

Service operations managers’ responsibilities – Overall, service operations management is concerned with the control of resources and processes that deliver value. Here, we classify them under four headings.

- Framing service operations.
- Understanding service people.
- Delivering service.
- Improving service operations.

The importance of service operations management – Service operations managers have an important and responsible role because they are responsible for managing the design and delivery of services, are responsible for managing most of an organisation’s resources, and therefore costs and investments, and have a significant impact on the ability of the organisation to innovate and improve its performance. Good service operations management is better for the customer, better for staff, better for the organisation and also better for society and the environment.

The challenges for service operations management – Of the many challenges facing service operations managers there are a number of key challenges faced by most, if not all, service operations. These are:

- Balancing the operations and customer perspectives.
- Managing multiple customer groups.
- Managing tactically and strategically.

Discussion questions and exercises



1. Rent the Runway (RTR), is a privately-owned service that rents out clothes, handbags and jewellery. It has a dry-cleaning warehouse that is the biggest in the world, processing 2,000 items per hour. It started by renting out formal dresses for weddings and other events. Eventually, it grew to the point where three-quarters of its clients used it to rent work clothes. Subscribers can rent four items at any one time. Turnaround has to be quick: returned clothes are washed, repaired if necessary and any stains removed. Most items are in and out in less than a day. (a) How does this service compare to a conventional garment retailer in terms of its IHIP characteristics? (b) What do you think are its main service operations management responsibilities?
2. An increasingly popular service model in business is that companies should earn revenues from subscribers rather than sell products or service as single 'items'. What do you think are the advantages and disadvantages of this type of service?
3. Reread the case example on the English National Opera. Consider the list of back-office departments in the case. (a) For each of the departments described, what aspects of their job do not involve directly 'making' something? (b) How would you categorise the 'non-making' activity in each department?
4. The IHIP characteristics that we introduced in the chapter are used to distinguish service from goods-producing operations. We also made clear that they were controversial and that they could be viewed as spectra rather than simple yes/no distinctions. With these characteristics in mind, think about how the music industry has developed over the last two or three decades, as its main 'products' have moved from CD (or vinyl), through downloaded music, to streaming services. Referring back to Figure 1.3, position these three offerings on the IHIP characteristics scales.
5. Again, thinking about the music industry, where do 'live performances' fit on the scales?
6. Consider three services: first, a business servicing heating, ventilation and air-conditioning facilities; second, an emergency plumbing service; and third, a disaster emergency charity. Again, using Figure 1.3, how does each service fit on the IHIP scales?

Case exercise

European Airlines Group¹⁵

The European Airlines Group was formed from the merger of two airlines – Airandor and Sky. Sky Airways was a major European airline with routes predominantly in Europe but offering daily flights to New York, Johannesburg, Mumbai and St Petersburg. It regarded itself as the senior partner in the merger, largely because Airandor was in a very weak financial position prior to the merger. Airandor was a more regional airline, operating in Europe and South America out of its headquarters in Madrid. However, both airlines, particularly Airandor, suffered from high operating costs.

Over the two years following the merger, Bernie Williamson, the Chief Executive of European Airlines Group, steered Airandor to profitability through aggressive cost-cutting, including a headcount reduction at its Madrid headquarters, and

renegotiation of contracts for pilots, cabin staff and engineering staff. Another area in which costs were cut was service levels, including food provision on both short and long haul. Business and first-class food and service levels remained largely unchanged, but on both long- and short-haul economy class flights, food was no longer provided as part of the ticket price. Passengers could purchase food if they wished, from a menu that was of a higher specification than the 'free' food provided previously.

Cost-cutting also took place at Sky Airways. Contracts had been renegotiated for all cabin staff and pilots, with a move to flexible contracts for engineering staff. 'Free' food was discontinued for short-haul economy passengers when the airline partnered with a high-end supermarket chain to offer premium sandwiches and snacks.

Both airlines scored poorly on all metrics used by industry commentators and review sites such as Skytrax. Although, interestingly, customer perceptions of food quality at Airandor had increased marginally since the move from free food to purchased food, which improved the airline's position overall on airline rating sites (5/10 on Skytrax). While its service quality and general ratings were poor, Airandor was at least now profitable and on an upward trajectory in terms of both profitability and service quality. These improvements took place despite limited investment in terms of new aircraft, or facilities at its Madrid hub. By contrast, over the same time period, Sky Airways received considerable investment in new aircraft, especially on short-haul routes. Unfortunately, possibly as a result of several years of cost-cutting, service quality had decreased dramatically to the point where one of the leading consumer advocacy groups in the UK rated the airline at just 'third from the bottom' of its customer satisfaction league table. On the Skytrax league table, Sky Airways had fallen to a score of 5/10 for customer satisfaction, with equally poor ratings across all aspects of service performance. Both airlines received the same 3 out of 5 stars for food quality.

At the meeting of Sky's executive board, Bernie Williamson expressed concern at the growing number of complaints Sky was receiving and the decline in online customer ratings. With the low-cost operators competing aggressively on short, and more recently, long haul, Williamson was under continuous and increasing pressure to cut cost per available seat mile (CASM). Typically, fuel represented 33 per cent of Sky's operating costs and labour about 23 per cent. The fleet modernisation programme meant that the fuel cost percentage (fuel CASM) was forecast to reduce considerably in the future. It was also envisaged that labour costs would continue to improve by changes to working practices, more headcount reductions and hopefully labour productivity gains. However, Williamson was aware that there were trade-offs in reducing labour CASM. While the exact causal connections were not completely clear, he was convinced that there was a link between labour CASM improvements and customer satisfaction scores. However, further removing complimentary meals – even on long haul – was seen as a way to both increase revenue per available seat mile (RASM) and reduce cost (CASM).

Williamson's analysis of the customer complaints had revealed that the majority of Sky's problems were in the areas of customer service and food

quality. The airline achieved good scores in terms of punctuality, with on-time levels similar to other carriers operating from its London hub. However, the food and beverage scores from the rating companies seemed to agree with the direct complaints from customers. Around 72 per cent of the complaints received were about the on-board catering. The remaining complaints concerned an equal number of stories about lost luggage, delayed luggage and poor service from cabin staff.

Given his desire to increase RASM, which had remained largely unchanged for some years, and reduce CASM, Williamson was keen to hear ideas from his team as to how they could deal with the service and food quality problems. This was an opportunity seized upon by Angela Carter-Smith, Sky's recently appointed Marketing Director. Angela suggested attempting to increase revenue, along with some cost-cutting. She argued that the airline should consider abandoning complimentary pre-packed and reheated meals in economy class in favour of the business-class style of service, whereby pre-ordered food is pre-cooked but heated, assembled and served in front of the customers. The food costs, she suggested, would be little different but, *'simply require more time by cabin attendants, which they have on the longer flights'*. When Bernie reminded her that they needed to provide an upgraded service for the premium-fare passengers too, she added that the answer here was to provide an increased range of 'culturally sensitive' meals: flying to and from Mumbai for example, the food should be Indian, while on flights to Johannesburg it should have a distinct African flavour. All eyes then turned to Peter Greenwood, the operations director, who had his head in his hands and was groaning. He promised to 'look into it' and report back at the next meeting.

The next day Peter made time to talk about the rising trend in complaints to Christina Towers, the catering subcontract manager, Justin Maude, a senior cabin attendant, and David Goh, senior gate manager.

Christina Towers explained:

The problem we have, like all other catering companies, is consistency. Although we can specify menus, portions and costs there are inevitably wide variations in quantity and quality loaded at various airports around the world. At our hub, we have complete control, but anywhere elsewhere we are at the mercy of the local catering contractors. We have the biggest problems at the furthest

destinations. You also put us under pressure to reduce costs, so we only try to load the precise number of meals and ingredients required in order to reduce wastage and space required. Passengers can order their meals via the website and our app, but they can do so up until four hours before boarding, so we have to do some forecasting. It is not easy making pre-flight predictions about both numbers and choices, and you cannot expect it to be right 100 per cent of the time without substantially increasing the number of meals loaded over and above passenger predictions. It is not cost effective and it is weight prohibitive to load two of every meal option, even for a business-class passenger who would expect, more than anyone else, to receive their first choice. To be honest, I think we would get fewer complaints if we reduced choice.

Justin Maude added:

You would not believe the difficulties we face in providing something as simple as meals to passengers. We frequently have to explain to passengers, in all the cabins, why they can't have their first choice of meal – even when they have pre-ordered and paid. This creates a great deal of stress for the crew. There is just no room for more meals on board; the galleys are really tight for space. As to seat-side preparation, don't get me started. It is tight enough doing this in business class. In economy, it is not going to happen, sorry. The biggest problem we have is over passengers who order special meals for religious, dietary or health reasons. I reckon one in five is not loaded on to the aircraft. Sometimes we have passengers on board who ask whether the food contains nuts and we have no idea. We can only offer them water and bread rolls to be safe. I think we should ensure the caterers let us know the contents of every meal and always provide extra vegetarian and kosher meals because passengers don't always remember to pre-book them. As to nuts, why are we even bothering?

A complete ban would make sense. Another problem is caused by the last-minute passengers whom you want us to take to fill seats, so we often have to ask for more meals shortly before take-off. I know this causes problems but, unlike a restaurant, during flight there is nowhere to find additional supplies. I think it would help if we could have fewer meals, so pre-purchased only, that need less preparation time and take less space, so we can load more meals in anticipation of an increase in passengers and also load additional special meals, just in case.

David Goh then added his views:

The main problem I have is ten minutes before take-off when we find that the incorrect quantity, quality and meal type are loaded and the crew request extra meals. We often end up delaying a plane and missing a slot while the caterers rush over half-a-dozen extra meals. We should let the plane go. I am sure not everyone actually wants a meal. They only eat because they are bored. I think we should stop providing meals altogether, certainly on the short hauls. Tourist-class passengers often eat at the airport anyway and we already provide food for business class in the executive lounges.

Peter had not dared raise the idea of changing the methods of service in tourist class and increasing the range and type of meals to business-class passengers. His thoughts turned to how he could explain to the board the difference between what might be desirable and what is deliverable and appropriate.

Questions

1. What problems does Peter Greenwood face?
2. If you were Peter Greenwood, what would you say to the board?
3. In particular, what recommendations would you make about unbundling the complimentary meals service on long-haul economy?

Further reading



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Notes



- 1 For a discussion see Johnston, R. (2005) 'Service operations management: from the roots up', *International Journal of Operations and Production Management*, 25 (12), 1298–1308; and Johnston, R. (1994) 'Operations: from factory to service management', *International Journal of Service Industry Management*, 5 (1), 49–63
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- 3 As pointed out in Lovelock, C. and Gummesson, E. (2004) 'Whither service marketing? In search of a new paradigm and fresh perspective', *Journal of Service Research*, 7 (1), 20–41
- 4 We are grateful for the cooperation of Sara Davies, whose interview formed the basis for this example.
- 5 The National Federation of Young Farmers' Clubs is a rural youth organisation in the United Kingdom. The Federation covers various Young Farmers' Clubs throughout England and Wales, helping support young people in agriculture and the countryside.
- 6 See, for example, Brudney, J.L. and England, R.E. (1983) 'Toward a definition of the coproduction concept', *Public Administration Review*, 43 (1), 59
- 7 Oertzen, A.-S., Odekerken-Schröder, G., Brax, S.A. and Mager, B. (2018) 'Co-creating services – conceptual clarification, forms and outcomes', *Journal of Service Management*, 29 (4), 641–679
- 8 See, for example, the work of Gustafsson, A., Kristensson, P. and Witell, L. (2012) 'Customer co-creation in service innovation: a matter of communication?', *Journal of Service Management*, 23 (3), 311–327; and Carbonell, P., Rodriguez-Escudero, A.I. and Pujari, D. (2012) 'Performance effects of involving lead users and close customers in new service development', *Journal of Services Marketing*, 26 (7), 497–509
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- 11 The information on which this case example is based is taken from: How To Stage An Opera, ENO (2014) YouTube video, added by English National Opera [Online]. Available at <https://youtu.be/eCiD4BBAhkM> [Accessed 16 April 2020]; Opera Jobs: The Stage Manager (2014) YouTube video, added by English National Opera [Online]. Available at <https://youtu.be/0t5Ld-MxwChg> [Accessed 16 April 2020]; Opera Jobs: The Sound Engineer (2014) YouTube video, added by English National Opera [Online]. Available at <https://youtu.be/9FHuNXjDCSg> [Accessed 16 April 2020]; Opera Jobs: The Prop Maker (2014) YouTube video, added by English National Opera [Online]. Available at <https://youtu.be/IFN7O2X73mI> [Accessed 16 April 2020]; Opera Jobs: The Milliner (2014) YouTube video, added by English National Opera [Online]. Available at <https://youtu.be/7HDtj-79WJQ> [Accessed 16 April 2020]; Opera Jobs: The Wigs and Make Up Manager (2015) YouTube video, added by English National Opera [Online]. Available at <https://youtu.be/gpji1x-tIAQ8> [Accessed 16 April 2020]; Opera Jobs: The Costume Department (part 1) (2018) YouTube video, added by English National Opera [Online]. Available at <https://youtu.be/1HK1bm7TqTs> [Accessed 16 April 2020].
- 12 Edvardsson, B. and Olsson, J. (1996) 'Key concepts for new service development', *The Service Industries Journal*, 16 (2), 140–164
- 13 The information for this example is taken from the two airlines' respective websites.
- 14 This worked example is based on a case study written by Shirley Johnston and published in previous editions of this text.
- 15 This case is an updated and adapted version of the 'Sky Airways' case originally written by Robert Johnston and Bridgette Sullivan-Taylor, Warwick Business School, and published in earlier editions of this text.

Chapter 2

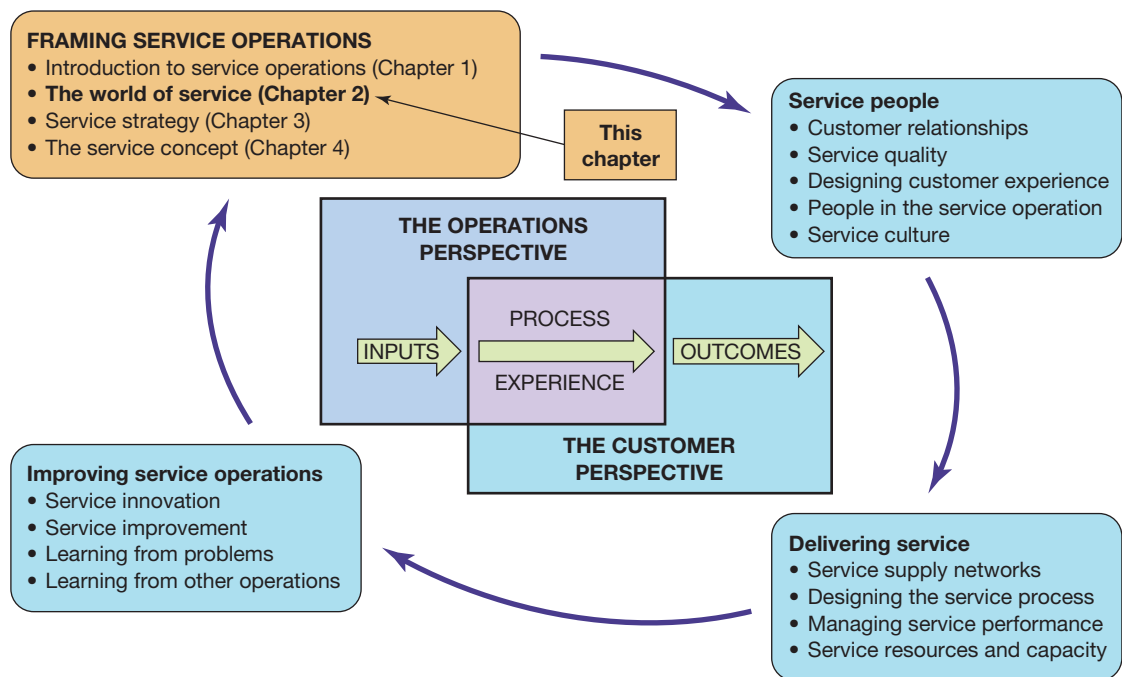
The world of service



Now we have established what service operations management is and why it is important, this chapter looks at the many different types of service organisation that exist, the importance of service in most economies and some developments in how we think about service. The position of this topic in our model of service operations management is shown in Figure 2.1.

Learning objectives

- To be able to identify the main types of service organisation
- To understand the importance and growing significance of service in most economies
- To be able to describe some of the more recent developments in how we think about service

Figure 2.1 This chapter examines the world of service

Introduction

If service operations and the service economy in general are both widespread and important, as we established in the previous chapter, then what are the broad trends that have shaped the service industries that we experience today, what types of service operation have to be managed by service operations managers and how is the way in which we think about service changing? Putting our current understanding of service operations in its broad historical context is important because it allows us to distinguish between what is changing in service and what is not. For example, if one were to visit a healthcare operation, such as a general hospital, of 20 years ago, some of the technology and medical treatments would look very different, yet the service experience would probably be basically very similar.

But first we need to establish a number of important points that are prerequisites for understanding the importance of services in our everyday lives. These are:

- That services are *everywhere*. The types of service that are active in the economy are many and various.
- That services are *most of what we do* and what we consume. Services are increasingly important economically in most parts of the world.
- That services are the *way of the future*. Many of the new ideas of how business is developing stress the centrality of service.

2.1 Services are everywhere

Services are everywhere – you can't avoid them. All of us are customers and users of a wide range of services, both commercial and public, whether they be education services, transport services, childcare services, hospitals, internet or high-street retailers, holiday firms, restaurants or music

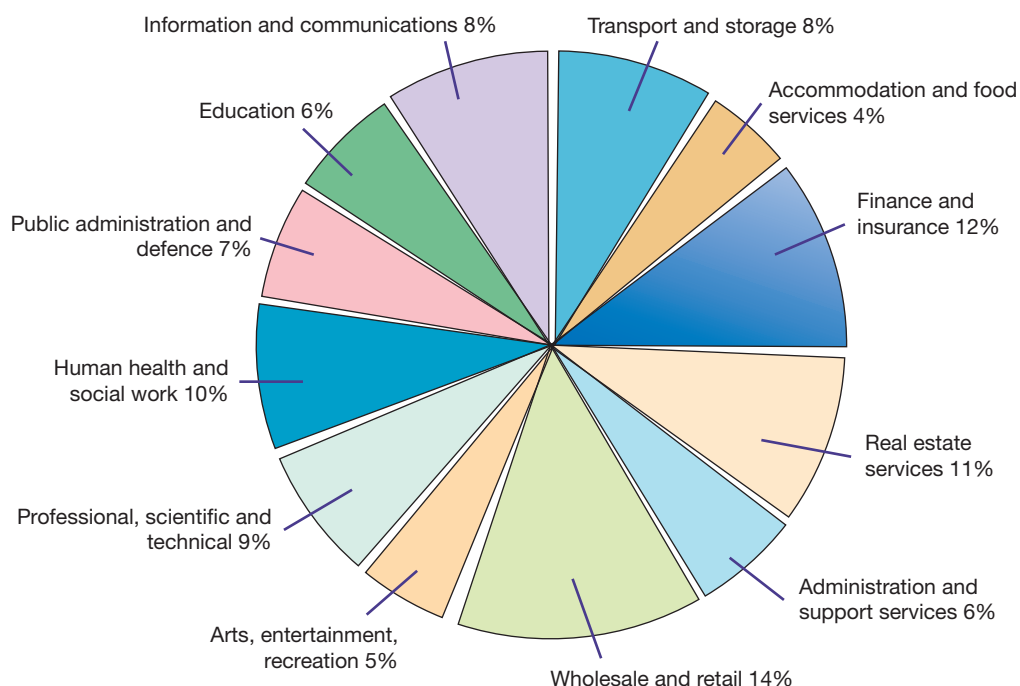
streaming. We come into contact with service operations every single day, continually experiencing and consuming their services. But, the term ‘service operations’ covers a far broader field than these ‘everyday’ services that we buy or receive as individuals, or the ‘personal’ services that we provide to each other. It includes the services that organisations provide to each other, such as procurement or consulting services. It includes the public services that governments, or their agencies, provide, such as social services, police services or fire and rescue services. It includes the many and wide range of services provided by non-profit and voluntary organisations, such as faith organisations or international aid organisations. It also includes all the ‘internal’ services that organisations depend on to run effectively: for example, information technology (IT) services, human resources (HR), support services, finance and accounting services, and so on. Even in manufacturing companies, there is a service element to what they produce. Very few (if any) producers of physical products can neglect how they serve their customers in ways other than delivery of the core product.

The purpose of this section is to illustrate the huge scope of service organisations; however, classifying the many different types of service is not always straightforward. For example, should a gym be classed as being a healthcare service, an entertainment service or even a dating service? Different clients may see it in different ways. But, accepting some degree of ambiguity in classification, Figure 2.2 gives a general idea of the relative size, in economic terms, of various types of service in a relatively service-heavy economy (the UK).

While the data in Figure 2.2 is illustrative of many relatively developed economies, an alternative (and more revealing) classification of services is based on the nature of who, or what, is performing the service and who, or what is receiving it. We treat this next.

Figure 2.2 UK economy service sectors, share of gross output (2014)

Source: Data from Black, A. (2018) ‘Hard Brexit: passport to nowhere for British services’, published by The Federal Trust for Education and Research.



Types of service – B2B, B2C and so on

A common, and useful, framework for classifying services derives from the early days of e-commerce. It divides services as generated by, and intended for, either businesses, government (or their agencies) or customers. The framework is shown in Table 2.1. Envisioning how each entity interacts with each other results in nine categories of service.

Business-to-business (B2B) services

Business-to-business (B2B) services are provided by businesses for other businesses or organisations. The IT company SAP, for example, is a market leader in enterprise application software; it provides a range of services to its business customers that help its customers (also businesses) to manage their systems and decision making. Other B2B services include consulting services, outsourced catering services, buildings maintenance or leasing and supporting equipment, corporate travel services, financial services and market research. Some B2B service companies also sell their services directly to individual consumers (B2C, see the next category). For example, Microsoft is known to individual consumers because of its well-known software products, but its sales to other businesses make it also one of the largest B2B companies in the world.

The decision to purchase a B2B service is usually made by professionals within the customer organisation, but they may not be the actual end users of the service. So, selling B2B services often means dealing with multiple contacts in a customer organisation. For example, consultants may have to work with a wide range of employees in their client organisations and maintain relationships at different levels in the organisation. Relationships can be complex, especially when the users or recipients of a service are not the purchasers, and this purchasing group may in turn be different from those who commission or specify the service standards. Moreover, B2B relationships may last for a long time, so the challenge is for the relationship to be maintained without becoming complacent and the customer or supplier being taken for granted.

Business-to-consumer (B2C) services

Business-to-consumer (B2C) services are those that individual customers purchase from service-providing businesses for themselves, or on behalf of another individual. B2C is one of the largest classes of service types, with services ranging from leisure services such as hotels, restaurants,

Table 2.1 A service classification derived from ecommerce

From – To	Business	Government	Consumer
Business	Business-to-business (B2B) services include corporate banking, consultancy, courier services, etc.	Business-to-government (B2G) services include outsourced waste disposal, economic research, etc.	Business-to-consumer (B2C) services include entertainment streaming, retail (online and high street)
Government	Government-to-business (G2B) services include legal advice, planning guidance, environmental compliance, etc.	Government-to-government (G2G) services include information provision, legal guidance, etc.	Government-to-consumer (G2C) services include security, justice and healthcare provision, etc.
Consumer	Consumer-to-business (C2B) services include online reviews, focus groups, reverse auctions, etc.	Consumer-to-government (C2G) services include tax payment, information provision, etc.	Consumer-to-consumer (C2C) sometimes termed peer-to-peer (P2P) services include social networks, video sharing, sales sites, etc.

sports provision, retail services (both ‘high street’ and online), travel services such as airlines and bus companies, and financial services such as banks and insurance providers, through to professional services such as lawyers and accountants.

The decision to purchase B2C services usually lies with the individuals who consume them. However, individuals are, well, individual. We are all different in some way. The challenge lies in providing consistent service to a wide variety (and often high volume) of customers whose individual perceptions are not always well understood. Each customer has their own special needs and expectations of the service provided and, to make matters more difficult, these may change for the same individual from day to day. Also, because an operation may serve so many customers, it faces a major challenge in keeping the experience fresh for the next new customer. It may be the first and only time the customer experiences this service, although the customer may be just one out of hundreds that an individual member of staff sees in a day. In addition, many B2C service operations have the added complication of the need for consistency across many points of contact with customers, frequently spread nationally if not globally. For example, a hotel chain may have hotels in all parts of the world, yet its reputation will depend on achieving a standard of service that is both appropriate to its intended market position and consistent throughout its chain.

Business-to-government (B2G) services

Business-to-government (B2G) services are the services that are offered by commercial organisations to national or local government, or their agencies. Usually this involves either providing services that facilitate the normal work of government departments, or providing services to the public on behalf of government. These types of services are also sometimes called business-to-administration (B2A) services. Common examples of B2G services include contracted refuse collection and disposal, major construction projects and public awareness advertising campaigns.

The decision to purchase this type of service is often influenced by other than purely economic considerations. Public bodies are usually governed, or at least influenced, by political issues. Moreover, because taxpayers’ money is (directly or indirectly) involved, all transactions should be fully accountable and transparent. Public bodies will be anxious to demonstrate that their purchases represent good taxpayer value. So, businesses trading with government will need to show how their services exemplify value and benefits to the public as well as complying with public policy. At the same time, businesses may hold the expertise to influence public policy. B2G organisations, therefore, may also have a lobbying or influencing role.

Government-to-government (G2G) services

Government, whether national or local, is complex. It usually involves many separate departments, public bodies or agencies, each with a different focus and set of responsibilities. Yet each of these often needs to provide service to other government departments. For example, tax authorities rely on the accurate provision of personal information such as births, deaths and other changes in personal circumstances that are usually registered with separate bodies. If the departments giving or receiving service are organisationally close (for example in the same local government authority), they could be classed as ‘internal services’, with all the issues associated with that kind of service (see later in the chapter).

There is usually no ‘decision to purchase’, as such, in this type of service. Separate parts of government rarely have any choice as to from where they receive their services. Each body is usually mandated to provide what is, in effect, an internal monopoly service. Obviously this might lead to a lack of sanctions on a service if it fails to perform adequately. There are also challenges common to all internal services. Research carried out by the UK government into how its services are delivered concluded that the ‘silos’ (organisational boundaries) between different areas of government delivering the same service to a user are one of the biggest barriers to delivering good services. In response, it expanded its programme of cross-government ‘service communities’ to bring together everyone involved in delivering a particular service.¹

Government-to-consumer (public) services (G2C)

Government-to-consumer (public) services (G2C), or government-to-citizen services, are those that are provided by central or local government for individuals in the community at large. Funding comes either through various forms of business and individual taxation, or a direct charge to the individual, or a combination of both. The funding is then largely allocated by policies set by government. Examples include the provision of security through defence forces and police, justice systems such as courts and the prison service, healthcare services such as hospitals and primary care (depending on how a country chooses to fund healthcare, this may be provided privately, by the state, or a combination of the two), primary, secondary and tertiary education, and so forth.

Again, there is not usually a ‘decision to purchase’ this type of service, as such. In fact, citizens may have little day-to-day choice. Services are funded through taxation with the allocation of resources influenced by political processes. The challenge lies in balancing the various political pressures and providing acceptable public services. Some public services are provided for the good of society at large and are not necessarily loved by those who have to deal with them. Prisons, police services and tax collectors may fall into this category. In addition, public services are under continual scrutiny to provide ‘best-value’ services. Nor can public sector organisations use the pricing mechanism to regulate demand, particularly with essential services. A public health service must make policy decisions as to how much resource can be devoted to heart operations, to maternity services and so on. Expenditure on intensive care units, accident and emergency provision and very expensive drugs are particularly sensitive since lives are at stake, but inevitably there will be times when demand outstrips supply or costs exceed budgets, meaning that there is an implied rationing of the supply of services.

Consumer-to-business (C2B) services

Consumer-to-business (C2B) services are those where customers offer their services to businesses. Although it is not a very large category of service, there are examples, such as when customers offer online reviews of products or services they have received, or when they participate in a support forum or focus group. In all three examples, a business is extracting value from the willingness of individual consumers to participate in supporting a business transaction. However, consumers, as a broader group, do benefit from the shared knowledge. This type of feedback may be more formal – for example, some companies organise online communities to provide comments on the development of their offerings. Sometimes a fee is paid to the consumer by the business – for example, a blogger may be recruited as an ‘influencer’ to promote the business’s offerings. This type of service also includes ‘reverse auctions’, where customers post the price they are willing to pay for a product or service they wish to buy. In some countries, electricity consumers may also generate some of their own (through solar panels, etc.), which, when in surplus, energy companies buy back. More controversially, customers of some social media businesses may not always realise that they have consented to be C2B providers when their personal data is sold to other businesses.

Consumer-to-government (C2G) services

This is another relatively small category. Consumer-to-government (C2G) services are when individual citizens provide ‘service’ to government. Often this is unpaid, as in providing earnings information for tax purposes. Once more, there is no decision to purchase – citizens either volunteer (for example, applying for a driving licence) or are required (providing tax information) to engage in the service. But this does not mean that such services should not be carefully designed. For example, a government department responsible for the issuance of driving licences can make life easier for itself, and its citizens, by providing all necessary information and building in all necessary links, on one web page. Also the use by government of the voluntary sector to, for example, clean up littered sites, could be included in this category.

Consumer-to-consumer (C2C) services

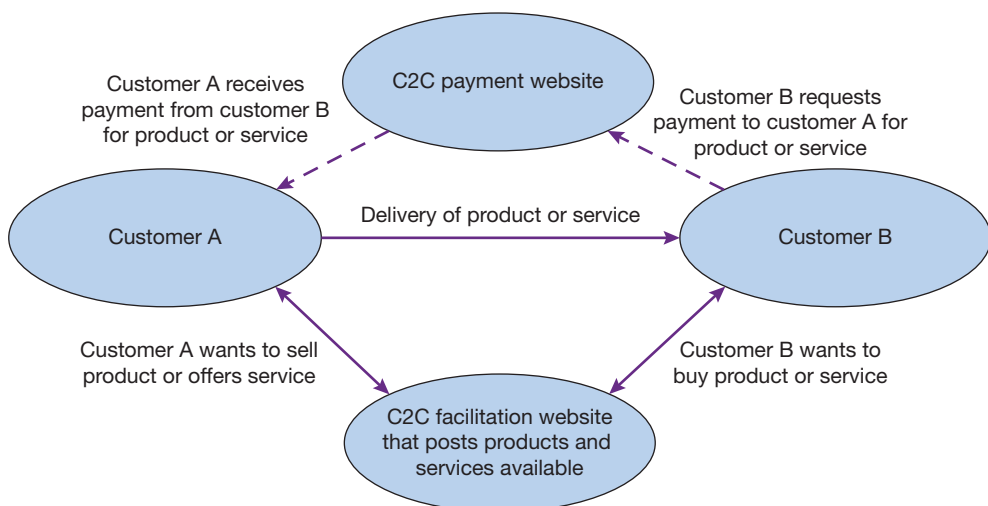
Consumer-to-consumer (C2C) services are those that *facilitate* transactions between private individuals, rather than the transaction itself. This distinction is important and explains why this category of service has become more important. The capability of internet-based ‘platforms’ to facilitate consumer-to-consumer interaction has allowed the development of numerous services, including social networks such as Facebook, business networks such as LinkedIn, video-sharing sites such as YouTube and peer-to-peer games. eBay was probably the first widely used e-commerce platform that facilitated C2C transactions, although earlier non-internet examples did exist, such as the classifieds section of newspapers (later superseded by online services, such as Craigslist), or the activities of an auction house. However, in both cases, a commercial third-party business facilitates the transaction for a fee, as is the case with more recent internet-based platforms. It is the use of these third-party services that is the important factor in C2C services. In effect, C2C platforms are providing a service that can promote other services. Figure 2.3 illustrates how a C2C facilitation website posts details of products or services available for sale, and another C2C facilitation website arranges payment.

The decision to purchase this type of service lies with the individuals who choose to use the facilitating service. Partly, this depends on how well the facilitating service helps buyers and sellers to locate and assess each other. The financial success of web-based services often depends on their scale. The larger the number of consumers using a site, the better the range of products or services to choose from, and the lower the cost per transaction to the facilitating site. However, C2C facilitating services do face some problems. For example, it is difficult for them to guarantee or control the quality of goods and services sold on their site. Similarly, it can be difficult to prevent fraudulent transactions, or the posting of views that pose a threat to the reputation of the facilitating site.

Non-profit services

A category of service not obviously covered by the e-commerce-inspired classifications above, is that of non-profit (sometimes called not-for-profit) services. As the name implies, these are services provided by organisations that do not (necessarily) expect to make long-term profits. But, even if profit is not the main objective, they do seek long-term relevance and ‘licence to operate’. The recipients of the service could be individuals, businesses, governments or other not-for-profit

Figure 2.3 Two C2C services that facilitate transactions between customers



organisations. One could therefore see them as organisations that combine elements of B2B, B2C and B2G. Such organisations include the services provided by non-governmental organisations (NGOs) such as aid organisations Oxfam (see case example), Red Crescent and Médecins sans Frontières (MSF). Other non-profit and voluntary organisations include faith organisations, charities, trusts, the Scouting Association and the many small voluntary clubs and societies such as sports clubs and photographic societies. Most engage in a mixture of fundraising, providing information about the cause or issue that concerns them, and in some form of social action. An organisation such as Oxfam must gather funds for famine relief and then organise to supply and distribute aid as required.

Usually, the beneficiaries of this type of service are self-selecting or chosen recipients. Self-selecting ‘customers’ are those who voluntarily seek out assistance – for example, from a citizens’ advice organisation. ‘Chosen’ recipients are likely to be those who are, or have been, affected by prolonged deprivation or a disaster. In most jurisdictions, not-for-profit businesses are required to function as a charity, *or* are religious, scientific or public safety organisations. Moreover, not-for-profit services may also exist to collect money and resources that can be channelled to other qualifying charities. But, whatever their purposes, not-for-profits often have to deliver their services under conditions of conflicting objectives. Coping with the differing objectives of volunteers, donors and beneficiaries can make decision making difficult, especially if the charity is dealing with emotional and overwhelming needs.

Case example

The problems of managing service in charities – Oxfam International²

Managing the service operations of a not-for-profit charity is not easy. It may seem that, unlike commercial businesses, they do not have direct competitors, yet in the United Kingdom alone there are over 160,000 general charities (most of them small), all of which are competitors for the same £37 billion of funding. But it is the idea of serving multiple stakeholders that is what best characterises service operations management in charities. They may rely on volunteers, who cannot be treated like regular staff in commercial organisations. They are ‘served’ by providing them with the opportunity to work in a worthwhile cause. They also need to ‘serve’ a wide range of funding sources, including individuals, commercial companies and governmental institutions, by proving their effectiveness at fulfilling their charitable purpose. Moreover, charities have to balance these activities between their prime purposes, the effort they put into raising the funding that they need and the ‘back-room’ operations that keep them running. How charities operate is just as important as the difference they make. Not only that, but any failures in how they run their operations can lead to a disastrous loss of trust. The recipients of the charity’s work, the



Geography Photos/Universal Images Group/Getty Images

donors who give money, the supporters and volunteers, the full-time staff and the public must all have confidence that the charity works to the highest ethical standards.

No charity demonstrates this better than Oxfam, the major international development, relief and

campaigning organisation that is dedicated to finding lasting solutions to poverty and suffering around the world. It is a confederation of 20 international organisations (country-based Oxfams) that come together to maximise their efficiency and achieve greater impact in reducing global poverty and injustice. Its vision, it says, is a just world without poverty, in which people are valued and treated equally, enjoy their rights as full citizens and can influence decisions affecting their lives. Working in more than 90 countries, and in partnership with thousands of local groups and civil society organisations, Oxfam enables poor and marginalised people to realise the changes that they want to see in their lives. It does this by supporting a combination of rights-based sustainable development programmes, public education campaigns, advocacy and humanitarian assistance in disasters and conflicts, to strengthen the resilience of individuals and communities.

Each year, Oxfam International launches emergency responses when lives, health and livelihoods are threatened by disasters – natural disasters, such as earthquakes and storms, or political conflicts, such as riots and wars. In 2017–18 it worked directly with over 23 million people in their programmes worldwide. Oxfam’s regional and country offices usually run the emergency programmes, with its headquarters providing advice, materials and staff, as well as deploying emergency support personnel on short-term assignments when and where their skills are required. Shelters, blankets and clothing can be flown out at short notice from the emergency warehouses. Engineers and sanitation equipment can also be provided, including water tanks, latrines, hygiene kits and containers such as the ‘Oxfam

bucket’, which is light, easy to carry and transport, and has a sealable lid.

However, increasingly, charities see their role as not being limited to responding to conditions, but also to actively campaigning to tackle what they see as the root causes of these conditions. In Oxfam’s case, it says that its purpose is to help create lasting solutions to the injustice of poverty, and that it is part of a ‘global movement for change’, empowering people to create a future that is secure, just and free from poverty. It is essential, Oxfam says, that it challenges the structural causes of poverty and urges governments and global institutions to realise their commitments to poverty reduction. Notwithstanding the laudable nature of such aims, it inevitably takes the charity into a more overtly political arena, where the kind of risks that it is exposed to can change. Taking a ‘political’ stance means that there will be other groups that have different views and interests, exposing the charity to critical scrutiny. Moreover, entering the political arena can mean that any failures take on a greater significance. Oxfam suffered considerable reputational damage when incidents emerged of serious sexual misconduct by a group of male aid workers living at an Oxfam residence near Port-au-Prince in Haiti. The country director admitted the truth of the allegations, but instead of being dismissed, he was allowed to resign and given one month’s notice if he cooperated with the investigation. Some Oxfam supporters accused the charity’s critics of having an ‘anti-aid agenda’. But Oxfam said it would launch an independent commission into its culture and practices, admitting that the scandal would stain its reputation for years.

Internal services

Internal services are the many sorts of formal and informal services that individuals and organisational units inside organisations provide to each other. The formal ones include such internal services as IT helpdesks, human resources, payroll and security services. In fact, most managers are involved in providing and receiving internal service, not just these formal internal services, but also the day-to-day service they provide to each other, such as giving information, advice and support. One way of thinking about organisations is to view them as networks of interconnecting service processes, each receiving inputs from other internal processes and providing service to internal ‘customer’ processes. So, each process is, at the same time, an internal supplier and an internal customer for other processes. This ‘internal customer’ concept provides a model to analyse the internal

Counterpoint

One could argue that there is a significant drawback to thinking about internal services as separate services. All services are part of a greater network, but internal services particularly should be seen as important parts of the end-to-end process that serves an external customer. Only by understanding how a total end-to-end process should work in order to provide an appropriate service performance to

the organisation's ultimate customers, can an internal service fully grasp its role. What have become known as 'silos' between different internal 'service providers' can present one of the biggest barriers to delivering great external service. Thinking about any one particular service inevitably takes away from an appreciation of the total internal network of services.

activities of any service operation. It is also a useful reminder that, by serving internal customers with the same degree of care as external customers, the effectiveness of the whole operation can be improved. Indeed, what has been called the 'Internal Service Rule' highlights the importance of internal service provision: the level of external customer service will never exceed the level of internal customer service.

In many circumstances, the customers of internal services have no choice of provider, as the services are frequently selected via a central budget. There is effectively no internal competition to turn to if they are dissatisfied with the service that they receive. However, this should not mean that internal services do not have to demonstrate value for money against possible external alternatives, especially where there is the possibility of subcontracting or outsourcing the service so it becomes a B2B service. The challenges posed by internal service provision include:

- Getting people within an organisation to recognise the service and the importance of the service they provide to each other, and treat it, assess it, measure it and improve it in just the same way as they deal with external service.
- Demonstrating that the internal services, such as IT and finance, provide at least as good 'value for money' as an external alternative.
- Gaining acceptance from their internal customers. Centrally funded services are frequently viewed with suspicion by local operating units and may not receive the cooperation required to carry out their tasks effectively (see the next section on 'shared services').

Shared services

A particular type of internal service organisation that is found in many larger companies and government services is the 'shared services' model. This is when one (or a set of) activities are consolidated and used by multiple parts of the same organisation. For example, a large, global oil and gas company, which once had independent finance and accounting departments in all of its global offices, may decide to set up a single consolidated centre that processes all its routine invoices, while leaving the more complex accounting tasks with its regional offices. The consolidated 'invoice-paying' centre is then known as a shared service centre (SSC). It is an increasingly popular way of organising internal back-office services, and is often employed to provide finance, human resources management, facilities management and information technology expertise and service.

An obvious advantage of SSCs is that they provide economies of scale and reduce unnecessary duplication of effort, while allowing each part of a business to focus on the core activities that support their business goals. It is also one of the best methods of ensuring standardisation – something that is particularly important where policy has to be applied uniformly, as in government services. However, not all efforts to implement SSCs are successful. The integration of sometimes

widely varying practices from various previously separate centres can be particularly difficult and take longer than some companies expect. Moreover, centralising a service almost inevitably means increasing the distance (both actually and metaphorically) from internal customers. Understanding internal customers' real needs becomes correspondingly more difficult. Consequently, internal customers may perceive there to have been a reduction in the service quality they receive.

All services have customers

One thing that does not change, no matter what type of service is involved, is that all service is performed for the benefit of customers. However, different organisations often use different terms for their customers. Public services provide services to citizens. The police service has victims and criminals. Providers of IT services talk about users. Hotels have guests. Radio stations have listeners. We tend to use the term 'customer' to cover all of these individuals and communities to whom organisations deliver service. We also use the word 'customer' to cover all the individuals and departments within organisations who provide each other service (internal customers) and also the external organisations with whom they provide services – for example, the police work with social services and the courts to look after vulnerable children. While the child is the recipient, the other organisations need to provide service to each other to help the child.

Different services within a sector

Just as each particular sector has its own set of challenges, there can be significant differences between service operations within sectors. This may relate to the way the organisation has chosen to compete, or which customer segments are to be served. Table 2.2 outlines some key differences between two B2C organisations operating in the same sector: a 'low-cost' airline and a 'full-service' airline.

One of the challenges for service operations managers is to match the style of operations, decisions about processes, people and technology to the overall strategy of the organisation. To do this, the operations manager must have a clear understanding of how the operations function contributes to the overall success of the organisation.

Is the distinction between different types of service reducing?

Although it is important to understand the differences between the various types of service operations outlined in this section, one could argue that, in many ways, the distinction between them is reducing. For example, the distinctions between commercial, public sector and

Table 2.2 Comparing airline operations

	Low-cost airline	Full-service airline
Business model	High volume, low cost	Global network, profit made on business travel
Network	Short haul, with no connections to other carriers	Long haul, with connections to global partner airlines
Cabin service	Basic, no food, no frills	Range from economy to first class
Locations	Secondary, low-cost airports	Primary airports to allow interconnections
Volume	Multiple flights per route each day	Range from three flights per day to one flight per week for less popular destinations
Booking system	Direct through own website, and/or own contact centre	Usually through intermediaries (travel agents) or websites

non-profit organisations are becoming blurred. Public services, although they do not have competitors, recognise that their customers may judge their service against for-profit organisations. Charities and government bodies often have moneymaking arms and sometimes compete for commercial contracts. For example, the RSPCA (a UK animal charity) developed a consultancy service to provide advice to the film industry on working with animals safely and humanely. Universities, charities and faith organisations talk openly about market share. Not-for-profit organisations are also increasingly run in similar ways to their commercial counterparts. They have chief executives, strategic plans and marketing departments, and routinely refer to their ‘customers’.

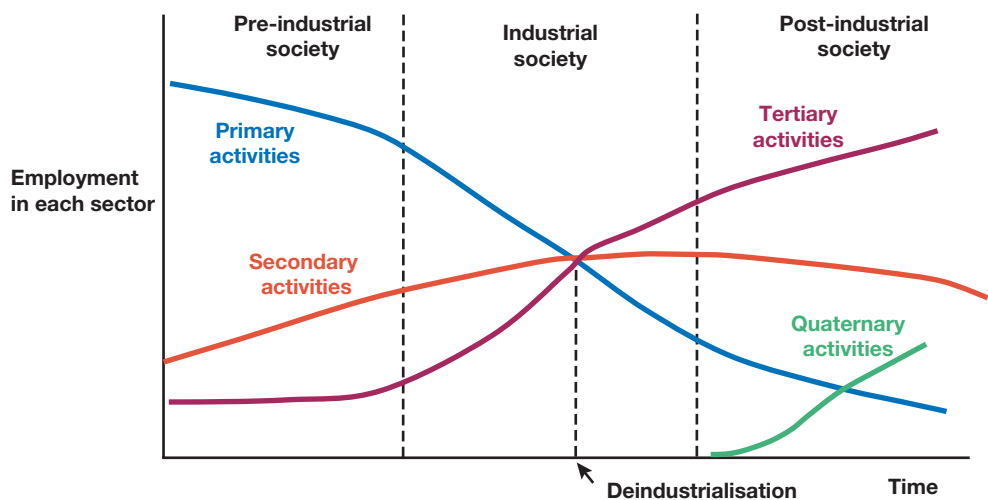
Accepting this merging of the distinction between types of service is not to deny that individual types of service such as financial services, tourism, leisure, charities, government, hospitals or business-to-business services have their own set of specific challenges. Managing a for-profit consultancy with a small number of high-value clients poses rather different problems to managing an aid agency in a disaster-struck, heavily populated region of a developing country. Yet there is a body of knowledge, a set of techniques and a number of frameworks that can be applied to all service operations. That is what this text deals with: most of the general theory and practice described in this text applies to all service operations, no matter what sector of the service economy they inhabit.

2.2 Services are what we do and consume

Not only is there a wide variety of types of service, service organisations in total are hugely important to the economy of most countries. Services are most of what we do and what we consume. Moreover, the amount of the world’s economic activity that comes from services has been growing consistently for over a century, as has international trade in services. Service activities are a vital and significant part of most developing and developed economies. In most developed countries, services account for around 80 per cent of gross domestic product (GDP), and for in excess of 50 per cent of GDP in developing economies. They also provide employment for a significant number of people, as service organisations provide employment for the vast majority of the working population in most countries. In many economies, the service sector is the only area where new jobs are being created – notably in tourism and leisure. Many service organisations, such as those in hospitality and transportation, are people-intensive, requiring different mixes of skilled and unskilled labour. Nor can we ignore the vast numbers of people employed in the public and voluntary sectors. Managing services such as education, health, fire, police, social services, famine relief organisations, faith organisations and charities requires as much expertise as their private-sector counterparts. Governments are increasingly subcontracting many services to the voluntary sector that were previously provided directly by the state.

Shifting roles in the workforce – the Clark sector model

Economists typically categorise three kinds of work in a country: agriculture (agriculture, extraction of raw materials, mining, fishing and forestry), industry (manufacturing and construction) and services (tourism, retail and the kinds of services described in the previous section). In the 1940s, the Australian economist Colin Clark associated changes in the balance between economic sectors with the nature of consumer demand in an economy.³ As a country’s economy grows, the demand for agricultural output decreases, he said. The demand for manufactured goods at first increases, and then, when it reaches some level of market saturation, starts to decrease. Demand for services, however, grows constantly. An illustration of how the relative employment contribution of each sector changes is shown in Figure 2.4. Countries at different stages of development, according to this theory, will exhibit different levels of employment in each sector.

Figure 2.4 The Clark model of employment in each sector

So, as economies develop, they follow a progression that moves them from a heavy dependence on agriculture and mining, through the development of their manufacturing sector, towards a more service-based economy. The United Kingdom was the first large economy to conform to this sequence. Other economies have made, and are still making, a similar transition to what is sometimes called a ‘post-industrial’ service-based economy, although there is some evidence that this transition is becoming faster.

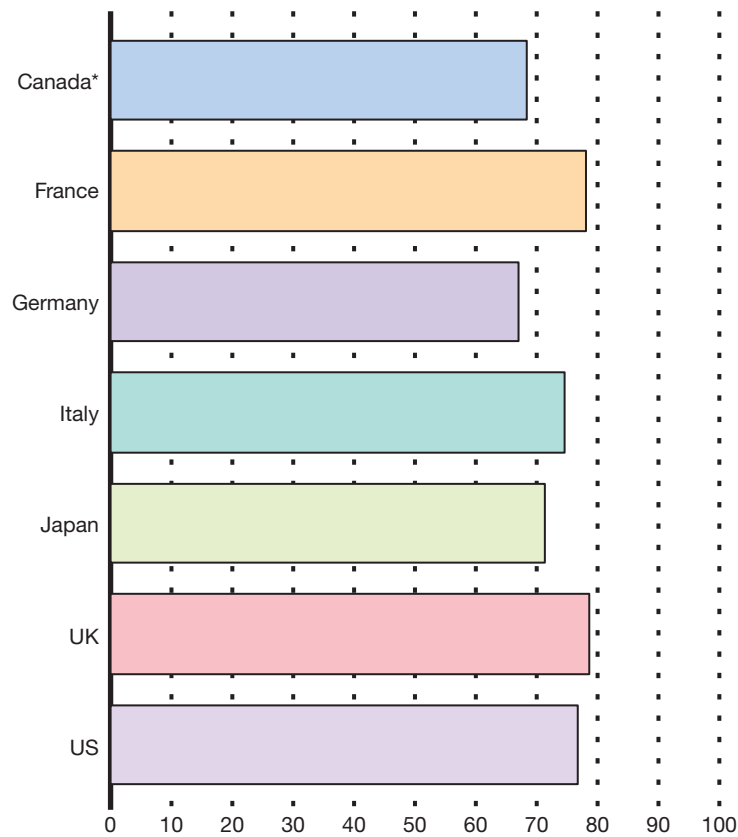
Even in what are now developed economies, around 70 per cent of their working population worked in agriculture in the mid-1800s. By 1900 this had reduced to 40 per cent, and today agriculture employs only around 2 per cent. By contrast, in these economies the service sector represented around half of gross domestic product (GDP) in the 1930s, but had grown to in excess of two-thirds by 1980 and more than three-quarters in the 1990s. And the growth continued. By 2017, service industries accounted for just short of 80 per cent of total UK GDP, and 83 per cent of its employment.⁴ Today, all very industrialised countries have, in effect, become ‘service economies’, at least when measured in terms of the share of the workforce employed in service industries. Figure 2.5 shows the percentage of gross domestic product (GDP) devoted to services in some major economies.

The quaternary sector

Although the original Clark model divides the economy into three sectors, it has become common to divide the tertiary (service) sector into two, making four in total. In this classification, the so-called quaternary sector includes services related to intellectual and knowledge-based activity (it is sometimes called the knowledge economy). Included, for example, are those services related to information and communication technologies (ICT), consultancy, research and development, theatres, design, brokerage firms, media, culture, entertainment and intellectual services generally. The main characteristic of quaternary-sector services is that their activities are intellectual rather than repetitive. More routine services in the tertiary sector, such as hairdressers or taxi firms, are largely repetitive, whereas quaternary-sector services such as tax planners or portrait painters involve more irregular and/or variable activities. However, not all work is easily classifiable. For example, teachers and doctors may spend part of their time on intellectual or research-based activities, but some of their time is spent on more routine work.

Figure 2.5 Percentage of each country's GDP that comes from the service sector

Sources: Data from OECD and UK Office of National Statistics (2014).



*Data for Canada is from 2012

Case example

Apple's move towards services⁵

Apple was one of the great successes of the Silicon Valley technology revolution that established itself towards the end of the last century. It was founded on an appreciation of what really mattered to the (then) developing market for computing and communication devices. Product design was clean, stylish and attractive, and functionality fitted admirably with its customers' requirements. And, although the operating software embedded in its products was much admired, they were still *products*, the trouble with which is that markets can become increasingly difficult as consumers slow the rate at which they

update their devices. By 2020, Apple's sales of its key iPhone product, although still growing, were slowing down.⁶ The share of revenue attributed to sales of iPhones accounted for 48 per cent, the lowest for the flagship smartphone for several years. In a world saturated with smartphones and computers, many of which offered similar functionality at less cost (although few could match Apple's design leadership), competition from other device makers was intensifying.

Yet, Apple's services business was growing at around 13 per cent. The company's App Store, music

and video streaming, gaming, licensing deals and other services were all seen as providing future growth potential. Also, even when iPhone sales were slowing, the installed base of Apple fans who owned their devices provided an attractive market for Apple-related services. Like other technology companies before it, Apple started to shift from selling devices to selling content and services. Years before, IBM had tried to offset the commoditisation of its computers by transforming itself into a company providing consulting, software and services. And, although it remained profitable, it had to shrink to a size nowhere near its former self.



BigTunaOnline/Shutterstock

Why this shift to services?

Several reasons have been proposed for the shift to services, and there is some argument as to which reason best explains it. Clark originally founded his theory on the ‘hierarchy of needs’ hypothesis, which assumes that because manufactured goods satisfy ‘higher’ (less basic) needs than agricultural output, and services satisfy even higher needs than manufactured goods, when an economy becomes wealthier, surplus wealth will increasingly be used to buy goods and then, later, services. Economists who question this idea point out that there are several relatively less-developed countries that have never developed much of a secondary (manufacturing) sector, but have shifted their employment directly from agriculture to services. For example, some Caribbean countries have grown their tourism and financial services industries while never having a significant manufacturing sector.

An alternative explanation is that the growth of service industries is because of the relative productivity growth between secondary and tertiary sectors. The production of physical goods has become increasingly mechanised, with developments in process technologies such as automation allowing fewer people to produce more goods. Services, on the other hand, although also capable of some degree of mechanisation, can be more difficult to automate (although developments in service technology may affect this).

The move towards outsourcing could also have had an impact on the rising share of employment in the service sector.⁷ This is partly an issue of how employment is classified. Most employment statistics classify companies according to their main output. This means that a service activity performed within a manufacturing company is classified as manufacturing employment, whereas the identical activity performed within a service firm is classified as service employment. So, for example, if a manufacturing firm chooses to outsource its finance and accounting activity to a specialist accounting firm, its accountants, who were once classified as belonging to the manufacturing sector, are now classed as being in the service sector.

As one would expect with a sector as varied and dynamic as the service sector, new ideas about what is, or could become, important are continually emerging. The next section explores some of these ideas.

Counterpoint

Could the growth of the quaternary sector be undermined by new technologies? Proponents of one school of thought speculate that the increasing sophistication of artificial intelligence (AI) will replace even knowledge-based jobs at such a rate that the increase in the quaternary sector may be slower than currently forecast by some experts. Some authorities argue that, just as robots have replaced much of the 'muscle labour' involved in physical manufacturing jobs, so what they call 'brain labour' will be taken over by artificial intelligence-driven automation.⁸ Technology can be cheaper and can often do even knowledge-based diagnostic tasks (such as examining X-ray images for signs of disease) better. So, technology is not only replacing people, it is also 'climbing the skills ladder all the time'. There will always be some types of job that are less prone to

being displaced by technology – usually work that is difficult to break down into a set of standardised elements, such as senior management tasks that involve decision making based on judgement and insight, teaching small children, creating original artworks and so on. However, the picture may hold a less certain picture for such jobs. As the convenience of data collection and analysis becomes more sophisticated, and process knowledge increases, it becomes easier to break more types of work down into routine constituents, which allows them to be automated. Even those studies that claim fewer people's jobs are likely to be destroyed by artificial intelligence than has been suggested, do not deny that many people will face a future in which their jobs may change significantly as technology affects the way processes are designed.

2.3 Services are the way of the future

A logical extension of the discussion on the rise of the tertiary (and the quaternary) sector is that services will continue to become even more important in the future. But, beyond the sheer preponderance of service organisations and their economic impact is the influence that service thinking can have on the way one thinks about all business more generally. In this section, we look at three sets of service ideas that have influenced how business can be viewed: the ideas of the experience economy, servitisation and service dominant logic (SDL).

The experience economy

It was back in 1998 that Joseph Pine and James Gilmore published an article in the *Harvard Business Review* that used the term 'the experience economy' to describe how people were increasingly spending their money on experiences instead of 'things'.⁹ They predicted a new commercial age in which all businesses would need to stage-manage memorable events for their customers. The idea is based on the way we have developed as consumers (similar to the hierarchy of needs hypothesis discussed previously). In past centuries, when food was less plentiful and shelter less reliable, it was the provision of those basic needs that provided the basis for happiness (or, at least, peace of mind). Later, the increasing provision of material goods led to the so-called 'consumer revolution' that transformed everyday standards of living. But, so the argument goes, there must be a limit to the amount of material goods that can bring true happiness. And even before that limit, every increase in the amount of 'stuff' we own will bring diminishing returns in terms of satisfaction. Some commentators have termed this phenomenon 'peak stuff'.

But proponents of the concept of the experience economy go further. They distinguish between services in general and experiences. In fact, they say, experiences are as different from services as

services are from goods. Moreover, they claim that experiences have the capability to bring greater satisfaction than material goods. Evidence for this is not uncontroversial, partly because it can be difficult to separate short-term factors from longer-term trends. However, there is some intuitive attraction in the idea, if only because experiences are more difficult to compare than goods. So, for example, if one person has a new Ferrari and another has a small 10-year old saloon, it is obvious who has the better car (even if the second person is happy with their old car). But comparing, say, holidays, is more difficult. The second person might have enjoyed the experience of his or her cheap holiday just as much, or more, than the first person's expensive one.

Moving more towards providing memorable experiences is something that could clearly be applicable to services that have traditionally relied on a high degree of contact with their customers. For example, 'bricks-and-mortar' retailers, under threat from online retailers, could attempt to embrace the experience economy by redesigning their offerings to enhance their in-store experience, promote customer engagement and exploit customer excitement (see the case example on the Apple Store). For example, an outdoor clothing and equipment store may offer not only customised products, but also 'adventure planning' consultations that match each individual customer's enthusiasms while promoting the heritage of the store's brand and their environmental credentials. Or, a store selling beauty products may encourage its customers to 'play' with its products in the store, offer beauty services and classes, hold beauty tip workshops, develop virtual technology that customers can use at home and so on.

Such examples treat the store as a stage – setting the scene, considering the interaction between customer and the service operation as one would a play. Even the language used reflects their change in emphasis. They do not 'provide service' – they 'stage experiences'. They focus on their 'guests' feelings' rather than 'deliver benefits' to customers. They provide 'memorable and personal experiences' while accepting that, as in a theatrical performance, each person's experience will be personal to them because it will depend on their state of mind as they interact with the experience.

Case example

The Apple Store experience¹⁰

Since opening its first retail store over two decades ago, Apple's range of products and the geographical spread of the stores have expanded rapidly. However, Apple has not always sold its products through its own shops. Through the 1990s, some conventional computer retailers were reluctant to stock its Mac computers, claiming that the Apple brand was too weak. However, when Apple's co-founder, the late Steve Jobs, decided to build Apple Stores, it provided the chance to put the customer experience at the centre of the stores' design. Jobs recognised the need for a better customer experience than the one provided by the third-party retailers that had previously sold Apple products. (Apple's retail store network has since expanded to over 500 stores throughout 24 countries.) Originally, the clothing retailer Gap, who also had embraced experience-based design, had a significant influence on the design of Apple stores. In fact, so many Gap employees moved to work for Apple that they joked about working for 'Gapple'.

Yet, even with the experienced Gap retailers, Apple wanted to develop its own ideas. Consequently, it built a 'prototype store' near its Californian headquarters and tested its retail concepts for a year before opening the first Apple Stores. This early learning period was important. It allowed Apple to come to the conclusion that the experience that customers would have within the stores was going to be particularly significant.

Apple figured that people would be willing to come to the Apple Store for the experience, and would be willing to pay a premium for it. And, of all the components to that experience, maybe the most important is that the staff aren't focused on selling stuff, they're focused on building relationships and trying to make people's lives better. Apple determined that its staff should be exceptionally well trained, and not on commission, so it would make no difference to them whether they sold customers an expensive new computer or helped them make their old one run better. Their job should be to figure

out what customers need and help them get it, even if it's a product Apple doesn't carry. Apple wanted to create a clear distinction with other retailers, where the emphasis was on encouraging customers to buy more, even if they did not want or need it. The important point is that creating the customer experience was not a matter of chance – it was carefully designed into Apple's strategy. Employees

were helped to cultivate their air of cool confidence through extensive training. Also, it's easier to be approachable and calm when there is little pressure to push sales. Training emphasised the importance of problem solving rather than selling, and treating customers with courtesy. For example, staff are told never to correct a customer's mispronunciation of a product name in case it is seen as patronising.

The experience economy for B2B services

While it is relatively easy to understand how treating customer interaction as an 'experience' can be useful in B2C service businesses, is the concept useful for a B2B business? After all, B2C services such as retailers or hotels often market themselves to individual consumers, based on their perceived brand value, and therefore lend themselves to being judged by their customers' experience. B2B firms are different. Their unit of sale is usually larger, involving a longer and more complex purchasing transaction, and possibly involving several individuals from each customer organisation. What does 'experience' mean in these circumstances?

In many ways, it involves connecting with customers on an emotional level just as it does in B2C businesses. But B2B does present its own challenges. First, there are usually multiple customers for each sale. These may range from very senior decision makers and technical staff, through to the staff who are going to 'use' whatever is being sold, and they may all have different perspectives, needs and opinions. Second, not only are there likely to be multiple decision makers on the customer side, there are probably several staff in the selling company who will have contact with the customer. Third, B2B customers are not 'the end of the chain'; they have customers themselves (who may also have customers). The implications of these issues are that experiences need to be designed with often complex, multifaceted and ambiguous needs in mind, and those staging the experiences must be well coordinated. (See the worked example on ZPZ Systems.)

Worked example

ZPZ Systems' focus on customer experience

ZPZ Systems (known in the industry simply as Zee-pee) was a provider of IT services and internal planning software to both public and private healthcare organisations. It was increasingly worried by competition from rivals who provided less-customised but lower-cost systems. Not only that, but its customer satisfaction ratings were no higher than those of its low-cost competitors.

We believed that enhancing customers' experience of adopting our systems would lead to greater customer satisfaction, an improved reputation and therefore increased sales,

said the company's CEO.

But we faced a number of problems. Our internal processes for evaluating customers' requirements were technically sound, but confusing to some non-IT staff in our customers' organisations. The same applied to our internal costing systems. Even when the systems had been installed and tested, customers often reported what we called 'false problems' – what customers saw as a problem, but in fact was simply that the customer didn't understand the new system. Too many times, the technical people that we dealt with in our customers'

organisations were happy, but their own internal customers were far less so.

What they did

When launched, Zeepee's customer-experience renovation programme involved several strands. First, it redesigned all the main processes that touched any part of a customer organisation. It did this by focusing on end-to-end 'customer journeys', critically examining all aspects of customer experience, from response times to employee mindsets. Second, the company sought to encourage customer engagement by devising a portal that provided easy access for customers to important resources, including tutorials on how its systems worked, explained in non-technical language. This proved such a success that it facilitated face-to-face workshops, both for single-customer organisations and more 'open'

events to encourage customers to share experiences as part of the 'Zeepee community'. As the CEO said, 'in difficult-to-understand high tech, customer engagement means providing experiences that humanises the technology so that you can connect with people at a deeper emotional level'. The third element in the customer-experience renovation programme was an attempt to build an emotional connection with customers. This involved producing a number of video case studies that showed how Zeepee's systems could impact on the working lives of healthcare professionals. These '*helping you to help them*' cases not only resonated with customers' staff, they also helped Zeepee staff to empathise with customers' concerns. In the CEO's words, 'it shows the importance of remembering that your services are being sold to people, so you must keep people at the heart of any customer experience strategy'.

Servitisation

'Service' is not confined to 'pure' service businesses. In fact, the traditional boundary between manufacturing and service is becoming more and more blurred and, as a consequence, the role of service in providing value is even more important in manufacturing industry. This is partly because products and services are merging. Increasingly, product manufacturers are seeking either to grow or protect their profitability by enhancing the service elements of their customer offerings. Hence the emergence of a wide variety of (what have become known as) 'servitisation' strategies. These are approaches to the development of customer offerings that blend services with products, and vice versa. Servitisation is the generic term that has come to mean any strategy that seeks to change the way in which product functionality is delivered to its markets. It has proved to be a practically powerful concept and one that seems to offer a lifeline to many manufacturers under competitive pressure. One of the earliest, and most discussed, examples of servitisation comes from Rolls Royce, the aero-engine manufacturer. Instead of selling its engines to its customers (mainly airlines), it offered them the option of paying a price per engine flying or operating hour – the price being dependent on the amount of support needed (for example, the number of aircraft, operating hours, amount of overhaul and repair, inventory, locations, transportation, etc.) and the performance guarantees required (for example, engine availability, turnaround time of repair, reliability, etc.). Rolls Royce originally called this service 'power by the hour' – a phrase seen by the industry as capturing the essence of servitisation.

Why has servitisation happened?

Servitisation is more than a management fad. It is an important indicator of how many industries are likely to develop. One could argue that it reflects the economic trends illustrated in the Clark model (see earlier in the chapter). Yet, at the level of the individual business, there is no single reason for the emergence of servitisation as a distinct strategy; rather there is a combination of factors:

- Substantial revenue can be generated from an installed base of products with a long life cycle by providing services. Particularly companies with a high installed base of capital goods (such as train manufacturers, construction vehicle makers, etc.) see their previous customers as representing a market that is worth exploiting.
- Services tend to provide a more stable source of revenue because they are resistant to the economic cycles that drive capital equipment purchases. The potential to sign long-term

agreements ensuring a stable source of revenue in service provision is seen as a major advantage of servitisation.

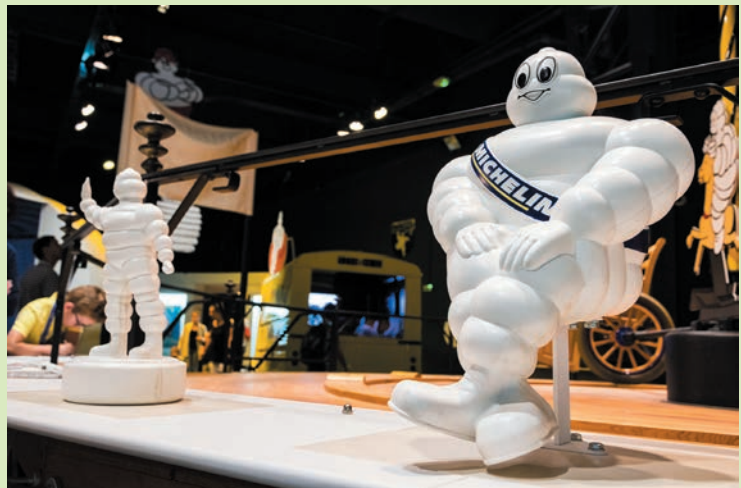
- Servitisation can be a hedge against the commoditisation of mature products.
- Servitisation can provide an opportunity for new business in some form, often replacing what either customers or other service suppliers have done in the past.
- Servitisation can provide the opportunity to create innovative and competitive services – this idea is typified by the phrase, ‘nobody knows our product better than ourselves’, so who better to create services that any other provider would find difficult to imitate?
- Services can improve relationships with customers; after all, it is difficult to provide service for customers without getting to know them. In particular, offering services provides an opportunity to understand customer needs and motivates the translating of these needs through both product and service design.

Case example

Michelin – from selling tyres to providing tyre management services¹¹

Michelin is a worldwide leader in the tyre industry, with over €15 billion of sales, 72 production facilities in 19 countries and around 100,000 employees. Once, it focused on simply selling its tyres both to private and commercial customers. Yet commercial customers have different needs to most private customers. Which is why the company formed ‘Michelin solutions’. It is responsible for the contract management of around 400,000 vehicles currently on contract and offers design, development and commercialising solutions for fleets of trucks, buses, coaches, cars and vans. Its solutions are aimed at fleets wanting to improve their efficiency, productivity and environmental footprint, in a global and customised way. Not only can the company allow its customers to outsource tyre management (reducing CO₂ emissions while keeping their vehicles in use longer), to facilitate its service offerings it launched four digital services (in the form of apps) for the road transport industry, designed to maximise efficiency by making easy work of laborious tasks and incentivising staff.

The MyInspection app guides drivers step by step through the inspection of their vehicle, following the list of checkpoints defined by the fleet engineer for each vehicle type. It is used to report anomalies and, with the help of a photo, can automatically notify the maintenance workshop, which will enable the repair to be planned quickly.



Joaquin Ossorio Castillo/Shutterstock

The MyRoadChallenge app offers an incentive to truck drivers, by both improving their skills on the road and rewarding exemplary driving. It scores and ranks drivers’ performance (only drivers have access to the data). Its algorithm analyses the quality of driving through the acceleration and deceleration detected by the GPS of the driver’s smartphone.

The MyBestRoute app helps fleet operations managers to calculate routes and all associated costs. It ascertains the cost of use of different routes, the quantity of CO₂ emitted, and provides a comparison between alternative vehicles.

The MyTraining app allows trainers to concentrate on a driver’s performance, rather than being distracted by forms that need filling out.

In summary, servitisation reflects an increased awareness that service in some form will play a far larger role in competitive strategy. It is an awareness that also applies to the customers of servitised offerings, whose enthusiasm for servitisation derives from a desire to reduce costs and enhance the quality of service. It allows customers to focus on their core business and outsource peripheral activities, which in turn provides the potential to exploit the expertise of suppliers as well as the economies of scale that suppliers could achieve.

Service-dominant logic

As the importance of service has become increasingly recognised, it is not surprising that some authorities have begun to view *all* business activity as a form of service. Foremost among the ideas that propose this is the paradigm of service-dominant logic (SDL).¹² The contention of the proponents of SDL is that the way that we think about service (and ‘services’ generally, SDL draws a distinction) still owes too much to a manufacturing-oriented ‘goods-dominant logic’ (GDL). The intention of SDL is captured in 10 foundational premises (FPs), which were seen as establishing the framework for this service-centred outlook. These are shown in Table 2.3, together with a brief explanation of what each means. However, it is worth noting that the FPs are not claimed to be exclusive to SDL (many had been discussed for several years prior to SDL being formulated). But, between them, they do convey what SDL represents.

Table 2.3 Foundational premises (FPs) of service-dominant logic

Foundational premises (FPs) of service-dominant logic	What the FPs mean
FP1 Service is the fundamental basis of exchange	When firms trade together, they are essentially exchanging ‘service’, meaning the application of knowledge. Also, note the singular ‘service’, rather than the plural ‘services’, emphasising the idea of service as a process or activity
FP2 Indirect exchange masks the fundamental basis of exchange	Because, conventionally, we see trade in terms of complex combinations of money and discrete services, we cannot always recognise that it is the application of knowledge that they are exchanging
FP3 Goods are a distribution mechanism for service provision	Goods only have value because they are used – that is, the service that they provide (known as ‘value in use’)
FP4 Operant resources are the fundamental source of competitive advantage	Economists sometimes distinguish between operant and operand resources. Operant resources are skills and knowledge that are usually invisible and intangible, as opposed to operand resources that are tangible assets. SDL views knowledge and skills as the primary basis of a firm’s competitive advantage
FP5 All economies are service economies	If the basis of all exchange is service, and service is the application of skills and knowledge, then, at the level of whole economies, all economic activity is based on service
FP6 The customer is always a co-creator of value	If SDL is about ‘value in use’, this necessarily implies some kind of interaction, which in turn implies that customers must be involved in some capacity
FP7 The enterprise cannot deliver value, but only offer value propositions	This again follows from the idea of customer co-creation. If the customer must be involved in the creation of value, then all a firm can do is offer the possibility of value, which must be activated by the customer
FP8 A service-centred view is inherently customer oriented and relational	With co-creation an important element of value creation, the exchange process must be customer-focused
FP9 All social and economic actors are resource integrators	The creation of value through the application of knowledge means that the knowledge possessed by all the actors in the service exchange will need to be integrated
FP10 Value is always uniquely and phenomenologically determined by the beneficiary	Customers are individuals with individual needs and individual circumstances. So, only they can judge the value of their service experience in their own context

What is clear from the obvious academic origins of SDL is that it is not intended to be either a set of prescriptions for running service operations, or a practical tool. But it would be a mistake to dismiss it for these reasons. It is intended as a way of thinking about the nature of business generally, and (arguably) the role of service in particular. It is a mindset, a way of putting the nature of service at the centre of all economic activity. SDL has been very influential in shaping academic thinking about the nature of service, and can also be seen as providing the conceptual foundation for the development of what has become known as ‘service science’.

Service science

Following on from SDL, service science is concerned with the study of services, service delivery systems and service-based technologies. Reputedly, service science began in 2004 when Jim Spohrer, an executive at IBM, the computer software, hardware and services company,¹³ was disturbed by how few suitable job candidates were coming forward who possessed an appropriate mix of knowledge. What was needed, he realised, was not a single discipline, but a multidisciplinary approach that included mathematical modelling, operations management, computer science, engineering and social science. It is this interdisciplinarity that is the key to understanding service science. It focuses on not just one characteristic of service but rather on service as an interactive system of elements that includes people, technology and business.

Like service-dominant logic, service science is neither a tool nor a prescription, it is a focus. It brings existing disciplines together and deploys them onto the world of services. It is a reminder to acknowledge the pivotal nature of service, and a motivation to deploy a sense of rigour into the study of service. It is also a plea to encourage service innovation by using scientific discipline, engineering methods and management practice in designing, improving and running service systems.

2.4 Summary

Services are everywhere – We all use service operations every day, and they are important in most people’s lives. Also, we all serve others, both as part of our jobs and as part of daily life for our friends and families. The question of ‘what is service?’ can be difficult to answer concisely. Most definitions of ‘service’ mean ‘what is a service, as opposed to a manufactured product?’. A common framework for classifying services divides services as generated by, and intended for, businesses, governments (or their agencies) or customers. This results in nine categories of service: B2B, B2G, B2C, G2B, G2G, G2C, C2B, C2G and C2C. In addition, service types include non-profit services and internal services.

Services are what we do and consume – The amount of the world’s economic activity that comes from services has been growing consistently. In most developed countries, services account for around 80 per cent of gross domestic product (GDP). The Clark sector model shows how, as economies develop, they follow a progression that moves them from a heavy dependence on agriculture and mining, through the development of their manufacturing sector, towards a more service-based economy.

Services are the way of the future – Three concepts illustrate how the service sector is developing. They are the experience economy (which seeks to recast services as ‘memorable experiences’), servitisation (which seeks to change the way in which product functionality is delivered by emphasising how services can be packaged along with the products they support) and service-dominant logic (SDL, which sees service as the basis for all business activity). Service science is related to service-dominant logic, and promotes a multidisciplinary approach that includes mathematical modelling, operations management, computer science, engineering and social science.

Discussion questions and exercises



1. Nespresso has been described as 'Starbucks without the drive'. It supplies coffee machines that brew coffee from capsules, or pods, for home or professional use. The company is an autonomous globally managed business within the Nestlé Group. With corporate headquarters in Lausanne, Switzerland, Nespresso is present in over 60 countries and counts over 12,000 employees worldwide. The company offers its ubiquitous coffee-filled capsules and machines for brewing espresso, latte and cappuccino one cup at a time, boasting on its website that 'the world's best café is in your home'. Investigate Nespresso and (a) explore how the company uses the concepts of experience-based service and 'servitization' to promote its offerings, and (b) how it tries to fulfil its social and environmental responsibilities.
2. A supplier of branded kitchen appliances that sells to the domestic market is considering offering its equipment and tools not as products but as 'a culinary lifestyle'. To help customers experience this lifestyle, it is considering establishing a network of cooking schools. Offer a justification of how this idea could provide a competitive advantage for the company.
3. How do you think that the big manufacturers of cars will respond to: (a) the general move from products to services; and (b) changes in vehicle technology?
4. The Earthy Construction Equipment Company sells its products (large earth-moving equipment) to building and mining customers around the world. The company's CEO has read about the idea of the 'experience economy', but feels it only applies to consumer companies, not business equipment companies such as hers. What could such a company do to provide 'experiences' for its customers?
5. Describe the customer experience and outcomes for a fast-food restaurant, a doctor's surgery and an internet-based fashion-clothing retailer. Compare and contrast the services of these three organisations.

Case exercise

Servitisation at Sterksteen¹⁴

The market had been really tough. Our main competitors had been raising their game and the quality of service given by the installers and landscape contractors, on whom we depend to sell our products, had been less than perfect. The turning point for us was the findings from a piece of market research, which identified that the 'Sterksteen' brand meant a lot to our customers.

(Ambroos Becker, Service Director, Sterksteen)

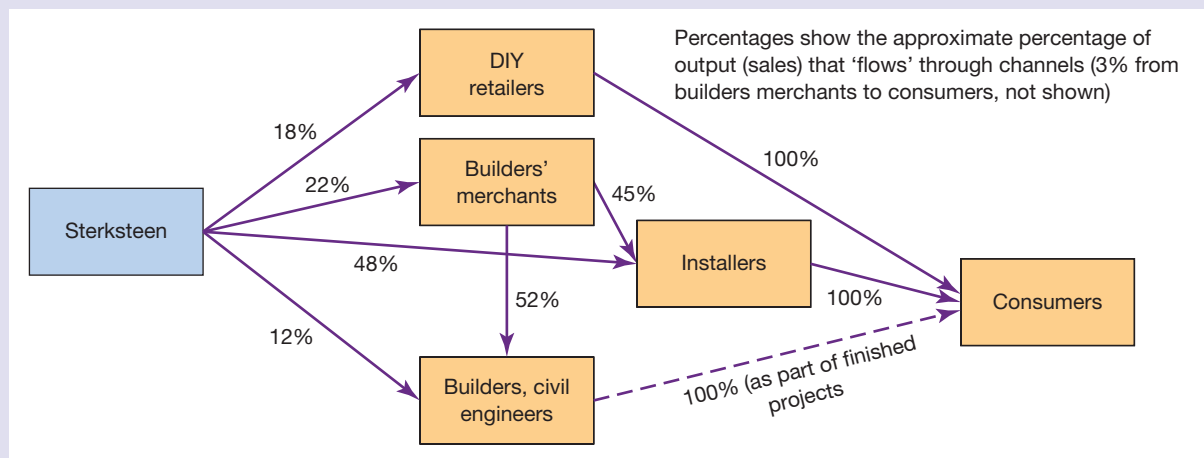
Sterksteen was a Netherlands-based company, operating not only in the Netherlands but also in Denmark, Belgium and Northern Germany. It produced a range of concrete paving products, landscaping features and decorative stone products that were sold through four main types of customer:

1. Retailers that sold relatively small quantities direct to consumers, usually for do-it-yourself (DIY) projects such as paving small areas.
2. Installers and landscape contractors – usually small-to medium-sized, largely independent companies and individual traders who undertook projects for consumers (for example, laying a driveway).
3. Builders' merchants, both regional and local, that supplied installers and larger building companies and civil engineering companies.
4. Large building companies, such as house builders and large civil engineering companies.

The supply network for Sterksteen is shown in Figure 2.6, together with the approximate percentage of sales that currently 'flows' through each channel.

The last 10 years had been hard for Sterksteen, with significant market decline. There were a number of reasons for this:

1. Consumers had developed the DIY bug and were opting for easier-to-install and less expensive alternatives – wooden decking instead of paving.

Figure 2.6 The current supply network for Sterksteen

2. People were moving house less frequently, reducing business from installers.
3. There had been a perceived reduction in the average reliability and quality of service given by installers (Sterksteen's main customers), with some very small and unreliable operators entering the business.
4. Sterksteen's key competitors were aggressively promoting their products with the national builders' merchants and had developed 'The Register', a scheme for approved installers.
5. The large retail and national builders' merchants were becoming increasingly powerful and could negotiate aggressively.

With a decline in sales, Ambroos' service budget was cut substantially. However, a market study he commissioned gave the Sterksteen team renewed hope and an improved focus. The market research was in fact very positive and identified that the end customer as well as installers valued the Sterksteen brand. Service quality was seen as being good and Sterksteen's sales people were seen as having integrity. There was also the realisation that Sterksteen had been ignoring the importance of the installers.

Research identified that there were different influencers in the value chain with different priorities. The builders' merchants wanted improved margins and trusted brands and products. The retailers wanted flexible ordering and fast delivery. The larger builders and civil engineers wanted dependable 'no frills' service. The installers wanted Sterksteen to help generate orders and leads and wanted to be associated with a strong brand, with marketing tools to

help them sell, and the customers wanted peace of mind, ideas and inspiration in design and a trusted or accredited installer. Armed with this information, Ambroos convened a series of meetings with his service and sales teams to consider how they should respond to the market research. Two ideas emerged from these discussions, with opinion more or less evenly split within the teams. The first was to respond to the competitor's installer assurance idea, 'The Register', by launching 'Sterksteen Secure'. The supporters of this idea believed that an approved list of trusted installers would help drive sales and reduce the powerful position of the large retailers and builders' merchants.

We had been toying with the idea of developing an installers assurance scheme for some time, but we didn't want a 'me too' offering.

(Ambroos Becker)

The second idea was more radical, Ambroos explained:

We had noticed how many different companies in several industries had adopted the 'servitisation' concept, and we considered how we could do something similar. Why not take the first steps to becoming a 'service provider' rather than simply a manufacturer of concrete products? We called this idea 'Sterksteen Install'.

Preliminary plans for the two ideas were drawn up for consideration by the company's senior management team.

Sterksteen Secure

The idea of Sterksteen Secure is not to threaten installers, but to help them increase their sales and 'pull-through' sales of Sterksteen products. There are clear 'fashions' in the paving and landscaping market, and although it is not seen to move as fast as many other consumer markets, existing installers do understand the market. Moreover, it is often the installer who influences the buying pattern of consumers (which products are used). The objective of Sterksteen Secure is to:

- Increase the company's direct contact with both installers and consumers.
- Improve consumer awareness, so they are more likely to ask directly for Sterksteen products.
- Reduce the buying price power position of retail and builders' merchants.
- Profitably grow Sterksteen's volume of sales with existing supply channels.

Research reveals that the internet is becoming increasingly important as a source of information and inspiration for consumers. Consumer internet sales from retailers and builders' merchants are growing at an estimated 15 per cent per annum, yet many landscapers and installers are not capable of taking advantage of this. Nor are most installers equipped with the computer-based landscape planning and estimating tools that could significantly improve the service they give to consumers. In fact, very few installers understand the value of many of the basics of customer care, branding or service reliability. The main concern of even the reputable and well-established installers is not to be confused with less reputable companies.

It is proposed that Sterksteen Secure includes the following:

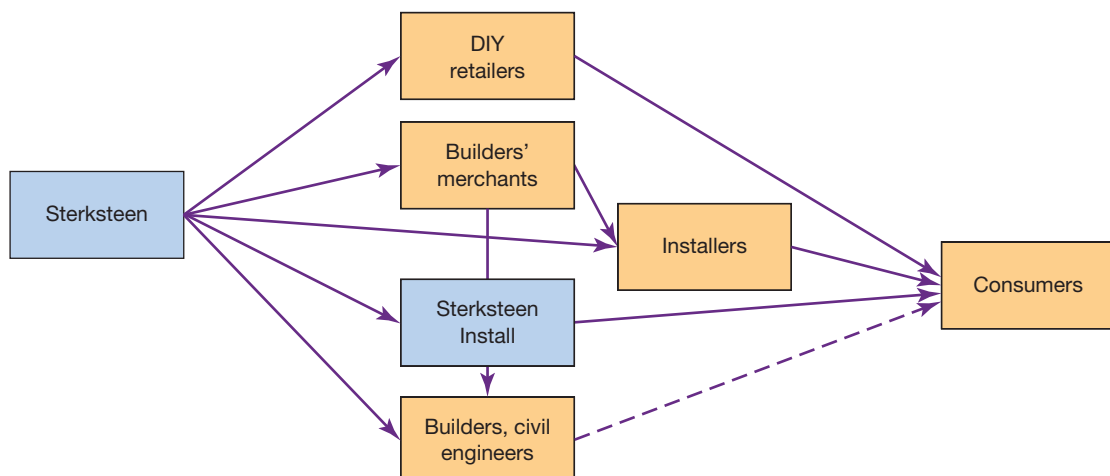
- A membership scheme, for landscaping and driveway installers, involving a rigorous recruitment process and regular quality of service assessments.
- A secure payment system, underwritten by Sterksteen, that guarantees payment for installers and satisfactory installation standards for consumers.
- The provision of sales and planning tools to installers that help them drive up their sales and increase service levels.
- Technical help with installers' web-based marketing efforts.
- Branded Sterksteen Secure workwear, uniforms, etc.

A nominal membership payment would have to be agreed, and though it would not cover the cost of the scheme to Sterksteen, the likely increase in sales would be the main pay off.

Full servitisation – Sterksteen Install

It was recognised that the Sterksteen Secure proposal did not fully embrace the full meaning of 'servitisation' as such. Therefore, some in Ambroos' team favoured a much more radical idea – that of 'Sterksteen Install'. This proposal would involve Sterksteen setting up its own installation and landscaping company, initially in the Netherlands and later in the company's other markets. Figure 2.7 shows how this proposal would affect the industry supply network. It was recognised that Sterksteen Install would provide direct competition for some of

Figure 2.7 Outline of the supply network for Sterksteen, including the proposed 'Sterksteen Install'



the installers who were currently Sterksteen customers, but it was felt that the relatively primitive state of the installation and landscaping industry was 'ready for disruption'.

The rationale for this proposal was as follows:

- As a manufacturer, Sterksteen has little control over our consumer's 'journey' so we need to build awareness and understanding.
- Moving down the supply chain in this way would get us closer to the end user/consumer and increase our understanding of the market and exactly what type of service is valued.
- Given the fragmented nature of the industry, a strong and trusted brand could have a very significant impact on how consumers view us.
- Again, given the fragmented nature of the industry, it is ripe for consolidation. If we don't do this, someone else will.
- The typical gross profit margin on installation work is around 30–40 per cent of sales; our manufacturing margin is only 10 per cent. We should be capturing this value.
- The increased efficiency that we could bring to installation operations could potentially increase those profit margin figures substantially.
- As we enter the installation market, we could use our economies of scale and better service to capture a reasonable share of the market (exact forecasts would need to be investigated).
- The Sterksteen Secure proposal, although workable, is still a 'me too' service.

While this proposal would be far more expensive to set up, and while it would also carry more risks, several of Ambroos' team believed it to be the way forward.

Questions

1. What are the broad advantages and disadvantages of each proposal?
2. Although cost and revenue estimates of each proposal are not yet available, which one do you favour?

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Notes



- 1 See <https://gds.blog.gov.uk/2018/01/25/6-ways-were-helping-to-make-government-services-better-in-2018/> for further information [accessed 20 April 2020].
- 2 The information on which this example is based is taken from: Ratcliffe, R. (2019) 'Oxfam failed to report child abuse claims in Haiti, inquiry finds', *The Guardian*, 11 June; Doane, D. (2019) 'Oxfam's "hypocrisy" is not unique: the aid system is built on a power imbalance', *The Guardian*, 12 June; and the Oxfam website, <https://www.oxfam.org.uk>
- 3 The three-sector theory is usually attributed to Clark. See Clark, C. (1940) *The Conditions of Economic Progress*, Macmillan, London
- 4 See <https://commonslibrary.parliament.uk/research-briefings/sn02786/> [accessed 20 April 2020]
- 5 Some information taken from: McGee, P. (2019) 'Apple delivers upbeat outlook despite shrinking iPhone sales', *Financial Times*, 30 July; and Waters, R. (2019) 'How the Apple world is quietly changing', *Financial Times*, 31 May
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- 7 Schettkat, R. and Yocarini, L. (2003) 'The shift to services: a review of the literature', Discussion Paper No. 964, Institute for the Study of Labor (IZA), Bonn
- 8 A popular YouTube video titled 'Humans Need Not Apply', created by CGP Grey, did much to popularise this idea.
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- 11 Data taken from <https://www.michelintruck.com/services-and-programs/michelin-fleet-solutions/> [accessed 20 April 2020].
- 12 Originally proposed in a developed form in Vargo, S.L. and Lusch, R.F. (2004) 'Evolving to a new dominant logic for marketing', *Journal of Marketing*, 68 (1), 1–17, (January); later modified and extended in Vargo, S.L. and Lusch, R.F. (2008) 'Service-dominant logic: continuing the evolution', *Journal of the Academy of Marketing Science*, 36, 1–10
- 13 Although the original ideas came from Henry Chesbrough, a professor at University of California, Berkeley.
- 14 Although based on a real company, its name and some details have been changed for reasons of commercial confidentiality.

Chapter 3

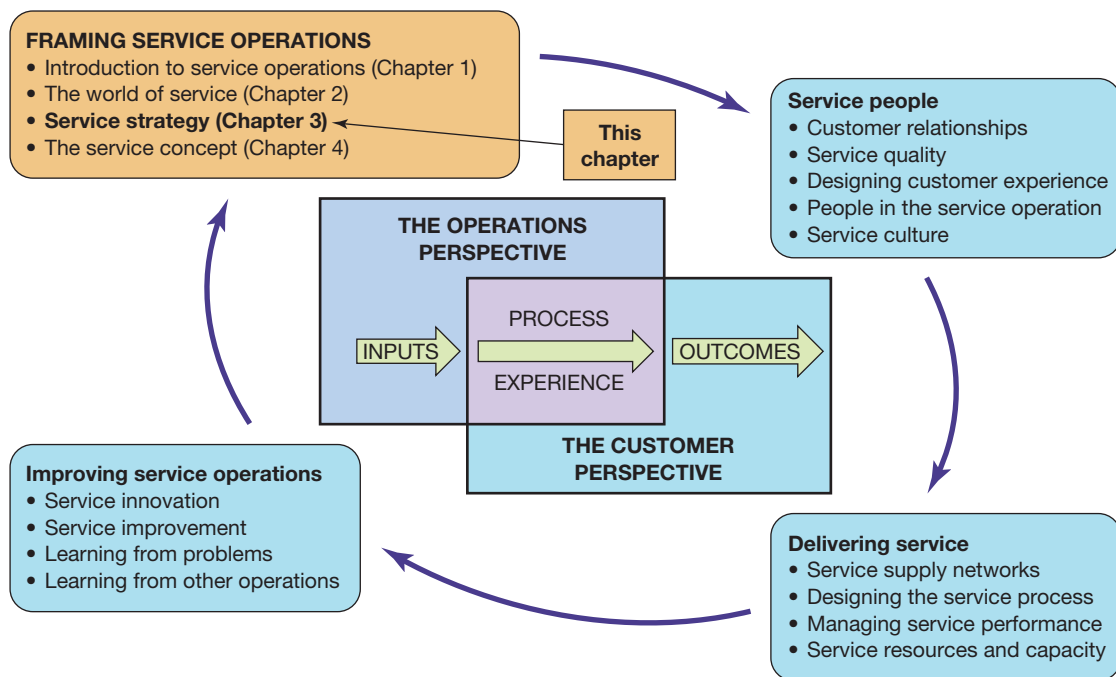
Service strategy



This chapter looks at how to create and implement an organisation's service strategy by taking four perspectives on its service operations, all of which are necessary if the resources and processes are to make an effective contribution to the organisation's strategic objectives. It goes on to show how performance priorities can be derived from the operation's performance, evaluated against both customers' and competitors' positions. The position of this topic in our model of service operations management is shown in Figure 3.1.

Learning objectives

- To be able to define service strategy
- To understand the importance of having a service strategy
- To be able to link service strategy to competitive advantage
- To know how service performance objectives can be converted into operations priorities
- To gain an understanding of how a service strategy can be sustained

Figure 3.1 This chapter looks at service strategy

Introduction

‘Service’, as we have already pointed out, is a verb. It is a ‘doing thing’, and it involves some kind of personal interaction. All of which might seem to imply that service operations, by their nature, deal with the short-term, individual and transient – in other words, ‘operational’. So, is ‘service strategy’ a contradiction of terms? ‘Strategy’ is usually regarded as the antithesis of those day-to-day routines and activities that are at the heart of service provision. But the way in which a firm’s service resources are managed is increasingly seen as being central to its long-term strategic success. Service management does have a strategic role. Nor is ‘strategic’ service management merely a matter of doing the operational things well so as not to hold back more important strategic decisions. Service strategy should certainly prevent strategic decisions being frustrated by poor operational implementation, but it should also be able to ensure that the management of service resources can itself provide advantage. An organisation’s aspirations for its service operations as well as service operations’ ability to contribute to strategic positioning are fundamental to its long-term success. Both are also undeniably strategic.

It is worth pointing out at this stage that the boundary between what is regarded as service strategy and what is regarded as operational service management is often not clear. In fact, it can never be absolutely clear because an important element in service strategy is the intrinsic capabilities that service resources and processes demonstrate on a routine day-to-day basis. Nevertheless, although service management and service strategy cannot be totally separated, they do have different characteristics and treat issues in a different manner.

3.1 What is service strategy?

Service strategy is concerned with how an organisation shapes the direction and development of its service-providing resources and processes. To do this, a service strategy (like any functional strategy, or contributor to business strategy) should do four things, illustrated in Figure 3.2. It should:¹

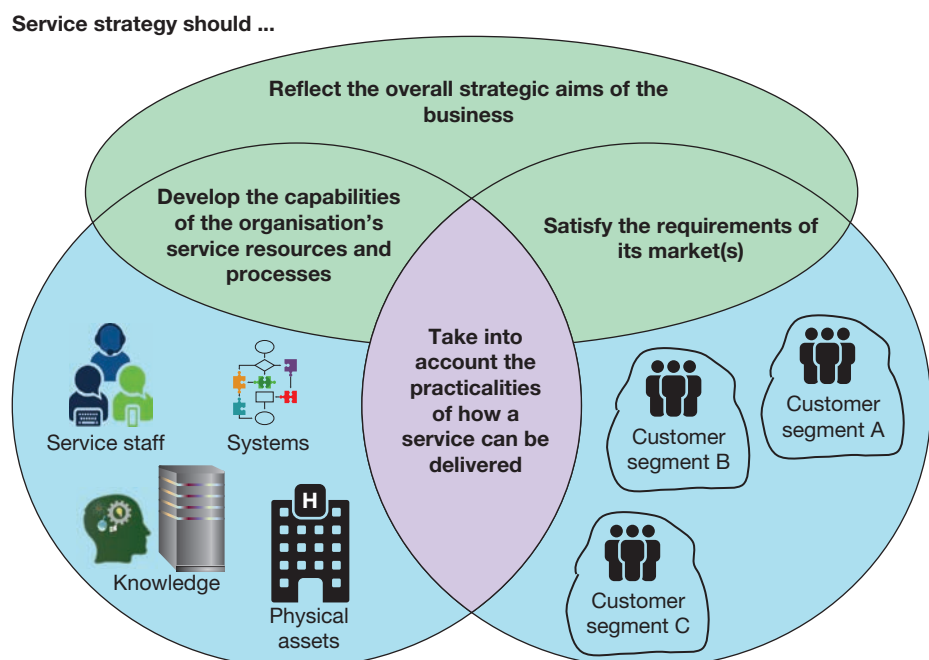
- Reflect the overall strategic aims of the business.
- Satisfy the requirements of the market(s) that the business serves.
- Take into account the practicalities of how a service can be delivered.
- Develop the capabilities of the organisation's service resources and processes.

Each of these is an important constituent part of a service strategy, and worth examining in a little more detail. However, each is only a part of a firm's service strategy. For a service strategy to be effective, all four must be addressed.

Service strategy should reflect the overall strategic aims of the business

For most organisations, but especially if an organisation is a large, diversified corporation, its corporate strategy will consist of decisions about what types of business the group wants to be in, in what parts of the world it wants to operate, what businesses to acquire and what to divest, how to allocate its cash between its various businesses and so on. Within a corporate group, each business unit will also need to put together its own business strategy that will set out its individual mission and objectives as well as defining how it intends to compete in its markets. Similarly, within the business, each part will need to consider how it should contribute to the strategic and/or competitive objectives of the business as a whole and guide its actions within the business. This is sometimes called the 'top-down' view of strategy.

Figure 3.2 Service strategy should (a) reflect the overall strategic aims of the business; (b) satisfy the requirements of its market(s); (c) take into account the practicalities of how a service can be delivered; and (d) develop the capabilities of the organisation's service resources and processes



Service strategy should satisfy the requirements of its market(s)

Understanding markets is usually thought of as the exclusive domain of the marketing function, whose specialists employ tools and techniques designed to access customer and consumer opinions and preferences. Indeed, the activity of marketing is often partly defined as the process that ‘identifies and anticipates’ customer requirements. The main approach it uses to do this is ‘market segmentation – primarily a way of understanding markets so as to match a company’s marketing efforts to its customers’ requirements. The marketing function approaches this task by viewing heterogeneous markets as a collection of smaller, more homogeneous, markets.² Yet, the nature of service organisations means that their service-providing resources are, to a greater or lesser degree, intimately involved with the organisations’ customers. Moreover, customers are clearly influenced in how they judge an organisation’s services by how they view that organisation’s competitors. Therefore, the nature and influence of markets and customers cannot be regarded as simply an issue for marketing. It is not good practice for any type of company to confine its understanding of markets to the marketing function. But for service companies it is particularly harmful. Ensuring that service strategy takes market requirements into account is sometimes called the ‘outside-in’ view of strategy.

Service strategy should take into account the practicalities of how a service can be delivered

A surprising amount of strategic discussion in most firms does not conform to the classic ‘top-down’ perspective that we described earlier. Research into strategy development suggests that many effective strategies are evolutionary rather than revolutionary.³ Moreover, they ‘emerge’ from the day-to-day practicalities of serving the organisation’s customers. This is not to dismiss the orthodox hierarchical view of how functional strategies should be put together in a top-down manner. Rather, it is simply to point out that any service organisation would be mistaken to ignore its opportunities to exploit its experiences of providing that service. It is recognition of an important ‘bottom-up’ (what is sometimes called an ‘emergent’) source of strategic ideas. The day-to-day experiences from which these strategic ideas emerge come, in effect, from the continuing interaction between an organisation’s service resources and processes and its various customer groups. In other words, although there is often refined strategic analysis embedded in strategic formulation, the real strategy evolves as internal decisions and external events combine to form a widely shared consensus for action among key members of the management team. The implication of this is that key contributors to strategy development must include those in constant contact with market requirements – the customer-facing staff. It is these front-line employees, often rather junior and poorly paid in many consumer services, who have a pivotal role in strategy development. They often have advance information as to customer likes and dislikes, and about the way that customers’ tastes are changing. Crucially, these staff have the task of ‘living the strategy’. If they are not committed to the goals and objectives of the organisation, it will be plain for all to see.

Service strategy should develop the capabilities of the organisation’s service resources and processes

The level and quality of service provided by any service firm is dependent on the nature of its resources and processes. Any service strategy should therefore concern itself with how these are developed (and hopefully improved) over time – what is sometimes known as the ‘inside-out’ view of service strategy. But this is not simply a matter of using cleverer technology or training more competent staff; a listing of one’s resources provides only the first step in understanding a service operation. To understand how a service operation works we need to examine the interaction between its various resources and processes. For example, how staff organise their tasks, how technology is adapted and integrated into processes, how suppliers are managed, how new services are developed, how relationships with customers that enable an understanding of market trends are developed, and how the organisation’s culture fosters and supports improvement. Note how many of these elements that make up service delivery are intangible. Also, note how many of these intangible assets relate to knowing how to do something. Knowledge of various asset types is embedded within any operation’s

resources. Some of this knowledge will be written down, but much will be in the heads of its staff. Indeed, some knowledge may not even be recognised as knowledge as such. It is ‘just the way we do things’. Such knowledge may be both the most important and the least tangible.

Worked example

Buxtain Security Services

Buxtain Security Services provides security services (staff and technology) to a variety of customers. It wanted to review its service strategy by examining the four perspectives on strategy.

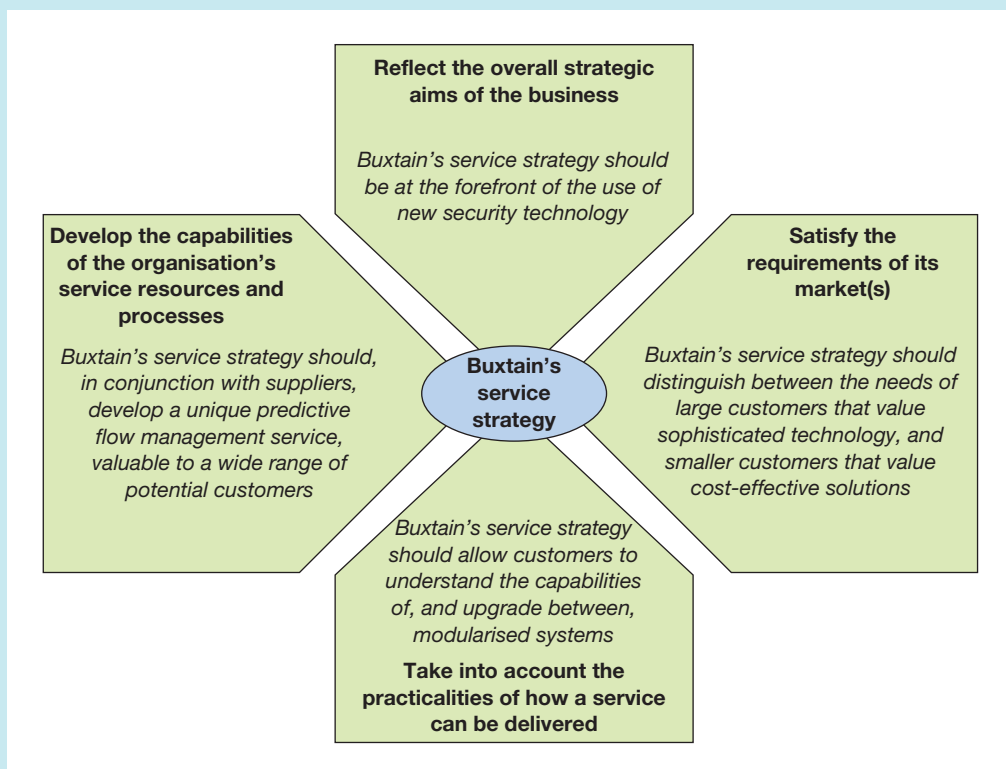
What the company did

Figure 3.3 illustrates how the company analysed the contribution of the four parts of its service strategy.

Reflecting the overall strategic aims of the business. The business is part of a group that contains several different types of ‘facilities management’ companies, providing services such as building maintenance and environmental monitoring.

Buxtain’s role within the group is to be profitable and to compete by being the first in the market with every available new security system innovation. Its service-providing resources and processes, therefore, need to be capable of coping with the changes that constant innovation will bring. The company must develop processes that are flexible enough to install and operate novel technology and systems. It must organise and train its staff to understand the way technology and systems are developing so that they can offer the best advice to customers. It must develop relationships with technology suppliers that will help them to respond quickly when installing new systems. Everything about Buxtain,

Figure 3.3 The four parts of Buxtain’s service strategy



its organisation, its staff, and its systems and procedures, must support and reinforce the company's competitive strategy.

Satisfying the requirements of its market(s). Most of Buxtain's customers fall into one of two groups. Its large customers already have existing security systems as well as human security staff, and value the innovative technology used by the security service company's services. They are primarily concerned with, and value, the enhanced security provided by the surveillance technology. Its smaller customers tend not to have any existing security technology and rely solely on human security staff. These customers value the ability of technology to partially replace security staff and hence save costs. Different service packages, involving different types and mixes of security technology and (crucially) different pricing arrangements, are developed for the two customer groups.

Taking into account the practicalities of how a service can be delivered. Buxtain finds that, according to its installation engineers, larger companies do not always understand the true potential of some of its more advanced technology that involves

face recognition. In response to this, the company decides to 'modularise' its systems in such a way that customers can understand the exact capabilities of each module, have installed the most appropriate system and, importantly, upgrade to a higher capability system as they require it.

Developing the capabilities of the organisation's service resources and processes. Buxtain, having adopted its modular approach to configuring its systems, expanded its operations and started to hire specialist security data analysts. These specialist staff could combine their expertise in analysing how people moved around public buildings using face recognition and tracking technologies, to develop predictive routines that could forecast potential overcrowding and bottlenecks in public spaces such as mass rapid transport stations. Over time, the company worked with its technology suppliers to develop a unique predictive flow management service that was valuable to a wide range of potential customers. It won contracts with public bodies, transport authorities, and even large supermarkets and shopping malls, to monitor, manage and sometimes redesign the layout of its operations.

Defining service strategy

After a firm has considered its service strategy from each of the four views of service strategy (top-down, outside-in, bottom-up and inside-out) it should be in a position to articulate its strategy. We define this summary as 'the set of plans and policies by which a service organisation aims to meet its objectives'. These plans and policies will need to:

- Take into account how the organisation's environment is changing and what it has to do in order to meet current and future challenges.
- Explain how they affect all parts of the organisation to which the strategy refers.
- Identify how they move the organisation closer to its long-term goals.

Remember, though, a 'strategy' is more than a single decision; it is a total pattern of decisions. A company's operations strategy, therefore, is shown in the pattern of decisions that the organisation takes to develop its service resources.

3.2 Why is it important to have a service strategy?

The majority of topics covered in this text are concerned with the everyday issues that are important for a service organisation to function effectively. Most of these are operational in nature. They are not directly strategic. They are relatively immediate and localised in their effect, and detailed in how they are treated. Thinking strategically about these operational issues is not the contradiction it once seemed. It is recognition that the way in which an organisation manages its service operation has a significant effect on its ability to provide those things that mean success in the market-place.

Service operations are just too important to be left to jog along, secure in the comfort of their own routine. They need strategic direction if their potential as the company's competitive engine is to be fully realised. So, it is worth stressing at this point why it is important to have a service strategy.

The obvious reason is that service organisations, like all businesses, need to have overarching strategies in place to prevent non-aligned and disjointed activities and decisions.⁴ As we have pointed out, strategy is a pattern of separate decisions rather than one single plan. Moreover, these separate decisions are probably taken by different parts of the organisation, at different times, with access to different data, and led by managers who interpret overall priorities in different ways. Even when these individual decisions are relatively short term and localised, when put together they can profoundly affect long-term performance. Without a coherent service strategy acting as a 'back-drop' to operational decisions, the possibility of unconnected and fragmented decision making is high. If effective service delivery is the foundation of strategic success, then all companies should take a strategic view of their service delivery operations.

Case example

IKEA and its 'big box' retail strategy⁵

For decades, IKEA has been one of the most successful retail operations in the world. Much of its success has been founded on how its so-called 'big box' strategy has served its customers so well. 'Big box' because the traditional IKEA store is a vast blue-and-yellow maze of a showroom (on average around 25,000 square metres) where customers often spend around two hours – far longer than in rival furniture retailers. This formula has driven IKEA to become the global number one in furniture retailing, with over 400 giant stores operating in 49 countries throughout the world. Customers particularly liked that a wide range of furniture was available under one roof, products being displayed both by category and in a room setting, the immediate availability, the in-store kids' area and a restaurant, and particularly the quality, design and good 'value for money' of the products. However, the retail environment in many parts of the world started to change, causing IKEA to consider adapting its retail strategy. Its customers were still broadly happy with its 'big boxes', although some complained of the long drive to reach the stores, the 'maze-like' journey that customers are 'encouraged' to take through the store, the lack of customer-facing staff in the store and long queues at some points in the store. There were even signs that some customers were not entirely happy to



Katharine Rose/Alamy Stock Photo

assemble the furniture themselves, which was one of the fundamental ideas behind IKEA's offering.

In response, IKEA launched a number of new types of operation. Among these were the following:

- Smaller stores to complement the larger ones. But not all were the same. As a deliberate strategy, each was slightly different, allowing IKEA to test alternative ways of locating, designing and managing its new ventures.
- IKEA bought TaskRabbit, whose app was one of the leaders in what was becoming known as the 'gig' economy. Using its app, independent workers or 'taskers' offered their services to customers

wanting to hire someone to do tasks such as moving or assembling furniture.

- It fully committed to 'multichannel' retail operations, including online sales, for all of its markets. Like many traditional 'bricks-and-mortar' retailers, IKEA had been slow to move online. Partly, this was because there was internal reluctance to interfere with its successful 'big box' retail operations.
- It announced that it would consider selling IKEA products through independent 'third-party' online retailers. Some insiders called it the biggest development in how consumers could interact with IKEA since the company was founded.
- As one of the world's biggest users of wood, some environmental groups had condemned what they saw as the 'disposable' nature of IKEA's furniture. In an effort to embrace the circular company, which focused on reusing, refurbishing and recycling materials, IKEA launched an initiative in Belgium that offered customers five options to give furniture a second life: selling old IKEA furniture in the store; renewing it by repainting or reassembling; repairing by offering replacement parts; returning old furniture through IKEA's transport service; and donating to social organisations.

There is also an almost philosophical reason for having a well-articulated service strategy. If it is clear and compelling, it gives an organisation its 'reason for being'. Not only that, but the service strategy has the potential to energise the organisation, define its service concept and indicate how it will be delivered.⁶ It provides the intellectual frameworks and conceptual models that allow managers to identify opportunities for bringing value to customers⁷ and for delivering that value at a profit or within budget. As we discussed in Chapter 1, the role for service operations managers is to help create and deliver that value by contributing to the strategy debate and by developing the operation, its resources, people and processes, to provide for the future success of the organisation.

However, a strategy is only as good as its implementation. The organisation needs to call on a wide range of abilities in order to create an effective strategy, from the visionary thinker at chief officer level, through the interpretation of this strategy into policies and plans by senior and middle management. By having a clear strategy, managers know what initiatives to approve and those to reject, customers know what to expect, employees know what to provide and operations knows what it has to deliver and how it has to deliver it. But it is not the purpose of this text to describe the strategic process in detail. We are concerned with the creation, communication and implementation of strategy insofar as it has direct relevance to service delivery.

Service strategy in non-profit organisations

We have already used terms such as competitive advantage, markets and business, all of which are usually associated with companies in the for-profit sector. The question is whether service strategy is a concept of relevance to organisations whose purpose is not primarily to earn profits in order to make a financial return for their owners. Are the issues associated with strategically managing service resources of, say, an animal welfare charity, research organisation, government department or university the same as those in profit-making institutions? Of course, most for-profit organisations do not always devise service strategies exclusively to maximise profitability. For example, considerations of the unemployment impact on a local area may make a company reluctant to close a site, even in the face of a strong economic case. However, here we need to distinguish between the short and long terms. Whereas the company may not close down a site the moment it becomes unprofitable, it is unlikely to keep it open forever in spite of mounting losses. To do so would be irresponsible to its investors. A non-profit organisation, on the other hand, may choose to sustain poor or negative economic returns in the long term in order to pursue other, non-economic, objectives.

The implication of this dilemma for service strategy is that judging the attractiveness of a strategic resource option is more complex and involves a mixture of purely economic objectives and those related to the social, environmental or policy objectives of the organisation. Consequently, there may be a greater chance of decisions involving service resources being made under conditions of conflicting objectives (often the economic versus the value-based). Managing such conflicts is of particular concern to the service-providing part of the organisation because it is at this level that they become evident. So, for example, it is the staff in a children's welfare department who have to face the conflict between the cost of providing extra social workers and the risk of a child not receiving adequate protection. Because of this direct connection between service decisions and the conflicts between strategic objectives, there is also a tendency for decision making to be more overtly political.

Of course, not all non-profit organisations are the same. But they all have to make the same set of decisions as for-profit organisations, even if their objectives are different. They need to decide their level of operating capacity, invest in technology, contract out some of their activities, devise performance measures, improve their operations performance and so on. The treatment of service in this text is such that the vast majority of the topics covered have relevance to all types of organisation, including non-profit.

Case example

Is Ocado really a technology service?⁸

Most people in the UK know Ocado as an online grocer. And it did begin by offering local grocery deliveries in the south of England, initially with a branding and sourcing arrangement, initially with Waitrose, an upmarket UK supermarket. But it went on to become the world's largest dedicated online grocery retailer, with over half-a-million active customers. Its objective, it said, was to provide its customers with the best shopping experience in terms of service, range and price, and build a strong business that delivers long-term value for its shareholders. But the company's service strategy turned out to

be more than simply expanding into new regions or selling an expanded range of goods. Rather, it came to understand that its service operations, including its website, information systems, distribution centres, and technology and systems that it uses to produce its service, had become more than simply a 'means to an end'. It had become, at least partially, the 'end' itself. It had developed an integrated high-tech supply



Chris Ratcliffe/Bloomberg/Getty Images

process that provided both efficiency and high levels of service. Most online grocers fulfil web-based orders by gathering goods from the shelf of a local supermarket and then loading them onto a truck for delivery. By contrast, Ocado developed the Ocado Smart Platform (OSP) – its exclusive solution for operating online retail businesses. It was this that became the core of its strategy.

Ocado Smart Platform combines proprietary, integrated, end-to-end software and technology systems with physical fulfilment-centre automation and delivery routing systems that manage the total user-input-to-delivery cycle. The company had long been known for its innovative investment in its own Customer Fulfilment Centre (CFC) technology. Rather than adopt the usual CFC process of transporting containers progressively through long conveyor belts, it uses a three-dimensional grid system to put together customers' orders. Robots move throughout the grid, picking up products and ferrying them to 'pick stations', where Ocado staff put the orders

together. All movements are directed by an overarching control system that coordinates the robots, conveyors and orders. However, it is the total end-to-end system that underpins the company's own operations, and increasingly those of other retailers. More to the point, it has allowed Ocado to offer its OSP as a service to other retailers. This has enabled it to replicate its unique service operations capabilities for partners in other markets. Its technology allowed it to partner with Morrison's, a UK supermarket, and subsequently to sell its systems to one of the USA's biggest supermarket chains and to other supermarkets in Europe, Australia and Canada.

3.3 The process of service strategy formulation

So far, we have explained what a service strategy should achieve, and why it is important. But to fully understand the nature of a service strategy, it is necessary to examine the elements that constitute a service strategy, and how they fit together to form a 'strategy process'. By 'strategy process', we mean procedures that are, or can be, used to formulate a service strategy.

The six elements of service strategy

A strategic plan will harness the various aspects of an organisation and ensure that they support each other and are consistent with the objectives of the organisation. Six critical elements of strategy are: the creation of a set of overall business objectives; an understanding of the market environment; the statement of the positioning of the service(s) in their environment; the development of an appropriate service concept; the identification of appropriate operations performance objectives; and the development of appropriate service resources and processes (see Figure 3.4).⁹

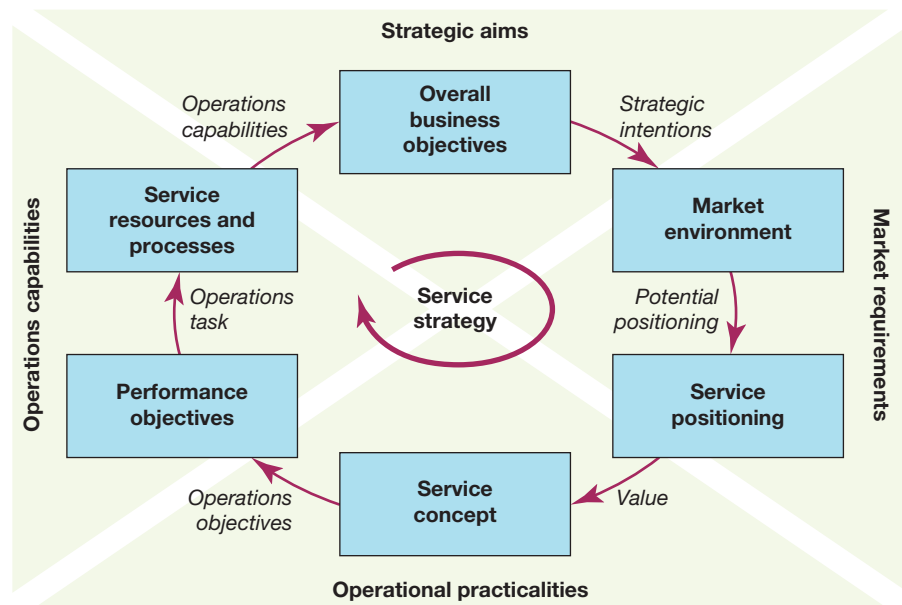
Overall business objectives

These provide the targets or goals for service strategy. If a strategy is a set of plans or policies to meet objectives, there needs to be a statement of those objectives. The impetus for any change in objectives may come from the organisation's executive, driven by a desire or need by its stakeholders for a greater return on assets, or expansion, or retrenchment, or diversification, for example. In part, the objectives provide the motivation for change, but they also set out the size and speed of change. Such a statement is an important step in making the change 'public', so that employees are made aware of what is expected of them. In essence, the overall business objectives set out the direction and the parameters for change. It is an element of service strategy that is closely related to our earlier discussion of the top-down view of strategy. However, while it is an obvious starting point for a service strategy, formulating a clear set of objectives is not always a straightforward task. Service strategies sometimes have to be formulated without the benefit of a stable, or well understood, financial or market context. Which is why filtering strategic objectives through an analysis of the environment in which the strategy will exist, is the essential next element.

Business objectives may well be expressed in financial or competitive terms over a set period of time – for example, return on investment, profit, number of new customers or market share. These

Figure 3.4 The six elements of service strategy

Source: Adapted from Johnston, R. (1989) "Developing competitive strategies in service industries", in P. Jones (ed.), *Management in Service Industries*, Pitman, London.



objectives need to be clearly stated and will provide the means of measuring and monitoring the success or otherwise of the strategy. The key questions that need to be asked are:

- What are the objectives?
- Are they achievable?
- What investment is required?
- What is the timeframe?
- What methods for review are in place?
- What are the contingencies?

Market environment

To ensure that business objectives can be achieved, there needs to be a clear understanding of the market environment in which the organisation currently operates, or plans to be operating. By the 'market environment' we mean all the environmental factors that can impact on the organisation's ability to achieve its overall business objectives. Some of these come from what is generally known as the 'macro environment'. These are the factors that describe the wider context in which the organisation operates, such as political, economic, social, technological, environmental (green) and legal factors (often referred to as PESTEL factors). Many of the factors included in these categories are outside any individual business's control. They must nevertheless be assessed and any possible strategic options judged against how they would be affected by possible scenarios, but they are largely 'states of nature' within which any strategy must function. However, other parts of the market environment are, if not completely controllable, at least to some extent responsive to an organisation's actions. The two most important of these are customers and competitors. The key point is that in formulating any service strategy, all organisations must understand their market environment in order to assess not only the opportunities that it might afford but also the likely response of other organisations and the reaction of customers to change.

A minimum level of understanding would be to assess the size and nature of the competition, the nature and size of the market or potential market, existing competing and complementary products and services, the ways the market is currently segmented, and the likely reaction of the competition. One key outcome of this activity is the identification of a potential target market and an assessment of the perceived needs and expectations of the target customers.

Key questions include:

- What are the characteristics of the market or market segment?
- Is the strategy appropriate for them?
- What are the needs and expectations of customers in this market?
- How well are these needs being served – by this organisation, by other organisations?
- What are the strengths, weaknesses, opportunities and threats?
- What might be the reaction of other providers to a change in strategy?

Service positioning

Service positioning is the process of deciding how the service(s) created by an organisation fits into the market, especially in relation to the organisation's potential customers and competitors. It involves the organisation's service strategy making two important decisions. The first is which parts of the market it wants to serve. This involves using its understanding of the market (using market segmentation) to analyse the nature and structure of its market, and then, on the basis of this analysis, deciding which market segments it wants to serve. The second decision involves choosing how it wants to serve the customers in its chosen markets. In other words, how it wants to compete in its chosen segments. This is often called the service's 'value proposition'. In effect, it is the position that a service has, as viewed by customers. Sometimes this value proposition is summarised by placing one's services and those of competitors on a 'positioning map' that places available services on two dimensions that are seen as important by customers.

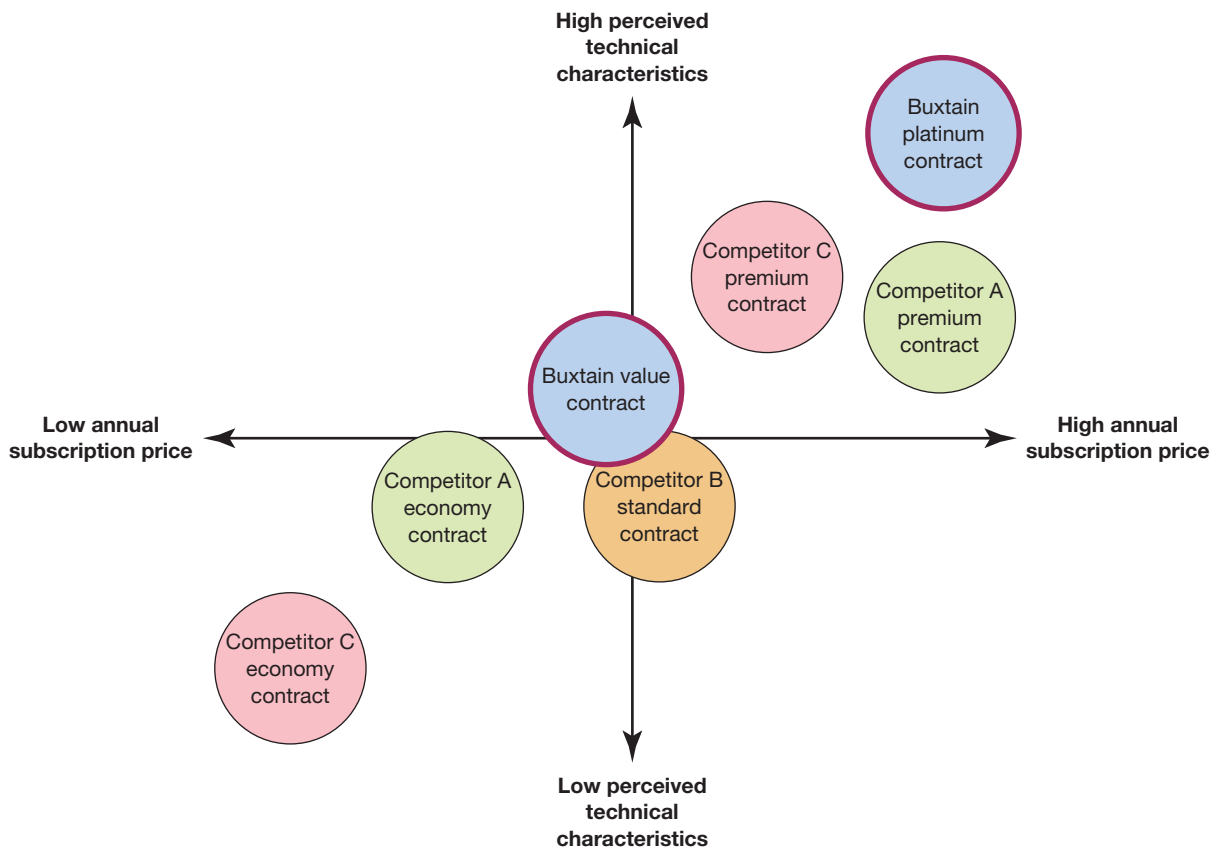
Figure 3.5 shows a positioning map for two of the services offered by Buxtain Security Services (see previous worked example). In this case, the various offerings are mapped against the annual subscription price of the services and the perceived sophistication of the services' technical characteristics. Such maps are useful conceptual frameworks – they are simplifications based on possibly incomplete market data and only two factors (although multiple maps can be used). However, they can be useful for analysing competitors' positions, identifying where more market research is needed and spotting possible gaps in the market.

Service concept

The service concept identifies the nature of the service (which will be fully explained in Chapter 4), but it is worth reinforcing how useful and, in a service strategy context, how vital it is. The service concept helps the organisation focus on the value that it can provide to customers. It is a shared and articulated understanding of the nature of the service, which should capture information about the organising idea, the service provided and the service received, including the customer experience and the service outcomes. The service concept is an important way of capturing the nature of a service so that customers know what they are getting and staff understand what they are providing. The service concept can also be used to help develop new services. The key questions to be asked are:

- What is the concept?
- Is it aimed at a particular market?
- Is it appropriate for that market?
- Can customers and providers understand it?
- How will it be communicated to customers and providers?
- Can it be delivered by the operation?

Figure 3.5 Positioning map for Buxtain's two security system service contracts compared with selected competitors' offerings



Performance objectives

Having identified a target market and developed a service concept, the operation needs guidance as to how it should manage its resources and activities. This will ensure that the service it provides will meet the corporate objectives and the needs of the target market and will establish how it will differentiate itself from the competition. A clear understanding of the performance objectives and their relative priorities is required. In effect, they provide the means by which a strategy is translated into operations language, and help to set the competitive priorities for the operation. Together with the service concept, they specify the task for service resources and processes. While the service concept defines the nature of the service to be provided, the performance objectives define the competitive or strategic priorities for the operations. Identifying a service strategy boils down to 'searching for a match between what needs doing and what the firm can do exceedingly well'.¹⁰ Performance objectives will (or rather should!) include, or incorporate, customer-based PUVs (perceived user value – see later in the chapter) together with the organisation's view as to how it does or should compete as a whole. Performance objectives are also the basis for the development of performance measurement systems and a key way of linking operations performance measures to strategy.

Organisations have to do well, and competitive organisations have to compete, on many different criteria. These might include such factors as:

- price
- quality

- availability
- reliability
- speed of service
- flexibility
- range of services
- new service development
- uniqueness.

Service resources and processes

Any change in a service strategy will almost certainly mean a change in the organisation's resources and processes. Its people, technology, physical assets, structure, processes, performance measurement systems, supply chains, etc. – all must reflect the changed strategy. (The strategy maps that we will cover in Chapter 12 are an important means of linking strategy to operations through appropriate performance measurement.) It is the interaction with performance objectives that sets the nature of these changes. However, this is actually a very complex interaction. Partly, the complexity lies in the difficulty most organisations have in clarifying either the nature of the trade-offs between performance objectives or the characteristics of their service resources and processes. Businesses do not always know the value, abilities or performance of their own resources and processes. Notwithstanding the popularity of the 'core competence' concept in recent years, organisations frequently find difficulty in identifying what are, could be, or should be, their core competences. More significantly, the resources and processes within the operation are not deterministically connected, like some machine where adjustments to levers of control lead inexorably to a predictable and precise change in the behaviour of the operation. The cause–effect mechanisms for most operations are, at best, only partially understood. All of which reinforces the complex nature of the activity, especially if new investment or a redeployment of existing resources is required. The operations plan then needs to be checked against the objectives to ensure that the total strategy is consistent and will achieve the objectives that have been set. The key questions include:

- What changes are required to processes, employees, customer management and infrastructure?
- How will the changes be brought about?
- What resources are required?
- Can the new concept be delivered?
- Will it meet the perceived needs of the target market?
- Can the performance objectives be achieved?

An iterative and continuous process

Putting any strategy together is an iterative process. The key components, business objectives, market environment, service positioning, service concept, performance objectives and service resources and processes all need to be aligned in the delivery of service and the achievement of the strategic objectives. The process requires a constant monitoring of all the elements to ensure that objectives can be met. Strategy formulation is not a one-off activity. Organisations need to respond to the two main forces of change that operate upon them: the external and internal environments. As a result, a strategy requires continuous assessment and, if necessary, amendment.

Case example

Service strategy at Singapore Airlines¹¹

Irrespective of how an organisation chooses to position itself in its markets, the nature of the service it offers to its customers is always going to be a characteristic feature of its strategy. Some organisations,

however, have chosen to place the distinctive nature of their service at the forefront of their strategy. One of the best-known, and most successful, examples of this type of company is Singapore Airlines (SIA).

Ranked World's Best International Airline for the 24th consecutive year by *Travel + Leisure* magazine and named in the Top 50 World's Most Admired Companies in 2019 by *Fortune* magazine, SIA has a good understanding about what service excellence really means. Not surprisingly, how the airline keeps its place as the exemplar of service excellence has been the subject of numerous studies. And although they may emphasise various aspects of the company's strategy, some themes reoccur.



James D. Morgan/Getty Images News/Getty Images

A thorough and systematic approach to customer service and innovation.

Central to SIA's customer service efforts is its service development department, which conducts extensive research, trials and studies, including mock-ups, so it can assess customer reaction to any change or innovation. Innovations have included its luxury first-class suites, 'all business class' flights and individual pre-flight meal selection. It also makes sure that innovations are effectively operationalised and supported by changes to current processes where necessary. Also important is SIA's view of who it should be competing with. It recognises that it is not only other airlines who are its competitors. This is why it benchmarks its methods and performance against all 'best in class' service companies.

Investment in human capital. Service excellence is not simply about better facilities and meal options: SIA's service staff are widely held to be exceptional. One explanation for this is the very extensive training given to its staff. For example, induction training can be twice as long as the industry average. And training is not confined only to customer care; equal weighting is placed on understanding the economics of the airline industry and the need to remain cost competitive. It is this broader business appreciation that equips all members of its staff to be able to be active in suggesting potential changes to how procedures could be modified to benefit both service and cost-effectiveness.

Investment in facilities and fleet. Facilities such as seats, cabin décor, entertainment systems and lounges are important for all airlines, and SIA more than keeps up with its rivals. Even more important, for passenger comfort, safety and cost-effectiveness,

is the fleet of aircraft that the airline operates. Generally, the younger the fleet (a higher proportion of newer aircraft) the better. SIA's fleet is one of the youngest in the world. While the industry average fleet age is 148 months, SIA's is only 85 months. Also, newer aircraft allow SIA to install more premium service innovations, while benefiting from lower repair and maintenance costs as well as lower fuel consumption.

Even more cost focus. Managing the border between quality and cost is a priority for any service strategy. And in an industry such as airline operations, with its fierce competition and frequent bankruptcies, there will be a constant tension between risking potentially sacrificing some aspect of quality and saving costs. SIA has a clear view on this tension. While anything that impacts on its customers has to be of a high-enough quality to fit in with its superior positioning at the 'top end' of the market, anything that customers cannot see is exposed to a thorough examination of its cost-effectiveness. Non-core processes are outsourced to lower-cost countries where possible and internal processes are efficient – even the company's headquarters are simple and functional.

In this way, all perspectives of SIA's service strategy are coherent: there is a clear 'top-down' direction set for the organisation as a whole; the 'outside-in' positioning of its offerings emphasise service excellence and innovation; the skills and experience of its staff are harnessed 'bottom-up' to promote improvements; and the capabilities of its operations resources are reinforced 'inside-out' by constant investment.

3.4 How can service provide a competitive advantage?

Many for-profit organisations, both manufacturing and service, recognise that by improving the service provided they can make significant and sustainable gains in the market-place. Service and service delivery can be, and increasingly are, competitive weapons.

For manufacturing and product-oriented organisations, service may be an important means of differentiation, particularly if they are operating in markets where there is little product differentiation or where product development is slow, difficult, expensive or short-lived. The nature of the services available and the way in which services are delivered may provide a means to competitive success.

Service-oriented companies are also recognising that there may be a need to provide high levels of customer service. Increasing competition, declining sales and more service-aware customers are putting pressure on service organisations to rethink and improve the levels of service that they offer. The effect of good service on creating valuable customers, increasing customer retention and loyalty and attracting other customers, as well as on the financial position of an organisation, is important.

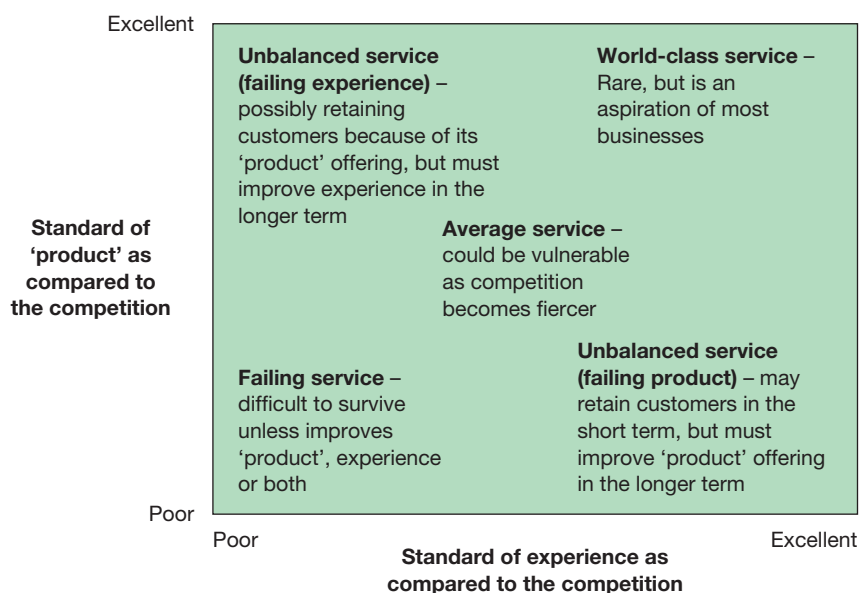
In addition, for organisations that compete on price (or have an objective to reduce costs), service has a role to play in ensuring right-first-time service provision and low operational costs.

Competing on 'product' or experience

In Chapter 1 we defined service outcomes as the results for the customer of the service process and their experience, including ‘products’, benefits, emotions, judgements and intentions. The ‘products’ are the ‘functional’ output of the service provided, such as the food and drink provided by a restaurant, or the ability of a delegate on a training course to construct a spreadsheet, or the new heart for the heart transplant patient. Some service organisations compete on their ‘products’ and others on the experience provided, while some manage to compete on both (see Figure 3.6).

As Figure 3.6 suggests, there are a number of positions that the service organisation may take up when compared with the competition. This analysis can also be applied by public-sector and

Figure 3.6 Competing on 'product' or experience



not-for-profit organisations, since they, too, are in a form of competition for resources: civil service departments compete for a larger slice of the country's budget, and charities compete for donor funds.

The five positions suggested by Figure 3.6 are as follows:

- *Failing service.* The organisations' 'products' are below industry specification, and their customer experience is poor. Traditional services that have failed to move with market trends find themselves in this position. Around the world, in the fast-food industry, several local services found that they were left behind by McDonald's in terms of higher food standards and faster service.
- *Unbalanced service (failing experience).* In these organisations, the 'product' is excellent, but the way that customers are treated is poor. Professional services sometimes fall into this category, being perceived as arrogant by their clients. They may well know better than their clients, and be the technical experts in their area, but this does not excuse service that can often be offensive. The medical profession often comes in for criticism in this area, dealing with patients not as human beings but rather as another condition to be treated.
- *Unbalanced service (failing product).* It is possible to develop customer loyalty through a good experience. However, if the 'product' falls below standard, customers will only tolerate this for a relatively short period. If the service experience is excellent, the emotional switching costs are quite high for customers, but eventually they will leave. Some computer companies have used this strategy to retain customers in the period between phasing out an old product and launching a new one.
- *Average service.* This is the position that many high-volume, business-to-consumer services believe they occupy. In many of these traditional service sectors there are frequently a number of reasonably established competitors, all conducting business in a similar fashion. In some countries, retail banks often occupied this position. There were many competing players in the market with relatively little to choose between them. However, as competition became fiercer, many chose to try to differentiate themselves through the way that they dealt with their customers.
- *World-class service.* These organisations are universally recognised as being the best in all that they do. There are few of these in existence.

Most large organisations will find that they can position their range of services at different points. Some services may be world-class, while others are failing. It is important to distinguish between them because each will require a different strategic approach.

Case example

Many different strategies for cruise companies¹²

The cruise industry is large. About 26 million passengers are accommodated every year. And it is an industry that has grown. Demand for cruising increased over 20 per cent in the five years up to 2019. Moreover, cruise companies offer a wide variety of different types of cruise ship for different markets. The strategy of most of the cruise operators is to match the facilities on board with the various market segments that they serve. There are cruise ships exclusively for adults, others with lots of attractions for families. Cruise ships that can go anywhere (with ice-class hulls for arctic waters),

others that keep to the warmer parts of the world. Cruise ships that provide a basic service, others that offer only the most luxurious facilities and service. In fact, most cruise lines generally have ships of all types and sizes in their fleet, with the size of a ship being one of the key decisions for cruise companies.

The biggest cruise ship (at the time of writing) is the 18-deck *Symphony of the Seas*, owned and operated by the Royal Caribbean cruise line. It joined a fleet of so-called mega ships, with capacities over 3,000 passengers, operated by most of the major

cruise companies. In fact, the *Symphony of the Seas* has a maximum capacity of nearly 9,000 people (including crew), with 2,759 cabins, or more luxurious 'state rooms'. It has more than 40 restaurants and bars, two full-sized theatres, 23 pools, jacuzzis and water slides, two climbing walls, an ice rink, a surf simulator, a fairground carousel, a ten-storey slide, a mini-golf course, a spa, a gym, a casino and more shops than even the most fervent shopaholic could want. And that is one of the factors driving the development of such large-capacity ships – the bigger they are, the more space



NAN728/Shutterstock

they have to offer a wide range of distractions. They have been compared to huge luxury-resort hotels that just move magically overnight, where you can see multiple destinations and only have to unpack once. But, although such large ships have cost advantages for their operators (and therefore can offer good value for their customers), some prefer the cosier, less-standardised luxury provided by some smaller ships. The larger ships can offer a wide variety of dining experiences, but smaller ships may be able to offer Michelin-level restaurants. The service on large ships can be 'good but impersonal', while smaller ships often give more personalised service.

The very scale of some of the largest ships can have other drawbacks. On very large ships, passengers need a map if they want to avoid getting lost (some ships are so big that passengers may be given GPS trackers). With so many passengers, embarkation and disembarkation can be crowded, with very long queues. The safety of very large ships has also been questioned. In 2012 the *Costa Concordia* ran

aground off the coast of Italy, and the crew could not fully evacuate the ship before it capsized. Perhaps most restrictive is that there are a limited number of ports that can accommodate such vast ships. In some cities, such as Venice, protests have been organised by residents over the scale of the vessels calling there. Because of these diseconomies, some in the cruising industry believe that the strategy of cruise companies may slowly change, with the future generations of cruise ships becoming smaller. They will also be greener – powered by liquefied natural gas and fuel cells.

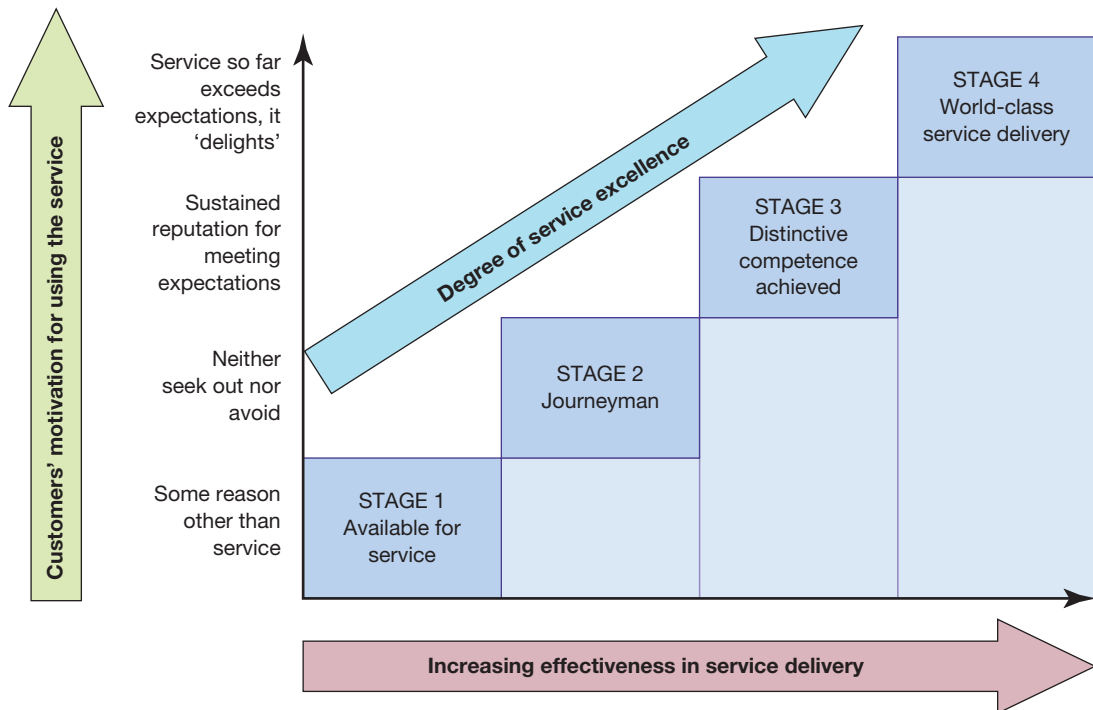
Addendum

The impact of the Covid-19 pandemic resulted in the share prices of cruise operators dropping to some 20 per cent of their pre-pandemic levels. This drop was not surprising, as the sight of holiday makers trapped on quarantined vessels, and court cases against all major operators, deterred even the most daring of maritime tourists.

Moving to 'world-class' service – Chase and Hayes' four-stage model

Chase and Hayes¹³ have articulated the progress that a service firm can make towards a state of indisputable competitiveness. They developed a model that identifies the progression of four stages that service firms can move through towards 'world-class' levels of excellence (illustrated in Figure 3.7).

Figure 3.7 Chase and Hayes' four-stage scheme of service operations' contribution to strategic competitiveness



Stage 1: Available for service

The service-providing resources and processes in service firms in this, the lowest, category provide almost nothing positive towards the firm's competitiveness. In fact, the rest of the organisation regards them as something of a 'necessary evil'. Service is largely reactive, with little or no active moves towards improvement. Such firms rarely look at competitors, or learn from innovations that originate from outside the firm. 'Avoiding the worst mistakes' is the best that the firm can expect from its service operations.

Stage 2: Journeyman

The service-providing resources and processes of firms in this category have progressed beyond the negative influence they had in stage 1. They are now in a position to look outside and compare their performance and methods with competitors. They may not be as good as the best of their competitors, but they aspire to be. The aim of 'journeyman' service operations is to keep up with competitors. Industry best-practices are adopted, performance is benchmarked against competitors and improvement, if not radical innovation, takes centre stage.

Stage 3: Distinctive competence

If stage 2 firms have an aspiration to be as good as competitors, stage 3 firms have made it. They have reached that point through management having a clear vision of how the operations' resources and processes create customer value, and a clear focus on designing the whole operation to deliver that value. Just as important, they have coordinated the various elements of their service strategy. There is a coherence between, for example, their approach to marketing their services, the way service delivery performance is measured, the development of service staff, the investment in appropriate capacity and technology – in fact, all the decisions that go to make the operations' service strategy.

Counterpoint

Chase and Hayes admit that making a judgement about where any particular firm lies on the four-stage scale is not always easy. A firm's performance can vary throughout its service network. Is excellent service in 99 per cent of service interactions but truly appalling service in the 1 per cent better than consistently reasonable service in 100 per cent of transactions? Perhaps more serious are the criticisms both of these types of 'progression' scale and of the whole idea of 'world-class'. First, progression scales: why are four stages used? Why not five, six, seven, etc? There is no rational reason

for any particular number. Moreover, service (or any other) business organisations are complex. Usually, some parts of a firm are likely to be better than others, so categorising a whole business as being at a particular stage must be something of a simplification. Second, the idea of 'world-class': it is obviously an attractive hook for consultants to sell their services – all managers would want to be 'world-class'. But, although Chase and Hayes' description of that they call 'world-class' is both interesting and coherent, one could argue that the term itself is not particularly meaningful.

Stage 4: World-class service delivery

One might think that stage 3 is the ultimate that any service firm could aspire to. However, Chase and Hayes make an argument for a further stage, called (not surprisingly) stage 4. The difference, they say, between stages 3 and 4 is a matter of how proactive a firm is in serving its markets. Stage 4 companies will have developed their service capabilities to the point where their service delivery operations do not just understand their customers' needs and fulfil them, they 'seek to create needs, establish expectations, and continually expand those expectations'. One interpretation of the jump from stage 3 to 4, is that stage 3 companies have simply succeeded by being better than competitors, whereas stage 4 companies have 'changed the rules of the game'.

3.5 How can service performance objectives be converted into operations priorities?

An essential step in understanding the link between service performance and competitiveness is to establish a method of converting the objectives that service operations should be achieving into clear operations priorities. These priorities can then be used to guide the strategic development of service resources and processes. We shall look at two (quite similar) methods of doing this. The first is the idea of perceived user value (PUV), the second is the importance–performance matrix.

Perceived user value

To understand how service or services can be used to create a competitive advantage it is essential to understand what customers regard as important. The notion of perceived user value (PUV) can be helpful here.¹⁴ PUVs are the criteria regarded by customers as being important, and on which they will base their assessment of the organisation and its services. The PUVs for a supermarket chain might include stock availability, range of products, store location, etc. Figure 3.8 shows a comparison of PUVs for two supermarket chains.

The scores in brackets on Figure 3.8 denote the relative weighting that customers ascribe to each criterion. Therefore, stock availability is weighted at 9/10, whereas checkout speed scores 5/10. This analysis allows the operations manager to determine priorities for action, and also to know in what

way operations contribute to the overall competitiveness of the organisation. Operations contribute directly to some aspects of PUV (stock availability, checkout speed and customer service advice) and may contribute indirectly to other aspects of PUV (for example, how the service is delivered may have an impact on brand image and the relationship formed with customers, which may facilitate feedback to revise the product range). By separating out price from the other PUVs, we have a useful framework for identifying and assessing current and future strategies. This allows the possibility of competing by more than simply being cheaper or differentiated – that is, by competing in both ways (see Figure 3.9).

The implication of Figure 3.9 is that Supermarket A is of similar size (depicted by the size of the circle) and strategic positioning (weighted average PUV) to Supermarket B. There is a smaller rival, C, which is perceived to be of higher quality but is very expensive. Likewise, D is the low-cost

Figure 3.8 Key components of perceived user value (PUV) for two supermarkets

Source: Adapted from Bowman, C. (1998) *Strategy in Practice*, Prentice Hall, London.

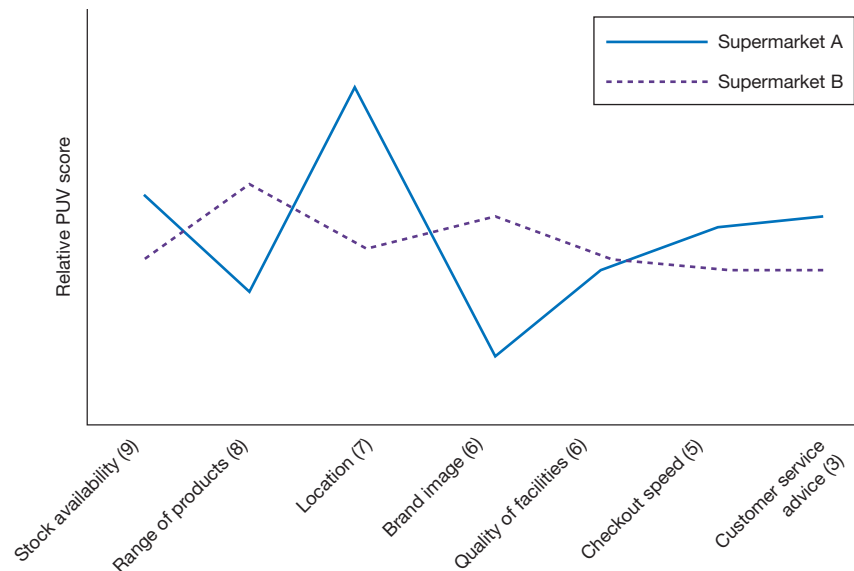
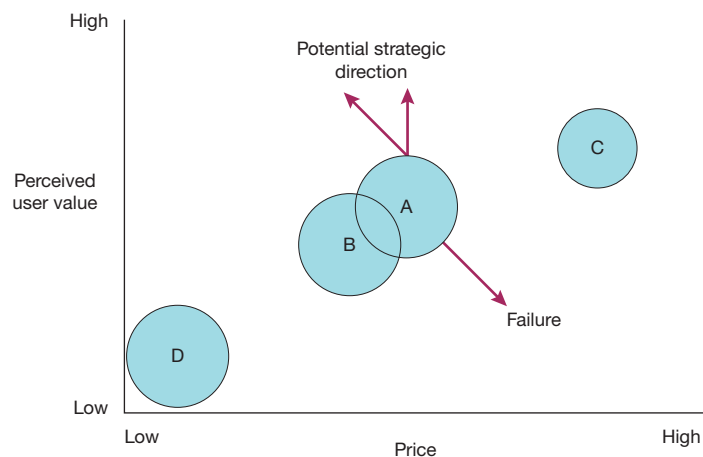


Figure 3.9 Perceived user value (PUV) and price for four supermarkets

Source: Adapted from Bowman, C. (1998) *Strategy in Practice*, Prentice Hall, London.



provider in this market-place and is only slightly smaller than A and B. The question to be addressed here is to understand which strategic direction to adopt. If A wishes to maintain the price position but wants to increase PUV, inspection of the analysis from Figure 3.8 will be a good starting-point. Clearly, high stock availability and product range provide opportunities for enhancing PUV. If this strategy is adopted, operations can determine its contribution in terms of improving service standards without increasing operations cost. If the preferred strategy is to increase PUV and decrease price, then operations have a major task if the reduction in price is not simply to be achieved by reducing margins.

The importance–performance matrix

Importance–performance mapping is a particularly useful approach to directing strategic development because it explicitly includes both of the major influences on the performance objectives that define customers' views:

- the needs and importance of customers' preferences; and
- the performance and activities of competitors.

Both importance and performance have to be brought together before any judgement can be made as to the relative strategic priorities for improvement. Because something is particularly important to its customers does not mean that an operation should give it immediate priority. The operation may already be considerably better than its competitors in this respect. Similarly, because an operation is not very good at something when compared with its competitors' performance does not necessarily mean that it should be immediately improved. Customers may not particularly value this aspect of performance. Both importance and performance need to be viewed together to judge improvement priority.

Yet, although we have associated importance with the views of customers and performance with the activities of competitors, the approach may be adapted to deviate from this. For example, a company may choose to give importance to some aspect of operations activity even when customers do not find it important. If a company is working towards providing customised services in the near future, it may regard flexibility as being more important than do its customers, who are, as yet, unaware of the change in the company's market stance. Neither is performance always judged against competitors. Although it may be an obvious benchmark, it does presuppose the existence of competitors. Many not-for-profit organisations may not see themselves as having competitors as such. They could, however, assess their performance against other similar organisations. Alternatively, they could measure performance against customer perception or customer expectations.

Judging relative importance

The importance of any aspect of performance to a firm can be assessed in terms of its importance to customers (internal or external). At a high level, one can identify three categories of importance – qualifiers, order winners and less important factors:¹⁵

- *Qualifiers* play an important part in retaining business or sustaining business activity, by which we mean retaining customers or sources of funding or even staff, for example. If performance falls below a certain point compared to other organisations, business/customers/funding/staff may be lost. An internet service provider (ISP), for example, may lose customers if access to its network is slower or more difficult than through its competitors'. A university that does not perform well in research league tables may lose out on government funds. If a charity does not have sufficient telephone lines and operators available to take donations during an emergency, it may lose out.
- *Order winners* both maintain and attract new business, funds or customers for the organisation. These are special qualifiers that the organisation has chosen as part of its strategy to use as a means of securing an advantage, or a point of differentiation, over other organisations. An ISP may choose price as its order winner, for example. By making its service free to its customers, or even providing free phone access to its network, an ISP may gain a significant advantage over its competitors and increase its customer base. A university may attract executive courses by

having outstanding facilities, even though its staff may be no better or worse than those in other institutions. A charity can attract new donors through developing new water-provision services for victims of droughts, or developing a reputation for being first on the ground in war zones.

- *Less important factors* are relatively unimportant but should not be ignored because they may become a source of advantage at some future point. In the case of a bank, the comfort of the banking hall may be a less important factor, or the speed of the search routines provided may be less important to an internet service provider.

To help judge the relative importance of individual factors and help identify priorities for improvement, a more discriminating nine-point scale can be used with three points per category (see Table 3.1).

Judging relative performance

Performance, the second dimension for assessing performance objectives, is concerned with the performance of each objective compared to other similar or competing organisations – whether they are competing in the traditional sense or competing for funds, staff or even kudos! A nine-point scale can again be used to assess relative performance of any of the factors (see Table 3.2).

Table 3.1 Judging importance of individual factors

Order winners (attractors)	1	Crucially important to attract business/customers/ funds, etc
	2	Important to attract business
	3	Useful for attracting new business
Qualifiers (retainers)	4	Vital for retention of customers/funding, etc
	5	Important for retention
	6	Useful for retention
Less important	7	Not usually important
	8	Rarely considered important
	9	Not at all important

Source: Based on Slack, N., Chambers, S. and Johnston, R. (2010) *Operations Management*, 6th edition, FT Prentice Hall, Harlow.

Table 3.2 Judging performance of individual factors

Better than others	1	Considerably better than others
	2	Clearly better than others
	3	Somewhat better than others
The same as others	4	Marginally better than others
	5	The same as others
	6	Marginally worse than others
Worse than others	7	Somewhat worse than others
	8	Usually worse than others
	9	Considerably worse than others

Source: Based on Slack, N. and Brandon-Jones, A. (2019) *Operations Management*, 9th edition, Pearson, Harlow.

Forming the importance–performance matrix

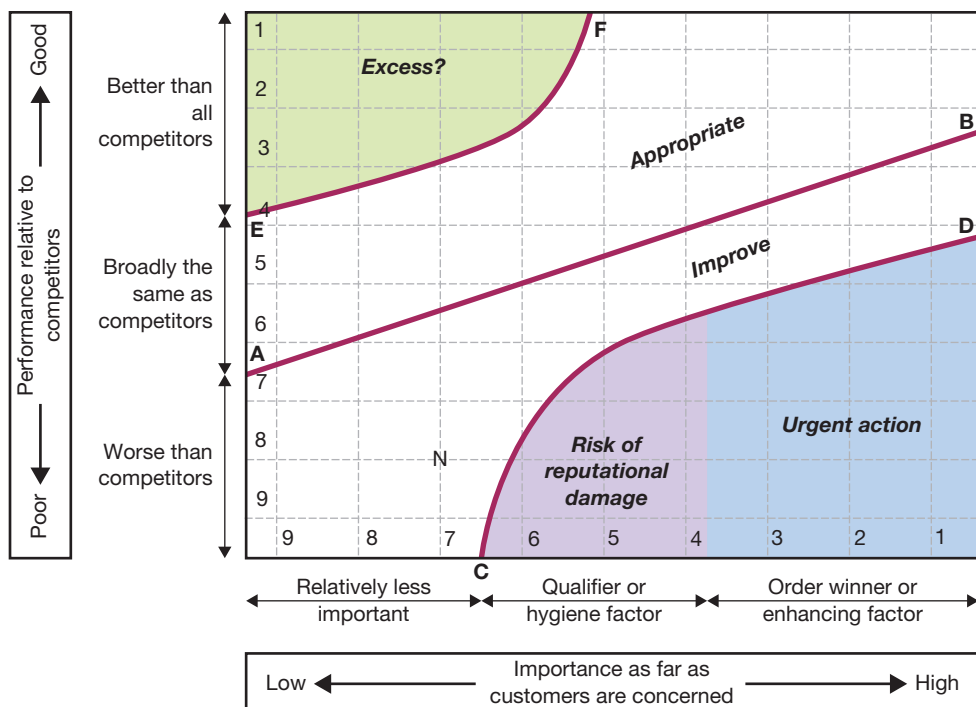
The priority for improvement that each competitive factor should be given can be assessed from a comparison of their relative importance and performance. This can be shown on an importance–performance matrix that, as its name implies, positions each competitive factor according to its score or ratings on these criteria. Figure 3.10 shows an importance–performance matrix where both importance and performance are judged using (in this case) the simple nine-point scale, and where the matrix is divided into zones of improvement priority.

The first zone boundary is the ‘lower boundary of acceptability’, shown as line AB in Figure 3.10. This is the boundary between acceptable and unacceptable performance. When a competitive factor is rated as relatively unimportant (8 or 9 on the importance scale), this boundary will, in practice, be low. Most operations are prepared to tolerate performance levels that are ‘in the same ballpark’ as their competitors (even at the bottom end of the rating) for unimportant competitive factors. They only become concerned when performance levels are clearly below those of their competitors. Conversely, when judging competitive factors that are rated highly (1 or 2 on the importance scale), they will be markedly less sanguine at poor or mediocre levels of performance. Minimum levels of acceptability for these competitive factors will usually be at the lower end of the ‘better than competitors’ class. Below this minimum bound of acceptability (AB) there is clearly a need for improvement; above this line there is no immediate urgency for any improvement.

However, not all competitive factors falling below the minimum line will be seen as having the same degree of strategic priority. A boundary approximately represented by line CD represents a distinction between an urgent priority zone and a less urgent improvement zone. Remember the characteristic of qualifiers though. A qualifier whose performance is clearly below the qualifying level represents the threat of customers actively withdrawing business. Any factors in this ‘risk of reputational damage’ area could be even more of a threat than those in the other parts of the ‘urgent action’ area.

Figure 3.10 The importance–performance matrix

Source: Based on Slack, N. and Brandon-Jones, A. (2019) *Operations Management*, 9th edition, Pearson, Harlow.



Similarly, above the line AB not all competitive factors are regarded as having the same priority. The line EF can be seen as the approximate boundary between performance levels that are regarded as ‘good’ or ‘appropriate’ on one hand and those regarded as ‘too good’ or ‘excess’ on the other. Segregating the matrix in this way results in five zones that imply very different strategic priorities:

- The ‘*appropriate*’ zone is where performance is better than other organisations for the order winners and at least the same as others for qualifiers and less important criteria. Factors in this area may not require action to improve, but the focus of performance measurement systems may have to be to keep the factor in control. To maintain an edge over other organisations it may be worth considering trying to develop performance in some factors in this zone.
- The ‘*improve*’ zone identifies factors that need some attention, such as order winners where performance is similar to others and qualifiers where performance is slightly worse. The focus for performance measurement should be on improvement rather than control, and strategies should be developed to improve performance.
- The ‘*urgent action*’ zone identifies factors where urgent attention is required to improve performance. It is likely to be an immediate priority to move factors in this area up to at least the improve zone and into the appropriate zone in the medium term.
- The ‘*risk of reputational damage*’ zone identifies competitive factors that could represent a serious risk to the business and should be looked at as a matter of urgency.
- The ‘*excess?*’ zone includes factors that may have higher performance than is necessary. Performance that is significantly better than others’ may be a waste of resources for qualifiers and certainly for the less important factors. On the other hand, if these factors are considered to be emerging qualifiers or winners, such expenditure may well be appropriate.

By applying the importance–performance matrix, operations managers can translate strategic intentions into clear priorities for the operation, identifying where limited resources may best be spent to support the organisation’s strategic intentions.

Worked example

Amfring Transport

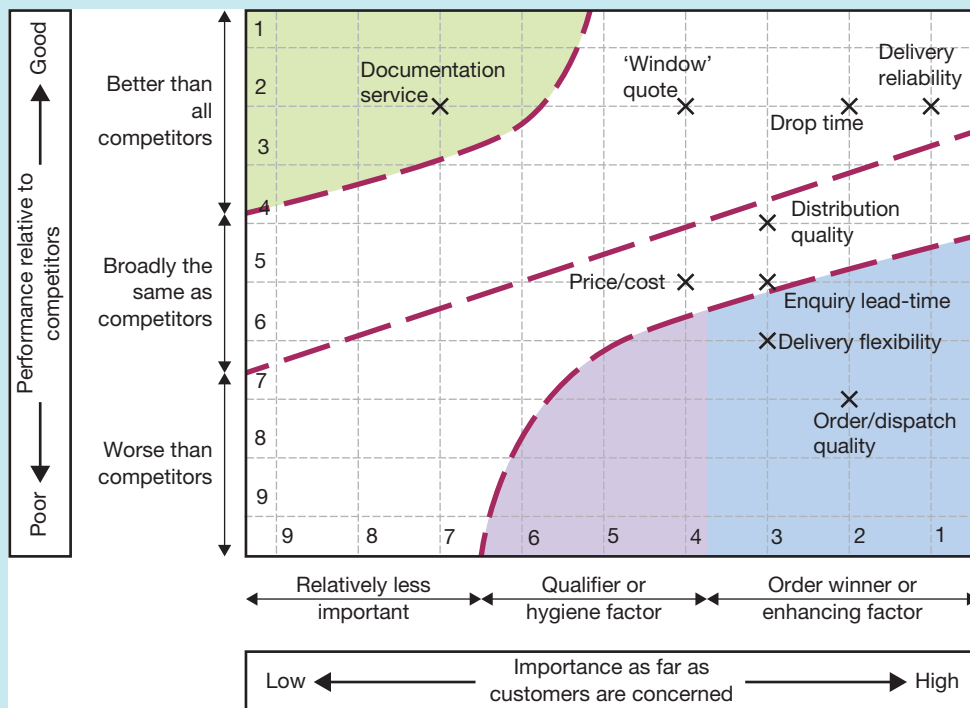
Amfring Transport (AT) is a successful logistics company that is reviewing one of its fastest-growing services – an overnight, temperature-controlled delivery service for chilled food. It is particularly keen to improve the level of service that it gives to its customers.

As a first stage in the improvement process, it has devised a list of the various aspects of its operations performance:

- Price/cost – the price (including discounts, etc.) that it can realise from its customers and the real internal cost of providing the service.
- Distribution quality – the ability to deliver goods in an undamaged state and its customers’ perceptions of the appearance of its vehicles and drivers.
- Order/despatch quality – the courtesy and effectiveness of its customer-facing call-centre staff.
- Enquiry lead-time – the elapsed time between an enquiry from a new customer and providing a fully specified proposal.

- Drop time – the earliest time each morning when delivery can be made.
- ‘Window’ quote – the guaranteed time window around the drop time within which delivery should be made.
- Delivery reliability – the proportion of actual deliveries made within the quoted ‘window’.
- Delivery flexibility – the ability to change delivery destination.
- Documentation service – the reliability of documents such as temperature control charts supplied with each delivery.

Based on its discussions with customers, the laboratory manages to assign a score to each of these factors on the 1 to 9 scale. A score of 1 for ‘importance’ means that the factor is extremely important to customers and 9 means that it has no importance. For performance, a score of 1 means that AT is considerably and consistently better than any of

Figure 3.11 The importance–performance matrix for AT’s ‘overnight temperature-controlled service’

its competitors; a score of 9 means that it is very much worse than any competitor. AT plotted the importance and performance rating it had given to each aspect of performance on an importance–performance matrix. This is shown in Figure 3.11. It shows that the most important issue, delivery reliability, is also where the company performs

well against its competitors. Several issues need improving, however, and three urgently: enquiry lead-time, order/despatch quality and delivery flexibility are all relatively important, yet the company scores poorly against its competitors. Finally, there is possibly an excess of performance in respect of process documentation.

3.6 How can a strategy be sustained?

Strategy is a long-term issue, so an important aspect of any service strategy should involve questioning how sustainable a strategy is. But, ‘sustainable’ does not mean ‘unchanging’. In this context, it means that the strategy gives some degree of stability to how change, if it is needed, is managed. Any element of the service strategy cycle illustrated earlier (in Figure 3.4) can prompt an adjustment in a firm’s strategy. Without constant appraisal of the changes to the internal and external environments and consequent adjustments to strategy, organisations may decay. This phenomenon

has been referred to as ‘institutional rusting’.¹⁶ Some of the more common operational difficulties faced by organisations in sustaining a strategy are:

- Conflicting objectives, such as the need to provide a customised product using existing processes capable only of delivering a commodity-type service.
- Inappropriate and inflexible operations processes and resources, such as inappropriate equipment and untrained employees.
- Inappropriate investment, including inadequate investment to provide the resources required or develop the existing ones.
- Undetected changes to the service concept as delivered by the operation as opposed to what was originally intended – for example, a failure to detect how managers and employees may be reinterpreting the concept in the way with which they are comfortable, as opposed to what is required by customers (concept contamination).
- The addition of multiple (similar) services to a service process originally designed for one service, resulting in potential compromise of standards across all services.

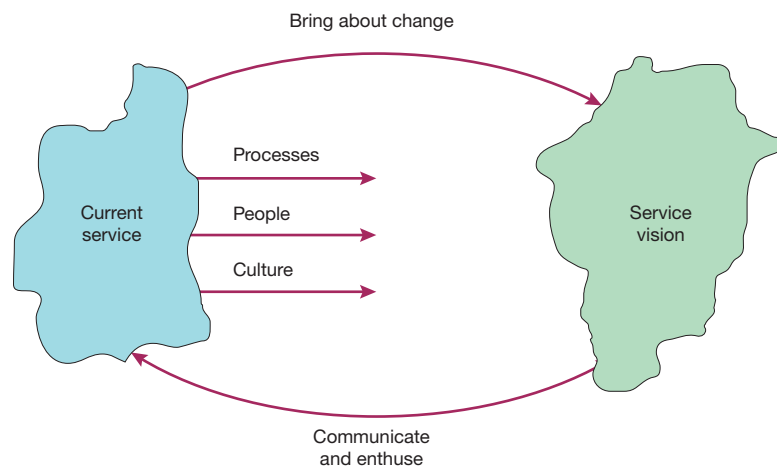
Service strategy therefore involves the process of continually checking the organisation’s plans for direction, progress and cohesion in terms of the continually changing environment. The importance–performance matrix can be used to check that operations priorities are aligned to, and reflect any changes in, strategy. Also, creating, using and updating strategy maps to link strategy through objectives to performance measurement are an important means for operations to both implement and sustain a strategy (see Chapter 12).

Visionary leadership

One condition that is often cited as having a major impact on service strategy sustainability is visionary leadership. This is often provided by an individual, usually at corporate level, although it is sometimes a senior figure within operations, marketing or finance, who takes responsibility for strategy development and acts as the linchpin in the wheel, pulling all the forces together and helping them move in the right direction.

Visionary leaders understand the current organisation and its service – its processes, people and culture, for example – and are able to create an attractive vision for the future. They are also able to communicate that vision and enthuse others, and thus galvanise the whole organisation to bring about the realisation of that vision (see Figure 3.12).

Figure 3.12 Visionary leadership



3.7 Summary

What is service strategy? – Service strategy is concerned with how an organisation shapes the direction and development of its service-providing resources and processes. A service strategy should do four things: it should reflect the overall strategic aims of the business; satisfy the requirements of the market(s) that the business serves; take into account the practicalities of how a service can be delivered; and develop the capabilities of the organisation's service resources and processes. These should be the four parts of any organisation's service strategy.

Why is it important to have a service strategy? – Service operations need strategic direction if their potential as the company's competitive engine is to be fully realised. An obvious reason is to prevent non-aligned and disjointed activities and decisions. Without a coherent service strategy coordinating operational decisions, the possibility of unconnected and fragmented decision making is high. Also, a well-articulated service strategy gives an organisation its 'reason for being' and has the potential to define its service concept and indicate how it will be delivered. It provides the intellectual frameworks and conceptual models that allow managers to identify opportunities for bringing value to customers and for delivering that value at a profit or within budget.

What is the process of service strategy formulation? – It is necessary to understand how the elements that constitute a service strategy fit together to form a 'strategy process'. Six critical elements of strategy are: the creation of a set of overall business objectives; an understanding of the market environment; the statement of the positioning of the service(s) in their environment; the development of an appropriate service concept; the identification of appropriate operations performance objectives; and the development of appropriate service resources and processes.

How can service provide a competitive advantage? – Organisations may compete on the excellence of their outcomes, the excellence of their experiences, or both. Chase and Hayes developed a model that identifies the progression of four stages that service firms can make towards 'world-class' levels of excellence. They called the stages 'available for service', 'journeyman', 'distinctive competence' and 'world-class service delivery'.

How can service performance objectives be converted into operations priorities? – An essential step in understanding the link between service performance and competitiveness is to convert the objectives that service operations should be achieving into clear operations priorities. These priorities can then be used to guide the strategic development of service resources and processes. Two similar methods of doing this are the idea of perceived user value (PUV) and the importance–performance matrix.

How can a strategy be sustained? – It is necessary continually to check the organisation's plans for direction, progress and cohesion in terms of the changing environment. In this sense, 'sustainable' does not mean 'unchanging'; it means that the strategy gives some degree of stability to how change, if it is needed, is managed.

Discussion questions and exercises



1. Reread the case example on IKEA and its 'big box' retail strategy. Applying the elements of the service strategy model (see Figure 3.4), explain what prompted IKEA to adapt its strategy?
2. This story is often related by strategy experts. During manoeuvres in the Alps, a detachment of soldiers got lost. The weather was severe and the snow was deep. In these freezing conditions, after two days of wandering, the soldiers gave up hope and became reconciled to a frozen death on the mountains. Then, to their delight, one of the soldiers discovered a map in his pocket. Much cheered by this discovery, the soldiers were able to escape from the mountains. When they were safe back at their headquarters, they discovered that the map was not of the Alps at all, but of the Pyrenees. What is the relevance of this story to strategy?
3. Maytech Financial (MF), a large accountancy corporation, is looking to assess the operations functions in three of its locations around the world. The MF Malaysia operations are marginally better than the

operations of many of its competitors in the region, but still behind the very best players. The function is also viewed positively by other functions in the organisation and their 'voice is heard' when it comes to strategy conversations. Arguably, MF Japan operations continue to provide the basis on which MF Japan competes – it recently developed advanced AI software to enable the company to access new larger corporate clients who, in addition to basic accountancy services, value the customer intelligence that working with MF Japan can offer them. MF Hong Kong operations are now clearly better than most of its competitors' and it has an active voice in the strategic direction of the firm. Recently, the operations team worked closely with marketing to respond to a key client's request to develop more automated processing of high-volume, low-variety work on their behalf. The initiative has proved successful, so marketing are becoming increasingly keen to build on this internal 'win-win' relationship. Where would you position the three MF operations functions on the Chase and Hayes four-stage model of service operations?

4. Carry out an importance–performance analysis for an amusement park. In doing this, think about the competitive factors (i.e. the key ingredients) for this offering, their level of importance and their performance, using the scale shown in Figure 3.10. Then map these onto an importance–performance matrix, as shown in Figure 3.11.
5. The managing partner of The Brandfair Partnership (TBP) was describing her business:

It is about four years now since we specialized in the small to medium firms' market. Before that we also used to provide brand consultancy services for anyone who walked in the door. However, within the

firm, I think we could focus our activities even more. There seem to be two types of assignment that we are given. About forty per cent is relatively routine. Typically, these assignments are conventional market research and focus group exercises. These activities involve a relatively standard set of steps that can be carried out by relatively junior staff. Of course, an experienced consultant is needed to make some decisions. Customers expect us to be relatively inexpensive and fast in delivering the service. Nor do they expect us to make simple errors, if we did this too often we would lose business. Fortunately, our customers know that they are buying a 'standard package'. However, specialist agencies have been emerging over the last few years and they are undercutting us on price. Yet I still feel that we can operate profitably in this market. The other sixty per cent of our work is for clients who require more specialist services, such as assignments involving major brand reshaping. These assignments are complex, large, take longer, and require significant branding skill and judgment. It is vital that clients respect and trust the advice we give them in all 'brand associated' areas such as product development, promotion, pricing and so on. Of course, they assume that we will not be slow or unreliable, but mainly it's trust in our judgment backed up by hard statistics that is important to the client. This is popular work with our staff. It is both interesting and very profitable.

(a) How different are the two types of business described? (b) It has been proposed that she split the firm into two separate business: one to deal with routine services and the other to deal with more complex services. What would be the advantages and disadvantages of doing this?

Case exercise

Corks Nightclub – an overnight success?

Dan Chicksand, Birmingham University

It was something I had always wanted to do, possibly because I spent part of my time at university supporting myself by working behind the bar at a jazz club in Soho (London). Managing to buy Corks Wine Bar and Club was a dream for me, so it was a shock when I had such a difficult start.

(Barry Lewis, Owner, Corks Nightclub)

Although a seasoned entrepreneur, buying Corks was Barry's first time running a business in this sector. A qualified accountant, his previous experience included running various operations, including a car sales dealership and an office cleaning franchise. Yet, as a professional accountant he was confident in his abilities to get to grips with the recent relatively poor performance of the wine bar. Although

he had bought the club for what he believed to be a good price, he knew that a great deal needed to be done to turn the business around. He had inherited a manager and several bar staff, as well as a chef, whom he suspected of having limited culinary abilities. His first job was to gather the staff together to explain to them the vision he had for the wine bar.

Barry explained that, having bought the 15-year lease, he had also been granted a late-night licence by the local authority (the wine bar had previously only had a licence until 12.00 pm). He believed that this would help him to turn the wine bar into a popular late-night venue. However, because of the club's location, close to Oxford Street (a main shopping street) but almost a kilometre from the main club area of Soho, it would get little passing trade. Therefore, Corks would need to become a destination venue in its own right. The club would also need modifying. Barry decided to close for three weeks for a makeover, after which it would reopen, offering all-day food. However, to keep the club's utilisation high, every evening at 10 pm the chairs and tables would be removed and the venue would turn into a nightclub. Barry particularly wanted to attract an ethnically diverse, professional crowd and started promoting the new offering to the many local businesses, including well-known 'upmarket' department retailers such as Selfridges. Early Friday nights were already attracting staff from the local stores and offices.

But, by the end of the first month after reopening, it was clear that all was not well. The business was haemorrhaging money. The extra costs of late-night opening and the need to hire expensive security staff meant that the business was a long way off breaking even. In fact, the only night that the club was making money was Friday night, when a resident DJ, whom they had inherited from the previous owners, played an R&B set. Never having envisaged running an R&B club, Barry asked his general manager to hire new promoters with the brief to attract a broader client base. In particular, he wanted to attract professionals who were willing to spend more money at the bar. Although Barry was relieved to be taking higher-than-expected money on the door on the Friday nights, the bar and food takings were not good. A budget was set up to attract new DJs for the other nights of the week specialising in house music and other genres, which Barry felt would attract a wider variety of high-spending clients.

Nevertheless, after the first six months of trading there seemed to be very little evidence of either

a significant improvement in revenue or reduction in costs. Although the club was licensed for up to 500 people, the only night that was yielding anything close to this was the Friday R&B night, with a regular figure of around 350 people. The takings on food sales were particularly poor, with takings hardly enough to cover the chef's wages. Then, the general manager came to a rather despondent Barry with an idea. He had been approached by a well-known KISS FM radio DJ (a London-based radio station specialising in R&B music) who wanted to do the late slot from 12.00 pm to 3.00 am on Fridays. He believed that the R&B niche was growing and that there was little competition from local venues. Barry agreed to try out the KISS FM DJ and promote the club night on local radio stations and other media. He also decided to drastically reduce the restaurant side of the business and fired the chef, deciding instead to offer simple snacks rather than a full menu. He would have stopped offering food completely but a stipulation in the licence required that the club should offer food.

By the end of the first year of business Barry realised that he had struck gold. The next six months showed a remarkable turnaround in the business. Each Friday night Barry stood at the door of his club collecting money as the queue snaked around the block. Over the course of a typical Friday night, in the region of 800 customers would enter the club, paying an average entry fee considerably higher than other nights. In addition to the popular Friday R&B night, he also established successful Thursday and Saturday nights as well, again focusing predominantly on R&B, in partnership with a number of DJs from other specialist R&B radio stations.

As the club became more successful, Barry realised that he would have to change the club again.

It became obvious that the club's layout and resources were not aligned with what the market really wanted. Nightclubbers particularly value a number of things: to have enough room to dance, to feel secure in and around the club, and to have easy access to the cloakroom, the toilets and the bar.

Given this, Barry decided to close the club once again so as to reconfigure it. The now much-smaller kitchen was moved into an upstairs office, freeing-up space in the club for a bigger bar, more toilets and a larger cloakroom. The new layout was much more suited to a nightclub and had a much

larger dance floor with seating around the edges. Barry and the team were delighted with the new look. In addition, they chose to hire a new security company, which had the ability to deliver the right number of well-trained and police-checked security staff. The opening night was a huge success. All the old customers returned and were delighted with the new look of the club and the better facilities. They also commented on the professional and friendly security personnel. Within a year, Corks had become

one of the top London-based R&B nightclubs and was nominated for 'Club of the Year' at the MOBO (Music of Black Origin) awards.

Question

How did the four perspectives of service operations strategy (top-down, bottom-up, outside-in and inside-out) influence the eventual service strategy of Corks Nightclub?

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Notes



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- 2 Usually this is done by assessing the needs of different groups of potential users in terms of the needs that will be satisfied by the product or service. Segmentation variables help to classify these needs, either by examining various characteristics of customers, or by classifying their responses to a particular service.
- 3 See, for example, Mintzberg, H. (1998) *The Strategy Process*, European edition, Prentice Hall, London; Mintzberg, H., Ahlstrand, B. and Lampel, J. (1998) *Strategy Safari*, Prentice Hall, Harlow
- 4 See, for example, Lovelock, C.H. (1994) *Product Plus*, McGraw Hill, New York; Senge, P.M. (1993) *The Fifth Discipline*, Century Business, London
- 5 The information on which this example is based is taken from: IKEA website, (accessed 2018); Milne, R. (2018) 'What will Ikea build next?', *Financial Times*, 1 February; The Economist (2017) 'Frictionless furnishing: IKEA undertakes some home improvements', *The Economist* Print Edition, 2 November; Milne, R. (2017) 'Ikea turns to ecommerce sites in online sales push', *Financial Times*, 9 October

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- 16 Lovelock, C.H. (1994) *Product Plus*, McGraw Hill, New York

Chapter 4

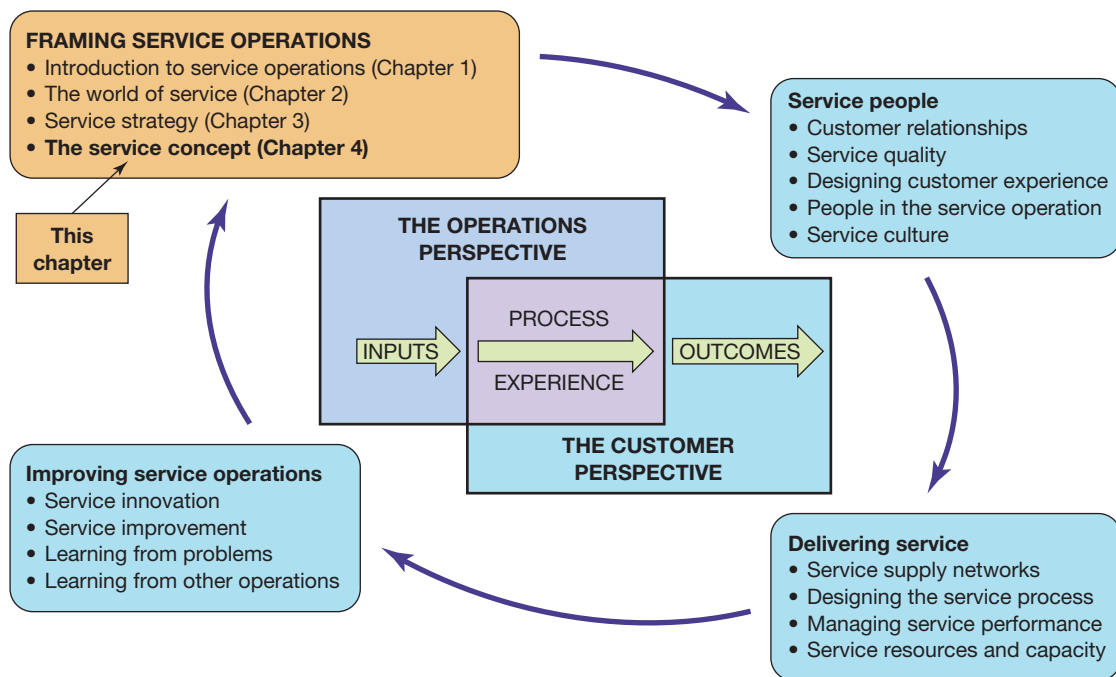
The service concept



This chapter is about how to develop and use 'the service concept'. The service concept communicates the essence of a service in terms of its 'organising idea'. It can be used to create organisational alignment, design the service and drive innovation and strategic advantage. In this chapter, we will also explain how the service concept can be articulated and show how it can be used to drive the understanding that can lead to innovation in new and existing services. Figure 4.1 shows where this topic is positioned in our model of service operations management.

Learning objectives

- To be able to define a 'service concept'
- To be able to identify the elements that make up the structure of the service concept
- To gain an appreciation of how managers can use the service concept

Figure 4.1 This chapter examines the service concept

Introduction

When buying (or using) services, customers tend to look for and buy more than the simple basic elements of the service. They are generally looking for something that is much greater, and often less tangible, than would be indicated by a simple outline of the service. For example, a hotel, looked at simply in terms of its elements or core product, provides shelter, a bed, a bathroom and food. However, looked at as a ‘concept’, a hotel can provide anything from a low-cost, reasonably comfortable night’s sleep, through a relaxing and pampered stay, to a truly unique and unforgettable experience. At an elemental level, a university provides lectures, food, accommodation and learning materials, but what its customers are looking to acquire are service aspects that are much greater than the core elements but less tangible – an ‘educational experience’, or a ‘richer view of life’, or ‘improved job prospects’. In fact, a cursory inspection of most university marketing materials reveals a huge emphasis on ‘experience’, with learning often taking a back seat. Likewise, we might go to Walt Disney World for a ‘magical experience’, or to a restaurant for a ‘great evening out’, or to a firm of consultants for ‘peace of mind’. These are examples of the *essence* of a service concept – what we will later refer to as the ‘organising idea’. However, to be useful to operations managers to help design, deliver and develop their service, the service concept needs to contain far more detail.

It is not just the customers for a service and the designers who shape the service resources and processes who need to understand these broader aspects of a service. It is easy for managers and staff of any service organisation to lose sight of what customers or users want. Service providers sometimes tend to focus exclusively on their processes and the output of their processes, rather than the desired experience and outcomes for their customers. In other words, there is a danger that they are placing too much emphasis on the ‘operations’ rather than the ‘customer’ perspective; thinking inside-out rather than outside-in (as we discussed in Chapter 1). Unless both perspectives are balanced, mismatches between what customers want and what the service provides can be difficult to avoid. For example, a hotel also acts as a conference centre for executive programmes and workshops. The delegates to these often want a quick and simple buffet lunch or even sandwiches, so they

can get back to their workshop, catch up with office emails at lunchtime and so on. However, the conference centre manager, eager to provide what he or she regards as a ‘luxury’ experience, believes the hotel should provide a three-course lunch, with several choices, and service at table. These different yet firmly held views often cause tensions, and complaints from teachers and delegates.

What is needed is a clearly articulated summary of the service that provides a common view of the essence of what is intended. This common view reduces the chances of different mental pictures and assumptions about the organisation’s services developing between managers, or between managers and customers. Such is the role of the service concept. It is an attempt to create a clear, agreed, shared and articulated definition of the nature of the service provided and received, in order to ensure that the essence of the service is delivered. Note that when we use the word ‘service’ in this text we are often using it as a shortened version of the term ‘service concept’. Also note that marketers may use terminology similar to the service concept to describe the ‘service promise’ or ‘service proposition’ – that is, the service provided. We use the term ‘service concept’ to pull together the provider’s view (service provided) and the customer’s view (service received or required) to help provide a shared and agreed base for the design, delivery and development of a service.

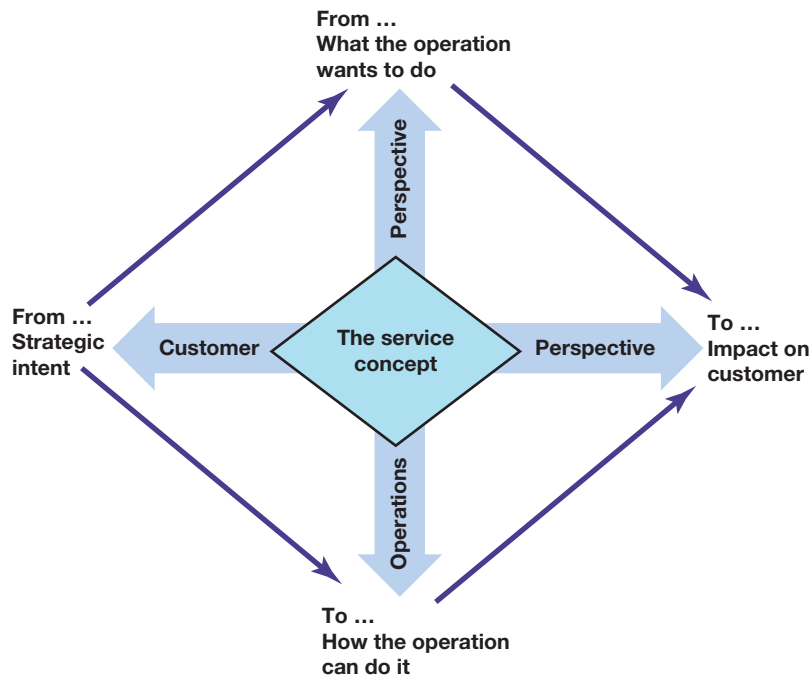
4.1 What is a service concept?

A service concept is a *shared* and *articulated* understanding of the essential nature of the service provided and received. It should provide a detailed explanation of what is to be done for the customer and how this is to be achieved. For example, Ingvar Kamprad, the founder of the IKEA chain of furniture stores, attributed the success of his stores to being a ‘concept company’. His explanation of their concept was to contribute to a better everyday life for the majority of people. They did this by offering a wide range of home furnishing items of good design and function, at prices so low that the majority of people could afford to buy them. The concept captured the imagination of both IKEA’s employees and customers. People buy IKEA products because they are well made, stylish and inexpensive. They also buy into the idea of self-selection, self-service, self-delivery and self-build. Not everyone can ‘buy in’ of course. The IKEA service is quite narrowly focused on customers who can shop in small groups, are car owning, are fit and strong enough to handle heavy flat-packs, and so on. Such constraints are no accident, and all aspects of the IKEA service concept and design have been carefully thought through. Of course, there are consequences of this service concept. Like it or not, there are queues at IKEA. These are no accident. Rather, the queues are a design choice that IKEA can live with. Both IKEA and its customers recognise that there are trade-offs to be made in any service. Try to satisfy all customers all of the time and you fail; try to satisfy the needs of the operation all the time and you will fail. A successful service concept ‘bridges the gaps’ and navigates a compromised path between the two extremes.

The service concept ‘bridges the gaps’

This idea of the service concept ‘bridging the gaps’ is an important one. In Chapter 1, we discussed the two perspectives on service – the customer perspective, which we also called ‘outside in’, and the operations perspective that we called ‘inside out’. Clearly, an important role for service managers and staff is reconciling the complex and fickle needs of customers with the need for stability and efficiency inside the operation. But, even within these two perspectives, there can be ‘gaps to be bridged’. When an organisation formulates the strategic intent of its services, it (presumably) does so by considering the impact it wants to have on its customers. Yet, the gap can be significant between a broad, and often abstract, statement of strategic intent, and the practical reality of how that could impact customers. Some kind of ‘linking mechanism’ that helps to bridge this gap would be useful. Similarly, when considering the operations perspective, the required performance of the organisation’s resources and processes, and the specific details of these resources and processes, needs to be bridged. Again, a linking mechanism is needed. The thing that links all these aspects of a service is the service concept (see Figure 4.2).

Figure 4.2 The service concept provides a linkage mechanism between strategic intent and its impact on the customer, and between what a service operations design wants to do and how it can do it



In effect, a service concept is a ‘translation’ process that attempts to reconcile potentially conflicting perspectives and views. However, this translation task can begin long before service operations managers are running ongoing operations. In fact, nowhere is the reconciliation task more profound than in the initial design of new services. It is in the creation of the service concept where the constraints and trade-offs underpinning service delivery are established. It is the first step in establishing the nature and extent of reconciliation. The service concept should state clearly what the service does and, critically, what it does not do. IKEA, for example, is pretty clear about the range of customer needs that it will satisfy. IKEA almost explicitly excludes some members of the public from its service. Try using IKEA if you don’t have a car (which is one of the reasons why Ikea modified its original ‘big box’ concept – see the case example in Chapter 3). In many respects, the service concept is a first step in articulating strategy at the level of operations resources and processes. The service concept is thus an important way of capturing the nature of a service, so that customers know what they are getting and staff understand what they are providing.

We would argue that the service concept is something to which service organisations should devote considerable design and management attention. However, the service concept is often not adequately articulated, shared or understood. The service concept is more emotional than a business model, deeper than a brand, more complex than a good idea and more solid than a vision. It is also something that can unite employees and customers and create a business advantage.

Not that all services will necessarily have gone through a process of articulating a formal service concept. Many services will have managed to translate their strategic intent into an appropriate impact on their customers and will similarly have bridged any potential gaps between their operations objectives and how to achieve them in practice. The case example on Ramblers Walking Holidays describes a service that is clear about its *implicit* service concept.

Case example

The implicit service concept at Ramblers Walking Holidays – ‘professional, passionate and knowledgeable’¹

Ramblers Walking Holidays has been successfully providing outstanding, small group, expertly guided walking and activity holidays for over 70 years. Originally the commercial wing of the UK’s Ramblers Association (later to rebrand as ‘The Ramblers’), it is now a legally separate commercial entity, although the two organisations still cooperate, and the company retains its ‘social enterprise’ not-for-profit philosophy. The company offers over 200 guided walking and activity holidays in the UK, Europe and worldwide and has gained a reputation for providing a customer experience that is highly regarded by its customers and insiders in the industry. So, what is it that makes the company’s shaping of its customers’ experience such an asset? The answer, and an object lesson for many other service operations, may lie in one of its ‘tag lines’. The company is, it says, professional, passionate and experienced. All three are qualities that help to cement its reputation.

‘Professional’ in this context means that a huge amount of effort is put into making sure that customers will travel with an organisation that they can rely on. It means that all travel arrangements, hotels, routes, restaurants, in fact anything that has an impact on the customer experience, has been carefully thought through and planned in advance. At the company’s headquarters, 50 staff work on various aspects of administration, nailing down arrangements with hotels, airlines and local services. But, no matter how much planning is done, unexpected events can still cause disruption. For example, when an ash cloud from the eruption of the Icelandic Eyjafjallajökull volcano caused worldwide chaos, the company’s tour leaders and headquarters staff worked together to preserve their customers’ holidays and get everybody home as painlessly as possible.

‘Passionate’ means that everybody working for the company shares a love of, and belief in, the virtue of seeing the world on foot, travelling in small groups, without being insulated from the world by a coach window. The company’s aim is to allow its customers to get an ‘up-close-and-personal’ experience and to discover the essence of the place that is being visited. It is an enthusiasm that also motivates the tour leaders, who are mainly volunteers doing what they do in the true spirit of enthusiasts.

They do the job for the sheer love of travel and sharing their outlook and experience with others. The company’s social enterprise ethos is important here; the money it makes from operating holidays is channelled back into charities and initiatives to support access to the outdoors and projects to benefit those living in the less-advantaged destinations it encounters.

‘Knowledgeable’ sums up one of the main reasons why Ramblers Walking Holidays’ customers use its services. It is a vital ingredient of how the company shapes the customer experience. Not only must those headquarters staff who plan a tour identify a route and the places to visit that give an authentic experience, the tour guides leading the tour have to provide background information and answer (sometimes obscure) questions from customers. The concept is to ‘get under the skin’ of the chosen destination with an out-of-the-ordinary experience, or to provide the chance to learn a new skill. This may be partaking of an authentic and instructive cookery demonstration that teaches customers how to make the perfect paella in Spain, or, for the ultimate in Japanese hospitality, to live like a local and join in with a traditional tea ceremony.

It is this professionalism of planning, a passion for the importance of the experience that it is providing, and a profound knowledge of, and empathy for, the areas it visits, that keeps its customers coming back for more.



Westend61/Getty Images

4.2 What is the structure of a service concept?

Although there is no absolute ‘formula’ for a service concept, there are elements that it has been found particularly useful to include. These elements are shown in Figure 4.3 using a structure that we will use throughout the chapter. These elements are:

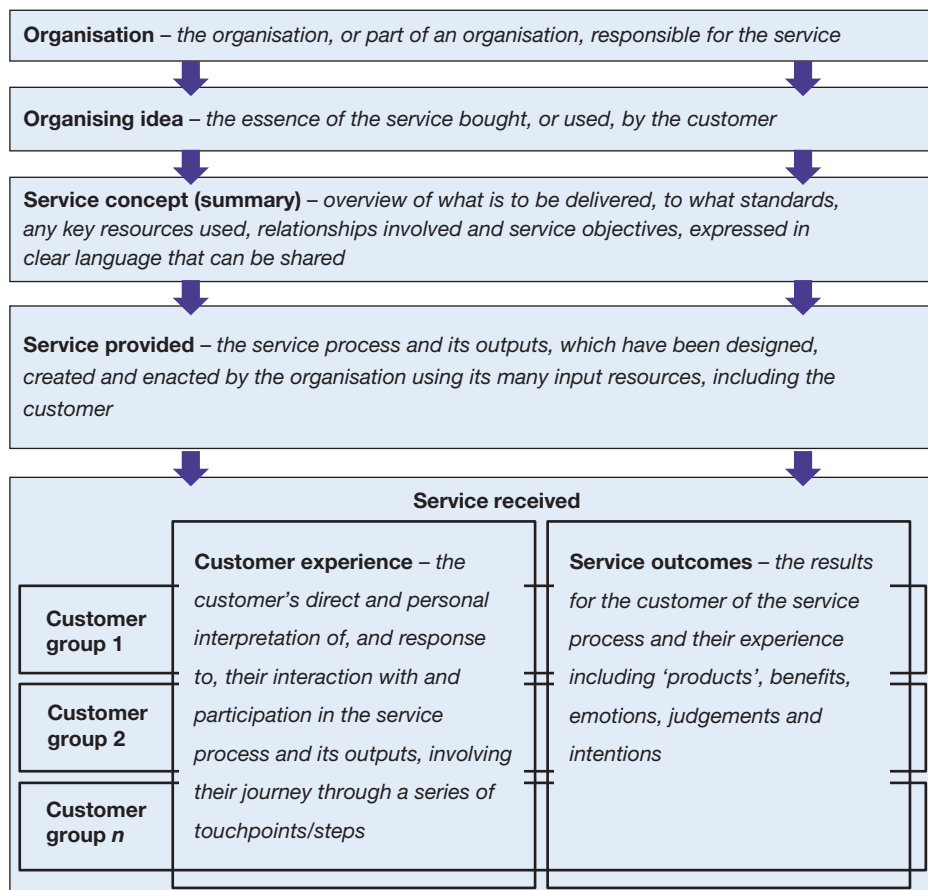
- The organisation responsible for the service.
- The organising idea.
- A summary of the service concept.
- Details of the service provided.
- The service received by customer groups.

We shall examine each element in turn.

The organisation responsible for the service

This may seem to be an obvious (and somewhat redundant) part of a formal service concept statement, as usually it is reasonably clear which organisation or enterprise is responsible for the service. However, that is not always the case. In the public sector, especially, more than one agency could share responsibility. Given that a prime purpose of service concepts is to share the essence and purpose of the service, it is sensible to define which organisations (or parts of organisations) need to share a common view.

Figure 4.3 The structure of a typical service concept



The organising idea

The organising idea of a service concept is the essence of the service bought, or used, by the customer. It provides a powerful way of reminding the service provider what the customer is really buying, and by doing so provides a focus for resource allocation and service design. The organising idea acts as a ‘magnifying glass’, helping the organisation focus on what is important. For example, a store selling paint, tools and other items for home improvements may be organised around ‘providing the cheapest hardware in town’ or ‘enabling the customer to carry out high-quality home improvements’. The first idea would require an operation focused on ‘no frills’, efficiency and economy, whereas the second idea might require investment in skilled sales staff to provide guidance for customers as to how best to carry out their do-it-yourself (DIY) projects.

Another example is that the organising idea for a theme park such as PortAventura might be – ‘A great day out at a theme park’. (We shall use the example of PortAventura throughout this explanation of the elements of the service concept. More details of the park are included in Chapter 13, when we look at how it flexes its capacity.)

There may be more than one ‘organising idea’ for a service provider. Consider a rental search agency that advises clients on available properties and looks for suitable properties. The core service for all customers would be available and appropriate accommodation; however the organising idea could be quite different each time, depending on which type of customer is being considered. Here are two examples:

- *The investor.* This customer is interested in a property that they can purchase and rent out for the short or medium term, and maybe sell in the longer term. The property needs to be of acceptable quality in a good location. This customer is not physically or emotionally involved in the property itself apart from its revenue-generating potential.
- *Building the dream.* This customer sees the property as part of their identity. Their house clearly needs to be of good quality in the right location, and this customer is emotionally involved in the process and may want to be involved at key stages in the search and evaluation process. If the property is under construction, the customer may also want to be involved in the decision making as the design and building progresses.

For the client looking for their ‘dream home’, the ‘list’ of outcomes is larger and more complex than for the investor. The outcomes also encompass both tangible and emotional benefits. For the service designer and service manager, understanding the differences between expectations of customer groups is a critical underpinning of success. It would be understandable if the agency resisted accommodating the second customer group, as they could be potentially disruptive to the first. Such a choice, while understandable, would have to be carefully explained to customers, and ideally would be the result of a conscious design decision to limit the scope of the ‘organising idea’.

The summary of the service concept

A service concept should provide sufficient detail to make it clear what the organisation is selling/providing and what the customer is buying/receiving. Thus, the service concept represents the nature of the service offering, which guides operations staff and managers to know what to deliver and how to deliver it and helps marketing know what to offer to customers or users. The detailed service concept may be based upon an explicit statement made by the organisation or it may be inferred from marketing information – either direct marketing by the organisation or indirect marketing through experience and word of mouth.

So, for example, the summary of the service concept for a theme park such as PortAventura might be: ‘*Six completely different worlds of adventure in one park in Costa Dorada, Spain. 43 thrilling rides and 19 shows to suit all ages and tastes with fun, fantasy, fast food, shops, hotels and magnificent themed gardens.*’

The service provided

Most services, when viewed from the customer perspective, are in fact bundles of individual ‘mini-services’. So, for example, an accountant offering a service preparing and submitting tax returns is actually offering her clients advice on their tax policy, checking to ensure that tax allowances are correctly applied, completion of all relevant tax forms, submission of information on time to the relevant authorities, insurance against tax investigations, acting on behalf of clients in answering authorities’ queries, and so on. Each is a separate, although clearly related, mini-service.

The summary of the service provided for a theme park such as PortAventura might be:

- Car parking
- Transport to entrance
- Ticketing
- Security
- Clean and tidy park
- Uniformed and helpful staff
- Fair and understandable queuing systems
- White-knuckle rides
- Shows and attractions
- Children’s rides
- Well-kept gardens
- Food outlets
- Toilets
- Street entertainers.

The service received

This is the detailed part of the service concept. It specifies the service as received by the customer, or by the various customer groups if the service serves more than one. It can be structured in different ways, but at a minimum it should contain the elements of the customer experience and the outcomes for the customer(s).

The customer experience

This should detail the customer’s direct and personal interpretation of, and response to, their interaction with and participation in the service process and its outputs, involving their journey through a series of touchpoints/steps. (We deal with the ‘customer experience’ in more detail in Chapter 7.) We know that customers will often judge the quality of the outcome by the quality of the experience they receive, not least because they may have limited or no understanding of the processes involved in delivering the service. For example, a patient may have little understanding of the clinical detail of hip surgery, but they will certainly be able to evaluate the quality of care and attention they receive in hospital before and after the core clinical process. Patients may report frustration with the lack of information they receive in the course of treatment. This is not necessarily because medical staff are uncaring. More likely is that clinical professionals don’t understand that information that they require to do their job (to manage their internal process) is also of interest to the patient. Medical staff may see a ‘body in a bed’ who needs treatment, rather than a human being with fears and anxieties that a little information would ease.

Similarly, in the world of garage services, customers have very little understanding of what goes on under the hood of a car. Long gone are the days when car owners could easily tinker with their engines; the modern car engine and associated systems are essentially black boxes. This said, customer expectations about the quality of maintenance activity have to be carefully managed. This is especially true when the customer is presented with a large bill for repairs. Provision of information, transparency and a pleasant service experience can make a significant difference to

customer judgements about the delivery of the core service. Many garages provide comfortable waiting areas with viewing areas so that customers can ‘think’ they know what’s happening to their car.

The ‘customer experience’ provided by a theme park such as PortAventura might consist of:

- Easy parking
- Good signage
- Exhilarating rides
- Enjoyable attractions
- Full day out
- Fun time
- Never a dull moment
- Lots of rides
- Lots of food available
- Helpful staff
- Clean toilets.

The service outcomes

This shows the results for the customer of the service process and their experience including ‘products’, benefits, emotions, judgements and intentions. A central issue here is the need to recognise the sometimes subtle differences between ‘outcomes for customers’ and ‘outputs from the service process’. For example, the output from orthopaedic surgery is a replaced hip or knee joint, whereas the desired outcome for the patient will be a working hip or knee joint providing the benefit of restored mobility. The output from an educational process may be a student who has satisfied the requirements of examiners, but the desired outcomes for that student will be greater employability and value for money, as well as less tangible benefits such as indulged curiosity, passion for learning and so on.

The distinction between outputs and outcomes may seem obvious, but there is a tendency to continue what some refer to as ‘provider push’. This means that service providers continue to deliver what has worked in the past, and what they are good at. Yet markets evolve – sometimes quickly, but sometimes very slowly and subtly so that firms are unaware of the changes. If the preferences of markets and hence desired service outcomes diverge too much from that which can be delivered by the service design (the outputs), then that design becomes irrelevant. However, a regular review of outcomes from the customer’s viewpoint can reduce the chances of a lack of coherence or ‘fit’ between operations resources and market requirements.

The ‘outcomes’ provided by a theme park such as PortAventura might consist of:

- Good food
- Eighteen rides used
- Three attractions experienced
- Fun day out with the family
- Thrills
- Terrifying rides
- Exhausting
- Car parking is extra
- Good value for money
- Want to go again
- Will recommend to friends.

Service value

In Chapter 1 we categorised service outcomes as ‘products’, benefits, emotions, judgements, including value, and intentions. Any statement of outcomes included in a service concept should indicate the nature of the value they provide for customers.

A pivotal element of the traditional ‘marketing mix’ is price. Price is the value placed on the service. This could be its monetary value, the financial price, or its comparative value if the service is bartered. The price of a service may be referred to in many different ways: the price of money is called interest; the price of poor motoring may be, in financial terms, a fine; while the price for use of equipment is rent.

The cost of a service to a customer is a combination of the financial price together with the cost, or inconvenience, of making the purchase – sometimes called the sacrifice. For example, the cost of buying groceries involves not only the monetary value of the goods but also the cost of going to the shops to make the purchase – this is not only the cost of travelling by car but also the sacrifice of effort and time involved, which could have been put to other uses. The cost of poor driving is not only the fine, but also loss of a no-claims bonus, higher insurance premiums and possibly injury or even death, with the mental ‘cost’ that follows.

To understand value, the costs to the consumer have to be weighed against the benefits consumers perceive in the service. The benefits are not just the tangible benefits but also the intangible feelings and emotions resulting from the experience, such as a feeling of well-being or being recognised in a restaurant. Value does not therefore necessarily mean low price. Value is the customer’s assessment of the benefits of the service weighed against all the costs involved.

A key role of marketers is to try to assess these issues to understand what customers value in order to help the organisation make pricing decisions. Operations management, on the other hand, is the art of creating and delivering value. The task for operations is to find the balance between maximising the value for customers and minimising the cost to the organisation; that is, striking a profitable or in-budget balance among:

- benefits to the customer;
- financial and sacrificial costs to the customer; and
- the cost to the organisation.

The service concept is a tool that can efficiently and effectively communicate the set of benefits (tangible ‘products’ and psychological experiences) to the customer in order to demonstrate the potential value of the service. Of course, the ultimate judge of value is the customer, and so when we conceptualise value we need to qualify that we are talking about *perceived* value. Customers feel that they are receiving value when it is based on criteria that are their own, and which are frequently intangible and intuitive. Here, again, the service concept is central to understanding customer requirements: facilitating marketing in presenting the service offer in the most effective manner, and focusing the operation’s performance measures on those areas that have most impact on the customers’ perceptions.

The emotional dimension

Although the ‘services received’ section of a service concept will contain a list of the obvious elements of service, there is also an important emotional dimension to service received. The service designer and operations manager should understand what emotions are likely to be evoked during the customer experience and which also are likely to result from the service outcomes. This assessment will be more important to some services than others. For example, an insurance company must treat with great sensitivity those customers who have incurred a loss, are seriously ill or have suffered a bereavement.

The emotional dimension can have significant implications for how an operation is resourced. For example, in UK ‘home improvement’ retailing, one of the major retailers, B&Q, has become an exemplar of commitment to age diversity in employment. Its policy was to employ a workforce that reflects the make-up of the local community, but with an emphasis on employing people over 50. The emphasis on older workers came in response to customer comments that they wanted to be served and *reassured* by someone who had lived in their own home and knew something about DIY. The B&Q service experience is designed around building confidence in customers to tackle DIY tasks.

One of the most interesting examples of attention to emotions in a service concept is the Apple Genius Bar. The company's manual contains many references to developing 'empathy' with customers. Genius Bar employees are given explicit guidance on how to respond to emotionally distressed customers. If a customer arrives with a burned out and unrecoverable hard drive, they will receive little in the way of apology or consolation. Geniuses are briefed to never apologise for the company, or any failure of its technology. Rather, employees are advised to indicate regret that the customer is having to convey profound emotions. When selling, employees are also taught to employ emotional guidance by using the 'three Fs': feel, felt and found. For example, if a prospective customer comments that an Apple product is £300 more than a competitor product, the employee could respond that they can understand how the customer might *feel* this way. They *felt* the price was high too, but what they *found* was that the Apple product was really great value because of all the fantastic software included. The power of emotional connection cannot be underestimated.

What the service concept is not

Understandably, not every service operations manager either uses or even fully understands exactly what a service concept is. In fact, it is often confused with related but different ideas. To help distinguish what a service concept is, it is useful to try to define what it is not. A service concept is not any of the following:

- *The service promise.* The promise defines what the organisation will do for the customer – which may not be what the customer wants. By contrast, the service concept is an agreed view of the service provided and received.
- *The business proposition.* The business proposition defines the way in which the organisation would like to have its services perceived by all its stakeholders – customers, employees, shareholders and lenders. This view, however, may not be shared by customers, who may perceive the nature of the service in a different way.
- *The 4Ps of service marketing.* Services and products are sometimes described in terms of their constituent parts. The marketing literature often refers to the 4Ps of marketing (sometimes expanded to the 8Ps), which encompass several elements of the service concept – product, process, place, physical evidence, people, productivity and quality – plus the additional marketing elements of price and promotion. Deconstructing a service in this way is helpful in that it allows us to identify the various elements of a concept, check them against customers' needs, design and deliver those elements and measure performance against them. However, this fragmented approach belies the complexity of many services and also ignores the fact that customers' perceptions of service are as much a response to intangibles as they are to outputs and tangible elements. For example, a day out at our running example, PortAventura, is more likely to be defined by the park's designers and visitors as a 'magical experience' than 'six rides, a burger and clean gardens'.
- *Business model.* A business model describes how an organisation achieves its financial goals. The business model for a low-cost airline will involve: minimising airport charges, fuel costs, employee costs, food costs, etc., providing very limited service, using point-to-point flight operations and appealing to large volumes of cost-conscious passengers. The business model certainly helps describe the 'value' part of the service concept, and some of the operations too, but it misses out on the more emotional aspects of the customer experience.
- *A vision.* An organisation's vision is usually concerned with where the organisation hopes to be at some time in the future. A vision is aspirational. The service concept is usually concerned with the present: what the organisation does now and what its customers think it does today. The service concept can be used to map future services and to guide service design activity, but in the design 'arena' the service concept is not meant to be aspirational. It is simply a summary device for communicating design intent.
- *A mission statement.* The service concept is not the same as a mission statement. Organisations' mission statements cover many notions from 'vision statements' to 'company philosophy'. As with

- vision statements, mission statements are often concerned with the future rather than today's reality. Where mission statements define an organisation's philosophy, they tend to be more concerned with organisational values rather than the detail of the service that is provided and received.
- *An idea.* An idea is an initial, often unformed, notion of a service. A service concept is closer to a complete picture of the service, which includes details about the service provided and the experience and outcomes for the customer.
 - *Brand.* The service concept is closely related to the notion of brand, and in early writing on the service concept it was difficult to distinguish between the two. However, 'brand' has many meanings, including: 'brand name' – the name, design symbol or any other feature that identifies a service (or a product); the 'presented brand' – how the organisation presents itself and its promise through its marketing efforts; the 'external brand' – how the organisation is presented through word-of-mouth communication and the media, for example; and 'brand meaning' – the customers' perception of the organisation and its services. While these four perspectives may be different, a service concept is a shared view and is articulated in far more detail. This detail is sufficient for both marketers to know what they are selling, and operations to know what they have to deliver and how it has to be delivered. Thus, the service concept is usually more detailed and concrete than a brand.

4.3 How can managers use the service concept?

The running example of PortAventura has shown how a service concept can be developed for a business-to-consumer (B2C) service. But it is not confined to B2C services. Here are two examples of business-to-business (B2B) services.²

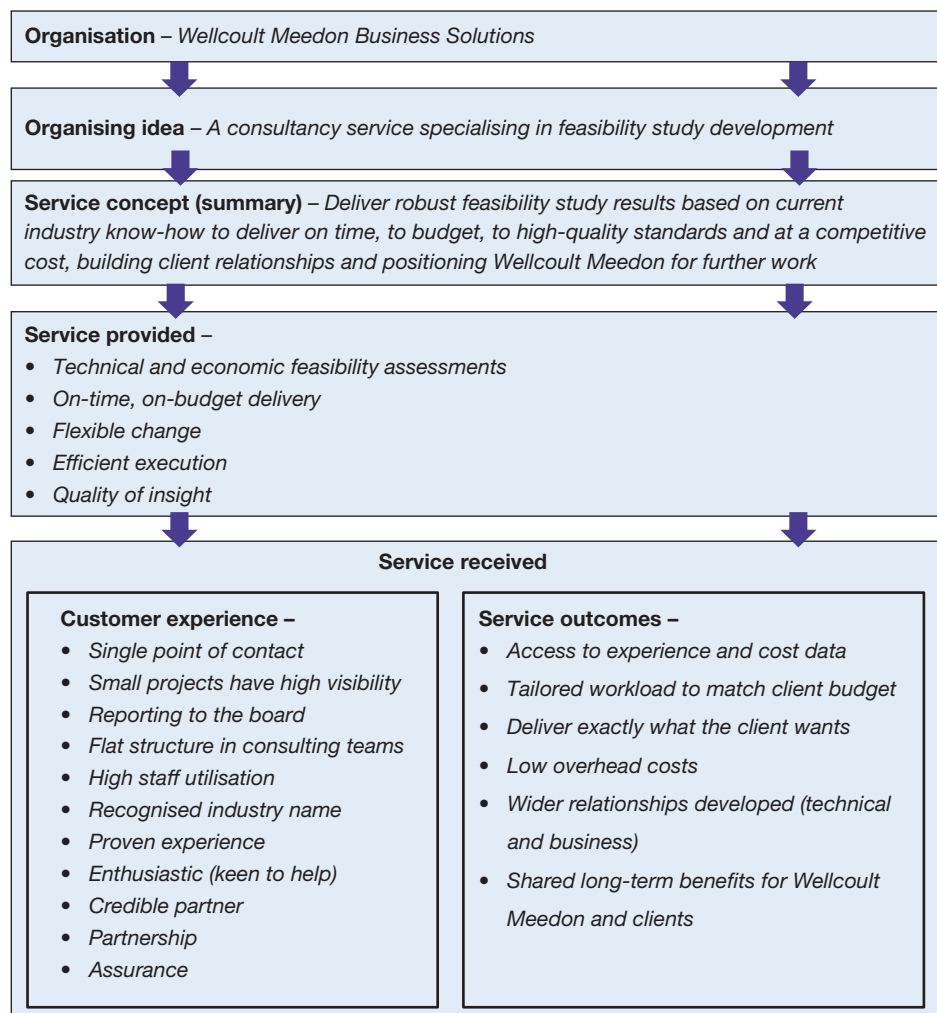
Example 1: Wellcoult Meedon Business Solutions

Wellcoult Meedon is an engineering consultancy, part of an international engineering group based in Seattle, USA. The group specialises in engineering design, procurement and construction management of process plants. Wellcoult Meedon's Australian operation piloted a consolidation of a number of engineering specialists into a dedicated consultancy group called 'Business Solutions'. The purpose of the consultancy was to support clients in determining technical and economic feasibility of proposed projects, and assisting clients in establishing a basis for the design of the next phase of development. Figure 4.4 shows the service concept that the firm developed for its Business Solutions operation.

Example 2: The Institute for Global Economic Development (IGED)

The Institute for Global Economic Development (IGED) is a private independent initiative based in Austria, with the objective to effectively contribute to global poverty alleviation. In contrast to many other charities in the field of economic development, IGED is convinced that sustainable poverty reduction can only be achieved by integrating people in developing countries into global economic cycles, so that they are able to build their lives upon their own income. IGED, together with partner organisations in developing countries, sets up programmes to empower people: through vocational training, support for micro-entrepreneurs and microfinance. When IGED's managers began the design of a new consultancy service to advise corporations in the developed world on corporate social responsibility (CSR) issues relating to their activities in the developing world, they needed to develop a service concept. The service concept for this new service is shown in Figure 4.5.

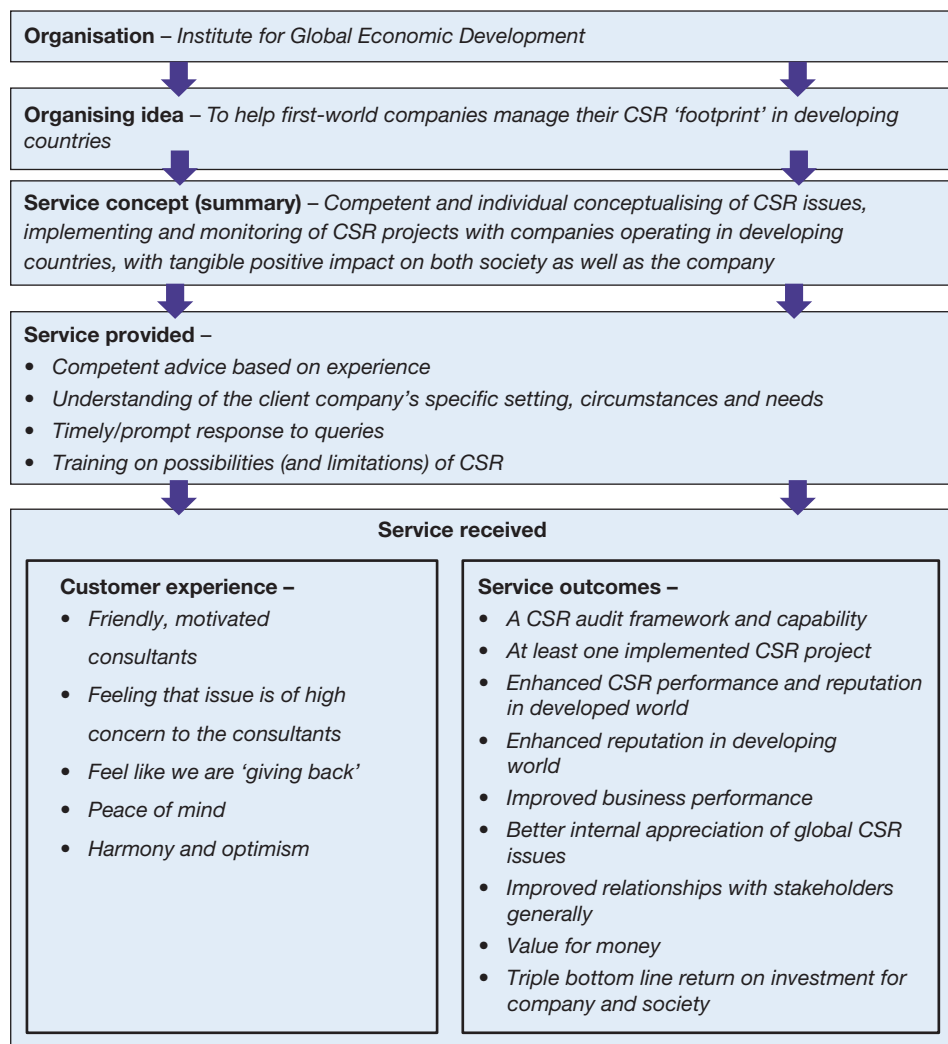
At a strategic level, the service concept can be used to create organisational alignment and to develop new service concepts to drive innovation and strategic advantage. The concept is also the starting point for the development of an operations strategy. The service concept can be used operationally to help design and specify the service and assess the operational implications of design changes.

Figure 4.4 The service concept of Wellcoult Meedon Business Solutions

Counterpoint

While the idea of the service concept is broadly accepted among service practitioners and academics, there are two (somewhat contradictory) criticisms of how the idea is sometimes put into practice. The first criticism is that, although the service concept is intended to reflect something both greater than and less tangible than a simple outline of the service, devising it can become too mechanistic. Devising a service concept can easily relapse into a 'box-filling' exercise. Simply following the process of identifying the elements of a service fails to get to the heart of what it is intended to represent. Although the

stages in the service concept process of identifying the 'organising idea' and a 'summary of the concept' should in theory reflect the more subtle aspects of a service, the following more detailed stages of listing the 'details of the service provided' and 'the service received by customer groups' allows practitioners to revert to simply identifying operational details of the service. The second criticism is that the process is 'over-structured' and complex. Therefore, in practice, managers are reluctant to devote the time necessary to use it as a mechanism for debating how a service could be designed.

Figure 4.5 The service concept of the Institute for Global Economic Development

Using a service concept to define and communicate the nature of the business

It is worth repeating that one of the main benefits of developing a service concept is that it both defines and communicates the nature of the business to all stakeholders in the organisation. As such, the service concept is not a benefit that should be ignored. In most organisations, with often complex departmental and sectional structures, maintaining a common view of exactly what a service should achieve is never easy. The discipline imposed by the service concept's structured approach can be particularly useful. A service concept provides clarity and focus for cooperative and targeted decision making and helps to achieve a common purpose while clarifying the roles of individual service staff. The common 'message' provided by a service concept is the first step to building a service culture. We shall explore the ideas of 'culture' and 'service culture' more in Chapter 9, but clearly any consideration of culture must involve attitudinal factors. Particularly important is how everyone in the operation sees themselves, and how they articulate their role and their contribution to the business. Both are derived from the service concept.

Using a service concept to create organisational alignment

Many service organisations miss out on opportunities to take control of their service concept and make it explicit. This exposure is the first step in gaining alignment around the service concept. When we ask groups of individuals, managers, staff and/or customers to define the service concept of a particular organisation, we invariably find a range of views. Often, managers working in the same department will have differing views about what their department does for the wider organisation (their internal service concept). The problem is that ‘what we do around here’ and ‘what our customers expect’ are seldom discussed, articulated or compared. Differing and unspoken perspectives and assumptions result in inconsistent service provision and confused and annoyed customers, internal and external. Managers need to take responsibility for making the nature of their service explicit by ensuring a clear and appropriate message to both employees and customers about the nature of the service concept. Only in this way will they help ensure appropriate, and consistent, service delivery.

The service concept can also act as an alignment tool that links different organisational functions with a common purpose and ‘standard’ against which their actions can be checked. Applied in this way, the service concept acts as a lens and filter through which internal functions can appreciate each other’s roles and contributions *as they relate to a specific service delivered to the customer*. The articulation and agreement of a service concept is a means not only of identifying the nature of the business, but also of providing the business with a sense of purpose and common direction. The service concept also provides a means of assessing contributions and interrelationships among the various functional groups that contribute to service delivery.

In order to share, communicate and evaluate a service concept, it must be written down, discussed and agreed. This review process requires staff and managers to reach agreement about what is being provided and why. The review also provides explicit signals to customers, existing and potential, about what the service will be like and the benefits they should expect. One problem is that, even when written down, the service concept does not have an objective reality in the same way that a manufactured product has. However, the service concept is still an important means of articulating what an organisation does and what its customers should expect, thus aligning its internal and external customers to the nature of the service.

Using a service concept to design the service

In the early stages of service design, service operations managers need to understand the organisation’s business model, and then to construct a service concept based upon the organisation’s vision, mission, brand and any new organising idea. Having agreed and articulated the service concept, operations managers then need to design and acquire the resources (inputs) and design and develop the processes and experiences required to deliver that concept to the organisation’s customers (we will cover the design of experiences and process in more detail in Chapters 7 and 11). The case example on designing a new hairdressing concept in Japan explains how a businessman designed a chain of hairdressing shops to deliver a brand-new service concept.

Part of the task of service design is also to create specifications for the service inputs and processes, and operating procedures to ensure that staff deliver service consistently. A specification takes the elements of the service concept and identifies the quality factors associated with each, details the standards to be achieved in each area and the organisation’s procedures (often referred to as standard operating procedures – SOPs) to ensure conformance to the standard (operational control). Where the organisation delivers multiple service concepts, it is likely that several specifications and control mechanisms will need to be developed. (We will explore the idea behind the role of the service concept in innovation in Chapter 14).

Case example

Designing a new hairdressing concept in Japan³

Traditional men's hairdressers (barbers) in Japan provide a haircut, shampoo, shave and a head and shoulder massage. This service usually takes about 40–60 minutes and the charge is usually around 4,000 to 5,000 yen (about £35). One day, Mr Kuniyoshi Konishi, a senior manager in one of the big commercial firms in Japan, while having a haircut in one of the top hotels in Tokyo, realised that the core value of this service was the haircut, which only takes about 10 minutes. He thought by just providing the core service (the haircut) a lot cheaper and a lot quicker, one might be able to open up a new market and attract a large number of customers. Mr Konishi said, 'Busy people seek shorter service if the quality of the outcome (haircut) is the same.' He added 'You can collect the money today which you lost yesterday but you can't collect the time you lost yesterday.'

As a result, Mr Konishi left his well-paid job and launched QBNET (Q for quick and B for barber). His service concept was, at maybe no surprise to us but quite a shock for the Japanese, a quick and inexpensive haircut (about 1,000 yen, £10), no shampoo, no shaving and no massage. Mr Konishi focused on making things as simple, cheap and efficient as possible. He provided small vacuum cleaners to quickly remove hair around the neck after the cut. Disposable paper towels were used around the neck and disposable paper combs were also provided. The interior of the shop was simple; there was no cash register, no telephone and no toilet. There were no chairs for people waiting but a small bar where customers could lean.

On the first day of opening, the shop had over 100 customers. He quickly expanded to a second then a third shop, developing efficient processes as he went along. For example, when the customer arrives at the shop he has to buy a fixed-price ticket from a vending machine and the time when the customer arrived is noted. When the employee starts working on the customer, he registers the number of the customer's ticket so that the difference between the time when the customer bought the ticket and the time started is recorded. This is used to provide potential customers with the waiting time using lights on the outside of the shop. A green light means there will be no waiting, a yellow light means a 5–10 minute wait and red means over 10 minutes. The door of the shop also has a sensor to count the number of people passing through. All this information is transmitted via the internet to the head office.

To help expand Mr Konishi's business and deal with the problem that the barber's job was now quite routine and standardised, he paid higher salaries than traditional barbers. He also started a Business-Partner Scheme, whereby an employee who had worked for three years could take over the franchise for the shop, paying 10 per cent of turnover plus a shop rental charge.

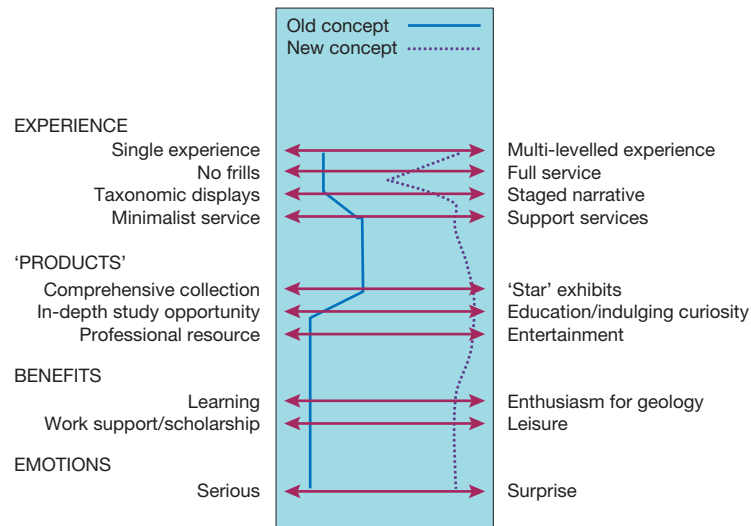
Nine years after opening the first shop in Kanda in Tokyo, Mr Konishi had 291 shops with a total turnover of about 3.8 billion yen (about £29 million). He then sold the business. Thirteen years later, under its new owners, QBNET was running 640 shops including premises in Singapore, Hong Kong, Taiwan and Thailand, and was entering the US market with its first three stores in Manhattan, New York.

Using a service concept to assess the implications of design changes

The service concept can be used as a driver for long-term service development. By defining the concept, service designers can compare it to alternatives – proposed or already provided by other service suppliers – and so help operations managers identify the implications of change. Whether the changes are deliberate changes to the concept or an evolutionary approach with modifications to process or procedures, changes to service concepts have implications for all parts of the organisation. There is substantial evidence to suggest that significant changes to service concepts expose the weaknesses in the organisation, its ability to coordinate all the various constituencies and its capacity to communicate effectively, both internally and externally.⁴

Figure 4.6 Changing the service concept of a museum of geology

Source: Adapted from Clark, G., Johnston, R. and Shulver, M. (2000) 'Exploring the service concept for service design and development', in J. Fitzsimmons and M. Fitzsimmons (eds) *New Service Design*, Sage publications, Thousand Oaks, California.



Such a 'concept audit' can be achieved by using a simple profiling tool. The case example on the Lapworth Museum of Geology in Birmingham in the UK, describes a change of service concept, which is profiled in Figure 4.6.

Case example

The Lapworth Museum of Geology, Birmingham, UK⁵

In a basement under the Aston Webb Building at the University of Birmingham is a little-known cultural gem, the Lapworth Museum of Geology. The museum is named after the university's first professor of geology, Charles Lapworth, and dates from 1880. Until 2014, it would be fair to say that the Lapworth Museum was an 'evolved' service. The museum had grown organically over time to support academic and professional geologists. The museum had a rich and diverse collection, but this was not particularly accessible to contemporary audiences. For many years, despite having a mission to be accessible to the public, to children, to family groups and so on, the Lapworth really didn't fulfil that mission. In 2010, Jon Clatworthy, the director of the museum, and his team applied for Heritage Lottery funding to improve the museum and to make it address a modern, more enlightened mission – to be accessible, to be open, to enthuse the general public about the natural world, and about geology in particular.

Before making design decisions, the project team undertook an extensive project of community engagement and public consultation. The narrative themes within the gallery would be based on what the public and wider community wanted to see, but also obviously designed to showcase and exploit the potential of the museum's collections. For example, children have always been interested in dinosaurs, and since 1993 and the release of *Jurassic Park* it has perhaps become impossible to have a museum of geology or natural history that does not give dinosaurs a major presence in exhibits. Fortunately, this interest provides a perfect 'narrative hook' to engage visitors with palaeontology and, in turn, the museum's extensive collection of fossils. After being 'hooked', the visitor has to be guided – or drawn – from one stage to the next. So, the new museum would need staging and sequencing devices. Unlike a professional geologist, who would find exactly what they want to see, the lay customer would need to be guided around the service.

In the old days, you'd certainly find that predominantly, the audience was, I would say, almost 90% academic. Today, we're looking at a much wider community engagement and public audience. I think we would not be excluding the informed geological community. But equally, we are aiming at engaging the public as well, and hopefully, there is enough here to engage both groups.

(Jon Clatworthy, Museum Director)

These changes would result in a requirement to add visitor and educational facilities that were previously missing. The 'target visitor' would no longer be a solo academic visitor, but now a family or social group, or perhaps a party of schoolchildren accompanied by a teacher. These groups would need facilities such as education rooms, reception desks, shops, cafés, toilets and so on. In particular, the younger visitors would need technology and interactive devices at least as good as what they were used to at school or in the home. However, the demand for technology and interaction would have to respect the architecture and historic feel of the museum building. Another group that would always be seen as a core visitor group was the retired adult community. Exhibits and facilities would need to reflect the needs and wants of this group too. Additionally, all museum spaces would need to be fully accessible. Finally, the museum would need to continue to respect the research and leisure needs of the university community of academics and students. Value, hitherto defined as access to a superlative reference collection of gems and minerals, was now to be reflected more in the degree to which the museum educated, enthused and entertained the public in the earth sciences.

The planned design changes would address the requirements of the main funding bodies, which needed to see improved and sustained community engagement. The redevelopment of the museum could not be funded as a pure academic institution or professional facility. Around 18 months of public consultation was eventually needed to build the funding case. The consultation also included the UK heritage and museum sectors. Financial support for the redevelopment came from a major Heritage Lottery Fund grant of £1.7 million, as well as contributions from University of Birmingham alumni and grants from Arts Council England and

the UK Government's DCMS/Wolfson Museums and Galleries Improvement Fund. The total bill for the redevelopment came to approximately £2.7 million. The project was managed and delivered by the Lapworth Museum alongside University of Birmingham staff and volunteers. In realising the redevelopment, the project team also worked with architects, exhibition designers and builders, and audio-visual designers.

By 2014 the team had raised all the necessary funding, and the museum closed in December 2014 to begin the redevelopment project. The main aim of the project was to make the museum's collections more accessible and appealing to a broader, non-professional and non-academic audience.

The centrepiece of the new museum is the 'Evolution of Life Gallery', which tells a story that takes visitors from the formation of the Earth right the way through to the last Ice Age and then on to the present to look at modern biodiversity. That overarching narrative is exciting and engages the target intellect. Within that story, however, the Evolution of Life Gallery interleaves stories of the fascinating geology in the UK Midlands. The gallery does so by showing five snapshots of what the UK Midlands was like at different points in geological history. For example, 428 million years ago, Birmingham was like the Bahamas; 316 million years ago, it had changed and was more like a swampy Mississippi Delta environment. Then, right the way through to the last Ice Age, Birmingham was somewhat like Siberia is today. If visitors went to any geological museum back in the 1980s, they would have seen little or no technology. Today, the Gallery provides a clear presence of interactivity and novel ways of interpreting and learning from the exhibits.



Simon Hadley/Alamy Stock Photo

A key point here is that of alignment. It is rare that a change to the customer experience or service outcomes can be made in isolation. Changes in one element will have consequences in others. Sometimes these represent opportunity, sometimes the potential for conflict. The use of the service concept and a profiling tool allows the people involved in the design or redesign of a service to understand what is required and to assess and therefore manage the implications of change.

Capability mapping

One enhancement of the profiling tool is the identification not only of the old concept and the new requirement, as in Figure 4.6, but also the capability of an existing service – that is, its current potential. This ‘capability envelope’ can be used by organisations that perhaps do not have a specific new or revised service in mind but can use capability mapping to explore what opportunities there might be for using operational potential.

The worked example on the TECLAN Translation Agency explains how an organisation can use the capability envelope to identify the areas where the company could develop new opportunities.

Worked example TECLAN Translation Agency⁶

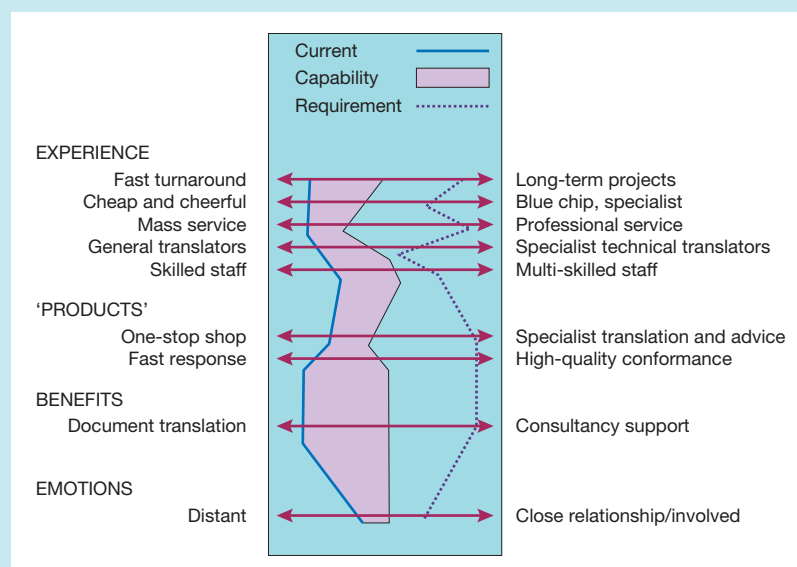
TECLAN provided a one-stop shop for language translation. The company used 35 in-house translators for most European languages, Japanese and Chinese. Translation to and from other languages was subcontracted to a network of some 3,000 translators. Though the company would handle just about any translation work, over time it had developed a distinctive competence in translating technical documentation, particularly computer software documentation. The majority of software translation was the ‘localisation’ of software written in English, including

conversion of hypertextual help-files. However, TECLAN often encountered help-files that lacked sufficient flexibility, and in localising they had to resort to developing completely new help-file structures. Thus, the company developed a new competence in help-file authoring and rudimentary programming.

By themselves these new competencies were not particularly distinctive, but coupled with the company’s translation capability they provided the potential for a highly competitive resource set. TECLAN’s service concept profile is mapped in Figure 4.7.

Figure 4.7 Capability mapping at TECLAN

Source: Adapted from Clark, G., Johnston, R. and Shulver, M. (2000) ‘Exploring the service concept for service design and development’, in Fitzsimmons, J. and Fitzsimmons, M. (eds) *New Service Design*, Sage publications, Thousand Oaks, California.



The profile shows where the company started from and the shaded portion represents the new operations potential that TECLAN developed. The dotted line indicates an idealised service concept for a new service that exploits the newly developed potential. This also highlights the gaps between current capability and that required for the new service concept.

The main areas requiring attention and development were in quality performance and the company's ability to manage relationships with its new class of customers. Although translators had developed the ability to manage relationships with clients' own technicians, TECLAN's account managers lacked the technical knowledge to market and sell the new capabilities.

Using the service concept to stimulate innovation

A particularly useful role for the service concept is as a part of how organisations innovate and develop new services. (We delay treatment of this aspect of the service concept until Chapter 14.)

4.4 Summary

What is a service concept? – A service concept is a shared and articulated understanding of the nature of the service provided and received, which should capture information about the organising idea, the service provided and the service received, the experience and outcomes. Its role is important because it bridges two important 'gaps' between the 'outside-in' perspective and the 'inside-out' perspective. It provides a 'translation' process that attempts to reconcile potentially conflicting perspectives and views. A service concept is more emotional than a business model, deeper than a brand, more complex than a good idea and more solid than a vision.

What is the structure of a service concept? – Although there is no absolute 'formula' for a service concept, there are elements that have been found particularly useful to include. These elements are:

- The organisation responsible for the service.
- The organising idea.
- A summary of the service concept.
- Details of the service provided.
- The service received by customer groups.

Any statement of outcomes included in a service concept could indicate the nature of the value they provide for customers, particularly in the balance between the benefits to the customer, the financial and sacrificial costs to the customer, and the cost to the organisation. It is also important for service operations managers to understand what emotions are likely to be evoked during the customer experience and which also are likely to result from the service outcomes. But the idea of the service concept can easily be misunderstood. It is not a service promise, a marketing summary, a business model, a vision, a mission statement or a brand definition.

How can managers use the service concept? – One of the main benefits of developing a service concept is that it both defines and communicates the nature of the business to all stakeholders in the organisation. It can be used to create organisational alignment by developing a shared understanding and making it explicit in both B2C and B2B contexts. It can also be used operationally to help design and specify a service, as well as assessing the implications of design changes using capability mapping.

Discussion questions and exercises



1. Referring back to the case example on the Lapworth Museum of Geology, construct the service concept for the current (redesigned) museum. Despite being very successful, it is a fact that tourism and leisure attractions have a finite life. Visitor numbers tend to peak in the first holiday season after introduction of new service, and then steadily decline. This decline in revenue is a problem for museums that are not state funded. It might be difficult to sustain the Lapworth Museum in its current form, let alone develop new exhibits and attractions. What changes could be made to the service concept of the Lapworth Museum that would possibly improve revenue potential but at the same time not conflict with the core mission of the museum?
2. From the 1960s through to the late 1990s, 'no loitering' had been an important principle underlying McDonald's operations. Founder Ray Kroc had ordered that pay telephones, jukeboxes and vending machines were forbidden at McDonald's restaurants. The goal of the restaurant was to quickly serve customers and not entice them to stay any longer than it took to eat a hamburger. Dining areas were designed with minimalist – and often uncomfortable – hard plastic tables and chairs, which were usually bolted into place. Customers consumed their purchases in spartan surroundings, which acted as a forcing device to hurry them along and create space for the next customers. However, with the new 'Forever Young' store design (adopted in 2006), remodelled restaurants featured dining zones with 'distinct personalities'. Most of the new store designs offered three sections, or zones. A linger zone was designed to accommodate people who were inclined to dawdle and socialise while sitting comfortably on armchairs or sofas using free wifi access. Another zone offered counters and stools for patrons in a hurry who might just grab and go. The third, and perhaps most important, zone is the one for families or groups where seating arrangements can be reconfigured to meet a variety of needs. Harsh colours and hard plastics were replaced with custom earth tones and flexible, padded, fabric-covered booth seating. All changes had the aim of encouraging diners to loiter and perhaps spend more money. Similarly, in 1993, the McCafé store design was developed in Australia and, as it was rolled out worldwide a decade later, addressed many of the aims of the 'Forever Young' store design. In 2012 McDonald's announced that it would be bringing the McCafé brand and line of products to all of the McDonald's restaurants in the United Kingdom. As outlets went through their five-yearly upgrade and redecoration cycles they incorporated both 'Forever Young' and McCafé facilities designs.⁷ Map the service concept for the original and post-'Forever Young' McDonald's store designs. What impact do the changes have on those elements of the service concept that were not directly the subject of formal redesign? In other words, what were the consequences for the service concept overall of the changes to the physical design of the restaurants?
3. An IT infrastructure support group services the IT infrastructure of several clients. In shaping a suitable service concept it is aware that, in effect, the group serves two distinct customer groups within its client base – the 'end users' who use the IT systems, and the 'business leaders' who invest in the technology. How might these two customer groups' distinct needs be shown in the service concept?
4. Earlier in the chapter we explored the case example of the Japanese hairdressers, QBNET. The service concept for QBNET is essentially a simple and no-frills barbering service. The QBNET service has been phenomenally successful in Southeast Asia, and latterly has begun expansion into other regions. Ironically, the UK has seen the opposite with the growth of the full-service barber where previously most men's hairdressing was simple, minimalistic and very much like the QBNET offering. Turkish Barber's Club opened the doors of its first traditional barber shop in Birmingham, bringing the traditional style, heritage and full service of Turkish barbering to the UK's second-largest city. The chain proved a huge success, and 10 years later had 10 branches throughout the local region. Turkish Barber's Club was not the first of its kind in the UK but was certainly one of the earliest full-service barbers to be successful. After its success, the city experienced phenomenal growth in the Turkish

barber concept and both city centre and suburbs saw the rise of many emulators of Turkish Barber's Club. If one chooses any high street in the suburbs of greater Birmingham, within a 10-minute walk one could pass three or four Turkish barbers. But some local people claimed that the Turkish barber

market had become oversaturated.⁸ Try to identify which aspects of the service concept for a typical Turkish barber could be seen as the most important. In other words, on what should managers focus so as to make their particular take on the Turkish barber shop sustainable in the long term?

Case exercise

Trialing new concepts at Capes & Latimer

Capes & Latimer (C&L) was big in the UK, running over 2,000 managed pubs, bars and restaurants. Originally, the company had been the largest brewery group in the UK, before it disposed of most of its brewing assets in the early 2000s and expanded into food pubs and restaurants by organic growth, and latterly acquisition. These covered a broad range of pub concepts (or brands), each aimed at a particular market segment. In fact, C&L had retained some brewing capacity in three sites, which supplied its own pubs and restaurants, but brewing was no longer a core part of the group's business. Approximately 40 per cent of the group's 'wet' sales (drinks) were bought-in from other suppliers.

C&L have been the pioneer in converting tired old pubs into vibrant, contemporary bars and bar restaurants. It's fair to say that we are famous for innovation in the pub and restaurant trade. For example, our most famous bar chain, GlassBar, completely changed the drinking habits of the citizens of the UK. Previously our older portfolio of pubs were really dark and male-dominated drinking dens. GlassBar refreshed the pub scene completely with its open-fronted, light and airy and contemporary café-bar design aesthetic. It was also female friendly, with a service concept that was designed to be safe and friendly, and critically to be able to accommodate large social groups of affluent female patrons.

(Thomas Benson, C&L CEO)

With the success of GlassBar, C&L began an ongoing programme of pub innovation. The chain would regularly scan for innovations in successful 'one-off' bars within its own portfolio of pubs, refine the

service concept, then roll out the new concept on a country-wide basis. The company would also look for successful and novel pub concepts outside the group. Sometimes it would copy these successful concepts, but more often it would buy out both the pub and the management talent, then allow them, with support, to develop the new service concept into a replicable C&L brand.

As well as its reputation for innovation, C&L was also known to be ruthless about culling any pub concepts that did not fit with its long-term strategy. In fact, in a single year the chain had divested itself of some 300 poorly performing 'traditional' community pubs. While these were nearly all loss-making, the sale of the pubs created a gap in C&L's portfolio for small, beer and 'conversation-focused' venues. The current C&L portfolio consisted of approximately 25 different service concepts covering market segments from students, through family-friendly venues (including play barns) to gastropubs and even fine-dining pubs.

C&L's portfolio of venues was managed regionally. Area managers would look after 40–50 venues, of all different types, within their region. The geographical spread of each region depended on its location. In rural areas with a low density of pubs, a region could be quite large, but in metropolitan areas, it could be the size of a couple of city blocks. The area managers were sometimes recruited externally but were more usually recruited from the general managers who had looked after individual venues. At individual venues, the general manager would be the overall business manager, with the deputy manager in charge of day-to-day operations. Two regions in particular had developed a reputation for innovation. Over the decades, these two areas (South-Central Birmingham

and Sutton in Surrey) had become, more by accident than by design, the main innovation centres within C&L. It was usually in these areas where new service concepts were developed and tested.

Marie Salter was the area manager for Birmingham South-Central. She was one of the original designer/managers of the bar that was eventually to become GlassBar. Marie had set up Bar Quo Bibistis in central Birmingham. It was an extraordinary success and was acquired by C&L, who recognised that it could be developed into a major C&L brand. Marie, who joined C&L, also negotiated an innovation management role within the group. Some years later, Marie had become responsible for 45 venues located in and around the Birmingham area. Within her stable, Marie had been nurturing some pilot pub concepts, three of which were coming up for review by C&L's executive committee. Marie had supported and evaluated these three pilots for approximately two years and would soon be reporting on the viability of the pilot concepts to be rolled out across the country. The three pilot concepts were known internally as 'The Paperclip', 'The Temeraire' and 'The Station'.

The micro pub: The Paperclip

While the attractiveness of the traditional community pub had declined massively, especially in metropolitan and suburban areas, the market for a variant of this kind of pub remained. However, the market was no longer 'working-class males' as it was 30 years previously, when working-class males would go to the pub after a day of factory work or other manual labour. However, there was a significant proportion of relatively affluent 'Generation X' and 'Millennial' customers who were interested in high-specification drinks and inviting spaces for conversation. They did not particularly like the food-based pubs that dominated the market, nor did they want TV, kids' play areas or loud music. C&L had noticed that (outside their portfolio) a successful new pub phenomenon had emerged to fill this gap. This was the micro pub, sometimes called a 'pop-up' pub. These often tiny venues were usually located in retail spaces designed for other purposes (as opposed to traditional pub premises) and had limited licences⁹ (usually because of their location).

The micro pubs sold high-specification and high-margin beers, ciders and spirits in low volume to discerning customers. However, such micro pubs

were often quite rudimentary inside. Marie had seen micros with just a pair of benches running down either side of a narrow retail space, with a simple bar at one end. Kegs of beer and bottles were placed on cheap industrial shelving. When she decided to try out this format, Marie's first micro pub was an acquisition. Called 'The Paperclip', it was set up in what was originally a small stationery shop located under a government employment exchange. It was located close to a main street in a moderately affluent Birmingham suburb, on a walking route to areas favoured by many young fashion-conscious couples. The Paperclip was also dog friendly, had no TV and played very quiet, non-pop music. It was furnished with thrift-store office furniture, as well as sofas near the window to the street. It served about 15 craft beers, which retailed for approximately a 50 per cent premium compared with typical mass-produced beer. While sales volumes were low, margin was high, and the off-high-street rent was low. While mainstream pubs needed to provide a consistent set of core beers and lagers, the micro-pub audience valued the idea that the line-up of beers would be constantly changing. The manager of The Paperclip had the flexibility to purchase small volumes of beer that were being discontinued (the brewery equivalent of 'bin ends'). The manager would advertise on social media that a new beer with limited supply was now available, and the scarcity and novelty would usually draw in the customers. The Paperclip never sold hot food, and only had a small range of pre-packaged snacks behind the bar. For a short while it had experimented with allowing customers to order-in food, using delivery apps. However, many customers had complained about the smell of food interfering with their enjoyment of beer. The Paperclip, like most of the micro pubs, was the place for enjoyment of high-specification craft beer and spirits, and conversation.

The brewpub: The Temeraire

So-called 'brewpubs' were not new. The idea of having a small brewery at the back of an alehouse was over a thousand years old. However, with the industrial revolution, brewery production of beer became more centralised. Now, a relatively small number of brewing groups own most industrial brewing capacity worldwide. However, a reaction against what was seen by some as the anodyne

beer produced by the conglomerates began in the 1970s and resulted in the reintroduction of their own high-specification beers and lagers. It also resulted in the acquisition of brands and recipes that had been developed successfully in the independent craft beer market. C&L pubs would typically sell, alongside mainstream beers, one or two 'guest' beers, which were ostensibly craft beers but were usually old craft beer brands that were produced on an industrial scale by the larger breweries. Marie's idea for brewpubs was different. The concept that Marie was trialling was a genuine brewpub in which the landlord was a brewing enthusiast. He or she would run the equivalent of a 'beer laboratory', producing very small batches for sale directly in their own pub. The brew set-up was limited to 200 litres per batch, with the landlord typically brewing a batch every Tuesday for sale during the rest of the week – a schedule that limited the supply of the genuine craft beer 'out front' in the pub. This production output was insufficient to be viable in anything but a small 'taproom' adjacent to a brewery. However, Marie's idea was to also provide the venue with a steady supply of mainstream beers and lagers from the parent brewery. Then, in addition, the landlord could indulge their, and their customers', curiosity by providing a steady stream of different and quirky experimental beers.

Marie's pilot brewpub, 'The Temeraire', also pioneered a range of quirky and interesting snack food. The range was deliberately limited, so that the kitchen was always working to its capacity producing a limited variety of food. Recipes changed frequently but ingredients would be pre-prepared in large batches. For example, the cook would prepare the fillings for about 2,000 vegan and fish tacos respectively (about two months' supply), freeze them and then sell those by simply reheating the pre-weighed portions in the microwave and adding them to the taco base. The cook would always prepare a vegan batch, but the second filling would be meat- or fish-based and would vary a little. The Temeraire occupied an existing pub site in another Birmingham suburb, within which Marie had commissioned the installation of a large window so that patrons could view the brewing equipment; and, on Tuesdays, the brewing process. Otherwise, the Temeraire was similar to most suburban pubs with a single large seating area consisting of free-standing chairs, small square

tables (which could be pushed together if necessary) and upholstered benches against the walls. Music was always played quietly, and while there was a projection TV, this was only switched on for major sports events. Customers would order tacos at the bar and collect their order when it flashed up on a screen behind the bar. Like the micro pubs, Temeraire's clientele were often beer aficionados, but those who had to serve the needs of their partner and often their children too.

The craft beer bar: The Station

Marie's final pilot concept up for review was 'The Station'. The Station was located adjacent to one of Birmingham's railway stations that served commuters travelling into the city. A row of windows on one side of the pub looked over the tracks and platforms of the railway station, and commuters could easily access the pub from the station platforms. Privately, Marie referred to The Station as her 'pretend brewpub'. 'Pretend' because the shiny copper and stainless-steel brewing equipment on display behind the bar had not been used in over a decade. In fact, the equipment had never been used on its current site at all. The brewing equipment had been acquired as an interior design curiosity. However, it was used to good effect, and both bar and waiting staff often exaggerated the role of the equipment in supplying the beer on sale.

The Station sold one mainstream lager and one beer, as well as a mainstream cider. The other 10 beers and ciders were bought-in craft beers. These were craft beer brands that had started life as small-scale independents, but which had been acquired by one of the three large brewers in the UK, and were now brewed at industrial scale. As such, the beers were high specification, though arguably not as good as they might have been when they were first brewed on a small scale. For example, typical cost-cutting in large-scale brewing often meant using frozen pellet hops as opposed to leaf hops. Similarly, the barley used in an original recipe was often substituted for cheaper versions. This said, only the most sensitive of palates could detect the difference in the beers.

By far the biggest portion of The Station's floor space was occupied by restaurant tables, with only a small number of seats and floor space given over to

non-diners. However, in the early part of the evening restaurant tables were made available to non-diners. The food was relatively high-specification gastropub fare, and diners were supplied with advice on food and beer pairings. On Saturdays and Sundays, The Station clientele were primarily couples and families seeking to have a meal out. The beer was appealing to some, but not all. However, on weekday evenings the bar attracted business travellers on their return trip home. The location of the bar obviously helped. These weekday clients were more interested in the craft beer selection, but they tended not to drink very much of it, presumably because they were returning to their families, or needed to get up early for work the next day. Thursday and Friday evenings saw the biggest weekday volumes and commuter customers would typically have a couple of drinks before returning home.

The three pilots

All three pub pilots were reasonably successful. Marie thought that her micro pub, The Paperclip, did extraordinarily well, and was somewhat frustrated that they didn't occupy larger premises. Very often people would walk by the bar but baulk because all the seats were taken. However, she realised that to move to larger premises might 'break' the atmosphere, and service concept. The Paperclip was seen as an ideal place for conversation, for meeting new people (and dogs) and for being exposed to an interesting range of genuine craft beers and lagers. In a larger site, the intimacy and close proximity that encouraged conversation and conviviality might disappear. From her perspective as a senior manager within C&L, Marie also valued the micro pubs as a great outlet for the 'bin ends' either produced by C&L or craft breweries around the country. The 'bin ends' were real bargains for customers, and so long as there was no need for consistency in the range of beers, provided a good way to keep cost of goods to a minimum, but enjoy high margins. Even so, Marie could not help but feel that the low-volume micro pub concept was 'leaving money on the table'.

The brewpubs were an incredibly exciting service concept. Many small breweries (below about 1,000 litre capacity) struggled to make sufficient

mainstream beer and lager to make their associated pubs viable. Mary's brewpub got around this problem by having C&L also supply the higher-volume beer and lager, spirits and wine, in addition to the more interesting and 'quirky' beers coming from the weekly brewing efforts of the landlord. Mary thought the brewpub service concept could be rolled out more broadly within the group. However, finding brewer/landlords with the necessary range of skills might prove to be a challenge. She also thought that any growth in this brand, should it be taken forward, should be by acquisition rather than organic growth within the group. The nature of the relationship between brewer/landlord and C&L would be critical. When The Temeraire had been acquired, the pub did not move from independent status to becoming a straightforward managed pub within C&L. As part of the acquisition deal it was agreed that the brewer/landlord would retain all profits from his own beers. Marie had to push hard to get this deal accepted by C&L's commercial and finance directors, but she thought it essential that the brewer/landlord be sufficiently motivated to produce interesting and high-quality beers.

It's quite sad that probably the most successful of all the pilots was The Station (the craft beer bar). In practice The Station is little different than most of the other pub restaurant brands within C&L. The beer earns slightly higher margins, but the food is comparable with many other brands in the group. It attracts fewer large social groups, being better suited to parties from two to four, but otherwise it attracts a similar clientele to GlassBar and some of the other metro-focused brands in the group.

(Marie Salter)

Questions

1. Using the service concept template shown in Figure 4.3, map out the service concepts for the micro pub, the brewpub and the craft beer bar.
2. On the basis of the current service concepts for each pub, as well as the financial data provided in Table 4.1, what recommendations should Marie make to the C&L executive board?

Table 4.1 Selected financial data for the three pilot pubs

	The Paperclip	The Temeraire	The Station
Trading area in m ² (front of house)	36	140	186
Income mix			
Liquor sales	100%	98%	84%
Food/snack sales	0%	2%	16%
Beer volumes			
Average (snapshot) occupancy	20	100	110
Dwell time (hrs)	2.0	2.0	1.5
Average pints/person/hour	1.5	1.3	2.1
Cycles	3.5	3.5	2.0
Drinks volume/day	210	910	693
Sessions/week	7	7	7
Pints/week	1470	6370	4851
Beer unit price and costs			
Average price/pint	6.00	5.00	5.50
Average cost	2.50	2.80	2.80
Gross margin	58%	44%	49%
Wet sales performance			
Annual revenue (wet sales)	£458,640	£1,656,200	£1,387,386
Annual cost of goods sold (wet sales)	£191,100	£927,472	£706,306
Annual gross profit (wet sales)	£267,540	£728,728	£681,080
Food sales			
Average meal/snack cost/person	n/a	3.95	20
Average food cost of goods sold	n/a	1.3	7
Food gross margin	n/a	67%	65%
Meals sold per session	n/a	20	36
% of customers eating	0%	0.20	0.3
Food revenue/session	n/a	£79	£720
Food revenue/week	n/a	£553	£5,040
Annual food revenue	n/a	£28,756	£262,080
Annual food gross profit	n/a	£19,292	£170,352
Totals			
Total annual revenues	£458,640	£1,684,956	£1,649,466
Total annual profit	£267,540	£748,020	£851,432

Further reading



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Notes



- 1 All information taken from the company's website, <https://www.ramblersholidays.co.uk>
- 2 Both examples are disguised for reasons of commercial confidentiality.
- 3 This example is based partly on an example in Slack, N. and Brandon-Jones, A. (2019) *Operations Management*, 9th edition, Pearson, Harlow; and a contribution in earlier editions of this text by Takao Kondo of the Graduate School of Global Business, Meiji University, Japan
- 4 Clark, G., Johnston, R. and Shulver, M. (2000) 'Exploiting the service concept for service design and development' in J. Fitzsimmons and M. Fitzsimmons (eds), *New Service Design*, Sage Publications, Thousand Oaks, California, 71–91
- 5 The information on which this example is based is taken from: <https://www.birmingham.ac.uk/facilities/lapworth-museum/index.aspx> and <https://www.birmingham.ac.uk/news/latest/2014/07/18-Jul-14-Rock-and-roll---Lapworth-staff-celebrate-historic-multimillion-pound-redevelopment-grant.aspx> [accessed 20 April 2020]
- 6 This illustration is taken from Clark, G., Johnston, R. and Shulver, M. (2000) 'Exploiting the service concept for service design and development' in J. Fitzsimmons and M. Fitzsimmons (eds), *New Service Design*, Sage Publications, Thousand Oaks, California
- 7 The information on which this discussion question is based is taken from: <https://www.chicagoreader.com/chicago/founder-mcdonalds-ray-kroc-michael-keaton/Content?oid=25250410>; https://en.m.wikipedia.org/wiki/History_of_McDonald%27s; <https://www.entrepreneur.com/article/197544> [accessed 20 April 2020]; and <https://www.theguardian.com/film/shortcuts/2016/mar/30/ray-kroc-the-wily-businessman-who-made-mcdonalds>; and <https://corporate.mcdonalds.com/corpmcd/about-us/history.html> [accessed 20 April 2020]
- 8 The information on which this discussion question is based is taken from: <https://turkishbarbersclub.co.uk/about-us/>; <https://www.economist.com/britain/2020/01/16/why-turkish-barbers-are-taking-over-britains-high-streets> [accessed 20 April 2020]; and <https://www.businessoffashion.com/articles/global-currents/how-the-turkish-barber-conquered-europe> [accessed 20 April 2020]
- 9 The micros might have to close at 11:00 p.m. to limit noise in residential areas. They might also be limited to opening only three or four days per week.

Part II

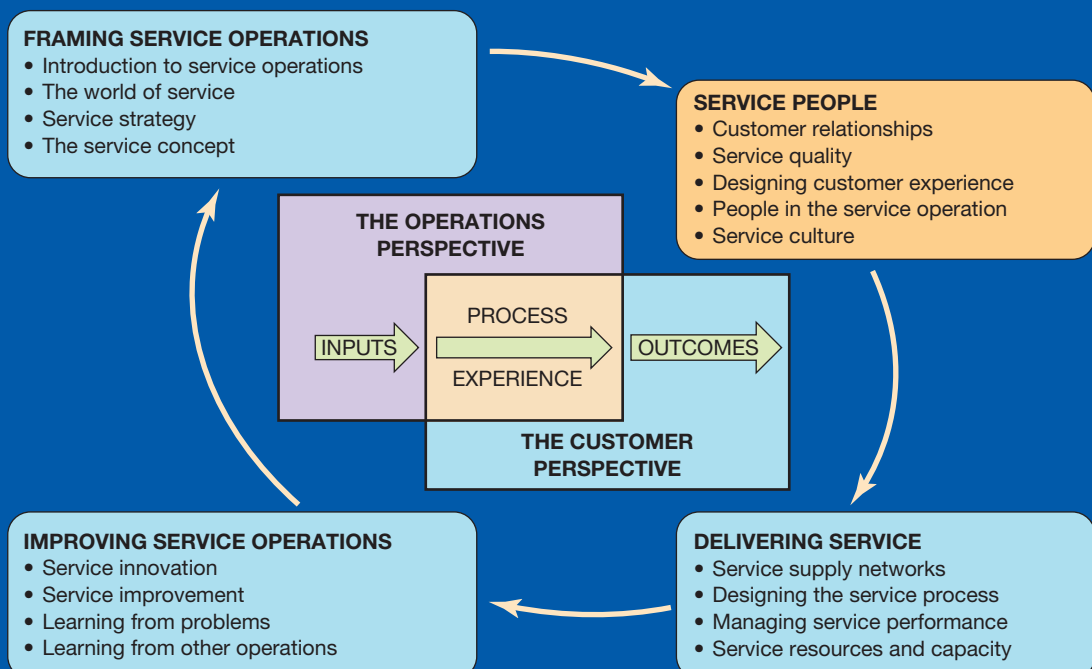
Service people

Because of the (often) high-contact nature of services, managing operations is very much a 'people business'. People, both customers and service staff, play a vitally important role in how effectively any service can be delivered.

This part consists of five chapters:

Part II Contents

- 5 Customer relationships
- 6 Service quality
- 7 Designing customer experience
- 8 People in the service operation
- 9 Service culture



Chapter 5

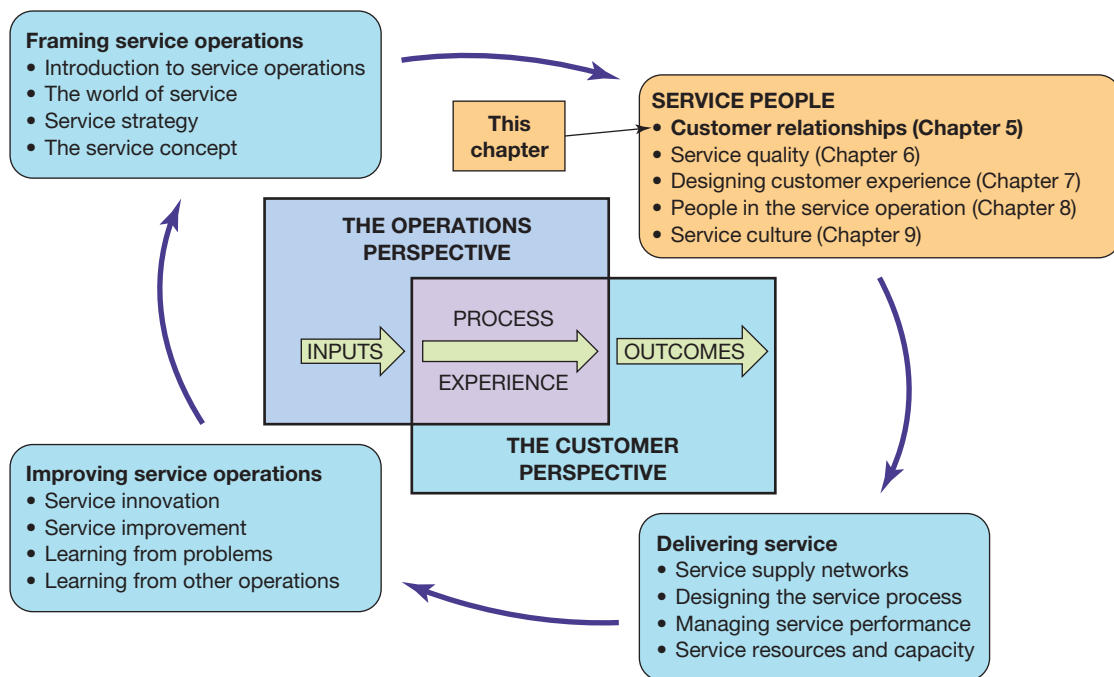
Customer relationships



A fundamental characteristic of service operations is the immediate presence of 'the customer' (or the customer's surrogate) within the operation itself. Understanding customers is therefore a vital issue for service operations managers. This chapter is about the relationship between customers of various types and the operations with which they have a relationship. It looks at how customers can be categorised and the importance of developing 'customer' relationships in both B2C and B2B contexts. The position of this topic within our overall model of service operations management is shown in Figure 5.1.

Learning objectives

- To be able to define the three approaches to classifying customers
- To understand the benefits of retaining good customers
- To explain how managers can develop good customer relationships in B2C markets
- To explain how managers can develop good business relationships in B2B markets

Figure 5.1 This chapter looks at customer relationships

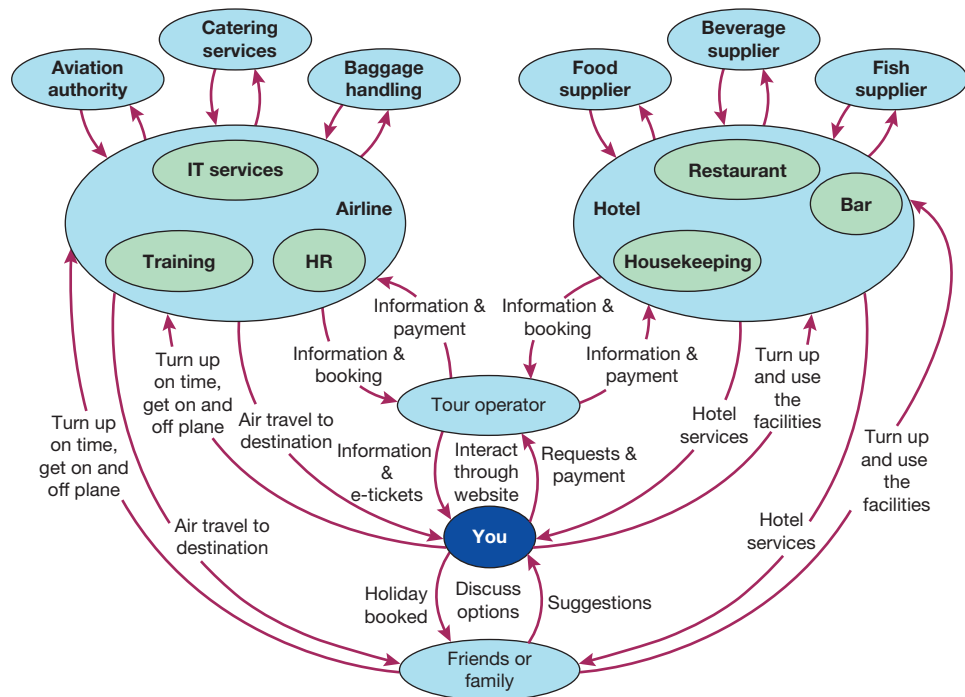
Introduction

As we made clear in Chapter 1, a ‘service’ is synonymous with the ‘customer’. Service is an activity (a process) that involves the treatment of a customer (or user), or something belonging to them, where the customer is involved and performs some role (co-production) in the service process. It is self-evident, then, that service operations managers need to understand and continually examine the needs, attitudes and expectations of their customers and how they develop the relationships with them.

But, although it is clearly important to understand one’s customers, it is not always obvious exactly who they are. The customer of a nursery is not just the child but also the parent. There are also stakeholders such as education authorities and health and safety officials, for whom the nursery provides information and related services, as well as internal customers – the staff – whose welfare and training needs, for example, need to be met. Moreover, the ‘conventional’ customers whom the operation serves routinely are not the same. They may come with differing needs and expectations, even when they are experiencing the same service, so some method of distinguishing between differing customer groups is needed. Yet, a common objective for service operations managers is to understand the benefits of providing a good service and retaining good customers. They also need to be able to manage those multiple customers. They need to understand the service they provide to each customer, and how to do it well.

5.1 Customers – who are they?

A ‘customer’ is the recipient and often also a provider (co-producer) in a service process. Thus, we use the word ‘customer’ to refer to all the individuals, units or even organisations to whom, and often with whom, an individual, unit or organisation provides service.

Figure 5.2 Customers and services in booking a holiday through a tour operator

For example, take the (seemingly) simple example of booking a holiday. Imagine you are choosing and booking a holiday for your friends or family using a tour operator's website. You are the customer of the tour operator and it provides you with a service (see Figure 5.2). Both parties are involved in the service of choosing the holiday. The tour operator provides all the information on its website, possibly using a comparison facility to help you decide. It may also have the facility for one of its 'advisors' to 'talk' to you, either directly or through the website. Information flows both ways, as you explain what you want and later make a payment, and the tour operator provides ideas and later emails you all vouchers and tickets. Your friends or family are also your 'customers' – you are providing a service to them by arranging the holiday for them. They discuss the options, take your opinions and provide you with their decisions or preferences (again, service is a two-way flow with customers receiving and providing service). The tour operator is also the customer of the hotel and the airline. It makes the booking with the hotel and the airline, providing them with your details and dates of travel and preferences, and the hotel and airline give it the booking (an agreement), which it then passes on to you. At the start of the holiday, the airline provides you and your friends or family with service. It processes you by gathering (batching) you up with other passengers to get onto the aircraft and transport you to your destination. You and your friends or family contribute by showing up on time, reporting to the gate for the flight, and getting on and off the plane in an orderly fashion. The airline is supported by many internal services, such as human resources, IT and training. It also requires the services of many other organisations to do all this, such as the airport, ground handling services, the aviation authority, catering services and so on. The hotel provides your party with a range of services involving many internal service providers, such as its restaurant and bar services, housekeeping and laundry services, and external services such as grocers, fish suppliers, beverage suppliers and so on. You all turn up at the hotel, provide information and use the restaurant and bar, etc.

There are a few important things to take away from this example:

- This is obviously a simplified diagram. In reality there will be many more organisations (and possibly individuals) involved. Any truly comprehensive diagram would be far more complex.

- Everyone in the diagram is a customer of somebody. You (in the diagram) are of course the ‘customer’, but you are also a supplier, providing service to others, the service providers and your friends/family – they are your customers.
- Some customers are individuals, some are units and some are organisations.
- Service is usually a two-way process – things flow both ways. You provide information to the tour operator and the tour operator gives you a booking. In essence, both parties are ‘customers’ of each other as they are both recipients and providers.
- Services are delivered through networks, as depicted in Figure 5.2. (We will return to how we manage these networks in Chapter 10.) Important to note is that service is provided (to you) by many organisations working together and providing each other with services.
- There are internal service providers, such as the restaurant in the hotel, and also external service providers, such as the beverage supplier. Thus, there are both external and internal customers.
- Different organisations use different names for their customers: to the airline you are a passenger; to the tour operator you are a client; and to the hotel you are a guest.

In summary, when we use the word ‘customer’ we refer to all the individuals, units or organisations for whom (and often *with* whom) an individual, unit or organisation provides service. However, customers may also be referred to by other names, such as ‘clients’, ‘patients’, ‘guests’, ‘passengers’, etc.

Classifying customers

Search the internet for ‘types of customer’ and you will be bombarded by (literally) hundreds of sites claiming to identify the various categories of customer. Typically, such sites catalogue lists in categories such as the ‘5 types of customers and how to deal with them’, the ‘13 types of customers and how to approach them’, the ‘11 universal types of customers that you need to understand’, the ‘7 types of customers – how to recognise and handle them’, the ‘13 types of customers and how to behave towards them’, and the ‘16 types of customer needs and how to resolve them’. In fact, there are many ways of classifying customers, with different approaches to classification reflecting the various needs of different functions within the organisation. Here, we group the various approaches into three sets:

1. Approaches to customer categorisation based on the nature of their purchasing behaviour. These are primarily used by sales people to judge how best to make a sale.
2. Approaches to customer categorisation based on the characteristics of customer groups. These are used primarily by marketing people to segment the market.
3. Approaches to customer categorisation based on where a customer is positioned in the supply network. These are used primarily by operations people to determine the best way to serve customers.

Categorisation based on the nature of customers’ purchasing behaviour

For service staff primarily interested in directly making sales, a common approach is to group customers based on where they are in the sales process. So, customers may progress from someone who is at the very early stages of potentially making a purchase, to someone who is simply looking and not currently committed to making a purchase, through to someone who is a regular and loyal purchaser and is very likely to return regularly. The idea is to develop sales strategies that are designed to increase the likelihood of a sale. Such categorisations often include customer types such as the following:

- Potential customer or ‘prospect’ – technically, such customers are not actually ‘customers’ yet.
- New or ‘fresh’ customer – who might be a ‘one-off’, but sales will obviously try to prevent this.
- Impulsive or spontaneous customer – who can make a buying decision in an instant under the right conditions.

- Value-seeking or discount customer – who will purchase only if the price–value combination is especially attractive.
- Loyal or regular customer – who, because they are attracted to a brand, or through inertia, purchase often.

Typically, proponents of these categorisations talk about moving a customer who is still only a prospect to a point where they become a loyal customer.

Recency, frequency, monetary value (RFM)

Given the increased dominance of ‘big data’ in sales environments where such data exists (for example, direct marketing), more sophisticated approaches to classifying customers in terms of their sales are often used. Probably the best known of these is the ‘recency, frequency, monetary value’ (usually referred to as RFM) technique. It is a marketing analysis tool used to identify an organisation’s best customers by using measures of these three factors:¹

1. Recency – how recently a customer has made a purchase. The assumption is that the more recently a customer has made a purchase, the more likely they will make subsequent purchases.
2. Frequency – how often a customer makes a purchase. Regular customers are, by nature, predictable, so sales efforts could be focused on reminding them that the service can be repeated.
3. Monetary value – how much money the customer spends on the service. The assumption is that customers who spend the most money will continue to do so.

RFM analysis operationalises this idea by rating customers numerically in each of these three categories, using a 1 to 5 scale (sometimes a 1 to 10 scale), usually where the higher the number, the more recent, frequent or monetary value a customer has. With a 1 to 5 scale, this leads to 125 possible ‘outcomes’, each of which could be used to indicate how such customers could be treated. So, for example, ‘champions’ are customers who have bought recently, buy often and spend the most, ‘promising’ customers are recent shoppers but who have not spent much, ‘at risk’ customers have made some big purchases, and often, but have not returned for a long time, and so on.

RFM helps to categorise customers into crude but focused clusters that can be used to identify how best to treat customers – for example, who are more likely to respond to personalised services, or sales promotions. It allows a comparison between actual and potential customers and gives organisations an indication of how much revenue comes from repeat, as opposed to new, customers. Advocates of RFM stress its simplicity (it does not require any analytical software) and that it gives clear and easily understood results.

Counterpoint

The RFM technique is widely used, but not without its critics. One criticism is that, because it focuses only on the best customers, it provides little meaningful scoring when most customers do not buy often, spend little and have not purchased lately. This is particularly true when, as is common, 80 per cent of sales come from 20 per cent of customers. It ignores markets where customers purchase a low-revenue service only once. Such customers (who would rate 1-1-1 on an RFM scale) are often the biggest customer

segment in a market and could have the greatest unexploited potential. Another criticism is that, by definition, the technique only uses a limited number of selection variables. There may be many other factors in particular markets that should be taken into account. Moreover, the three factors that are used may be interdependent. Perhaps most seriously, RFM focuses on a service’s current customers and cannot be applied to potential new customers who have had no, or minimal, contact with an organisation.

Valuable or not-so-valuable customers

Much of the practitioner and academic service marketing literature proposes that organisations prioritise service towards customers who can create the most value for the organisation.² Given that any operation has finite resources, it would seem sensible to ensure that any prioritisation safeguards long-term business interests. The problem is that what is meant by value is not always clear. Here, we define a valuable customer as one that is either of high value and/or valued. Note that we use the term valuable rather than loyal. While some customers are loyal, in the sense that they frequently use the organisation, they may also have other loyalties and may not be very profitable or helpful to the organisation.³

- *High value* means that the financial value of the customer, over the long term, is of value to the organisation. This view links with the idea of assessing the lifetime value of a customer (see section later). For organisations that deal with many relatively small (in value) transactions, it has been found useful to calculate the lifetime value (the historic value plus extrapolated value of a customer over time). For example, a customer with a weekly supermarket spend of £100 represents annual revenues of £5,000 and lifetime revenue in excess of £250,000. Some service organisations claim that this understanding helps motivate managers and front-line employees to treat customers with respect – it certainly may help justify investment in customer service. Equipment-related services have used this approach for some years, since their customers understand the difference between lifetime cost of ownership and the cost of acquisition. Indeed, it is common in some industries for companies to make a loss on the sale of original equipment, knowing that 25 years of spares and service contracts will ensure long-term profitability.

The difficulty with this approach is that it is not always obvious as to who are the high-value and low-value customers. Business-to-business services may have a reasonable idea about customer value, perhaps represented by size of contracts; indeed, in some cases these organisations may have only one customer. Consumer services may have more difficulty. Financial services, for example, may be able to classify customers according to socio-economic groups, credit ratings or spending habits and make judgements accordingly. However, just because an individual is, for example, earning a relatively small sum today, it does not mean they will not be a millionaire in a few years' time, or indeed vice versa.

High-value customers are also those that tend to spend more per transaction than other customers (incremental value), purchase additional services (strategic value) and, importantly, may also act as an advocate for the organisation, encouraging or recommending others, by word-of-mouth for example, to use the service (social network value). They may also be prepared to pay premium prices for the service.

- *Valued* customers are those individuals who are positively disposed to the organisation and are thus relatively easy to deal with (see Allies and Champions later). They appear to appreciate the service and interact helpfully and pleasantly with employees.

Valued customers are not only a pleasure to deal with, but they can also create financial value for the organisation. They could be involved in cost reduction by taking time to help the organisation and its staff by, for example, clearing tables after use or reporting incorrectly functioning equipment. They are also usually cheaper to service since it can be costly to recruit new customers into an organisation. Valued customers can be involved in revenue generation by providing positive word-of-mouth advertising and by encouraging others to use or support the service.⁴

Valued customers are also supporters of the organisation and are ready and willing to help the organisation maintain and improve its service, for example by completing questionnaires and providing suggestions. Valued customers also do not place undue demands on the service. For public sector organisations, such as hospitals, this might mean not using the service more than is necessary. For all organisations it might mean not asking for, or expecting, more than the service can provide.

Categorisation based on the characteristics of customer groups

In reality, all customers are different in some way. We are all individuals with our own characteristics and motivations for potentially engaging in a service. Yet, simply saying that ‘we are all different’ is not exactly helpful if services are to try to understand customers as a whole, or design and target specific services that match customer needs. This is why ‘market segmentation’ is a core issue within service (or any other type of) marketing. Here, we take market segmentation as the process of dividing markets into smaller segments of people who share common characteristics. Organisations do this primarily to target their marketing, advertising and sales efforts appropriately. In fact, segmentation is the first step in a broader marketing process known as ‘segmentation–targeting–positioning’ or STP:

- Segmentation is understanding the different segments of a market.
- Targeting is deciding how attractive each segment is, and therefore which segments one wants to compete in.
- Positioning is deciding how to establish oneself relative to competitors.

While it is beyond the scope of this text to fully explore the (admittedly important) issue of market segmentation, it is worth explaining the main types of segmentation.

Demographic segmentation

This is one of the most common types of segmentation. Individual customers are categorised based on observable differences such as age, sex, occupation, marital status, family size, education level, income and religion. It is useful where services are targeted towards a specific demographic. For example, one optician might be targeting relatively wealthy, young, fashion-conscious clients, while another targets lower-income families more interested in low cost.

Psychographic segmentation

Psychographic segmentation is similar to demographic segmentation, but treats those characteristics that are more psychological and emotional, even though they may not be as easy to observe as demographics. For example, a charity that promotes sustainability issues may target young people with families. But not all such people would be interested in contributing to the charity’s aims, so it might further focus on people who share its environmental aims.

Geographic segmentation

Geographic segmentation splits markets based on their location. It is useful where a customer’s location can help to understand their needs. For example, a sports video streaming service would need to distinguish between customers in cricket-mad India as opposed to customers in the USA, where cricket is practically unknown but one of the few places where baseball is played.

Behavioural segmentation

Segmentation can also be based on customers’ behaviours, especially regarding the service being promoted. Many of these behaviours could relate to how customers interact with the organisation itself. For example, a website could track individuals’ browsing habits, across all similar sites, on the assumption that particular browsing behaviour may predict the chances that particular customers may be attracted to purchase from the website.

An operations view of customer segmentation

Segmentation is a tool used primarily by marketing professionals. It is designed to help focus on the appropriate marketing decisions. These are not the same as the decisions that need to be taken by operations managers. Yet, clearly, service operations managers must be aware of the emphasis

behind the marketing approach adopted by the organisation. Not only does it make sense to target marketing efforts on people most likely to buy the service, but market segmentation also helps operations managers design their facilities appropriately and provide the right service, experience and outcomes.

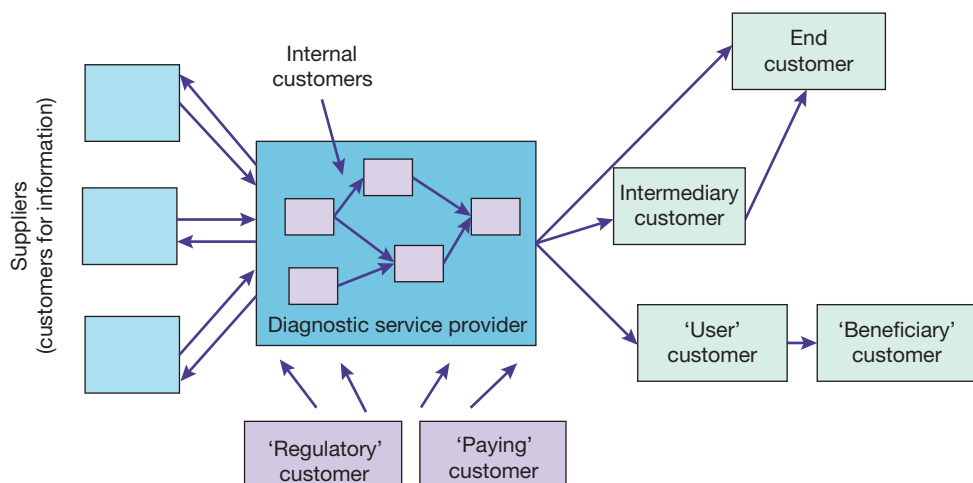
A restaurant provides a simple example. If the restaurant is targeting couples for intimate romantic dinners for two, the design of seating and ambience will be rather different from a restaurant that considers families as its prime source of revenue. Many operations-related decisions, such as the type of food served and the way in which it is served – for example, speed, manner and information provided – will be different. In the case of a family restaurant, easy-to-clean facilities with flexible seating will be required, together with value-for-money meals served efficiently. The romantic restaurant will require different furnishings, lighting, music, staff competencies and food. Clearly, a wide range of other decisions flows from this initial identification of the customer group to be served. But it also presents an operation with the dilemma of how to serve more than one market segment.

If the restaurant company has more than one site, it could target some sites to the ‘intimate’ market, and others to the ‘family’ market. This is known as ‘operations segmentation’ – focusing different parts of the operation’s resources on different market segments. Smaller restaurants will find this difficult, so face a further choice: either choose the more attractive market segment and focus on that alone, or try some form of ‘temporal operations segmentation’. This means adopting different operations activities at different times. For example, some restaurants manage to adapt to changing needs, providing gentle (bland) music and reasonably bright lighting for early evening family groups and more elderly diners, before moving to more upbeat music and dimmer lighting for younger couples as the evening progresses.

Categorisation based on the customers’ position in the supply network

Classifying customers by their purchasing behaviour is useful for sales planning. Market segmentation is necessary for marketing professionals. But service operations managers particularly respond to how they directly or indirectly interact with customers. In Chapter 10 we will look in some detail at how operations link together to form networks of customers and suppliers, in a similar way to how we illustrated part of the holiday industry in Figure 5.2. Again, it is best illustrated by an example: Figure 5.3 shows the supply network of customers for a provider of healthcare diagnostic

Figure 5.3 Various types of customer positioned in a diagnostic service provider’s supply network



services to hospitals and clinics. As in many service supply networks, we can classify their customers into several broad and overlapping types:

- external or internal customers;
- intermediaries, end users or consumers;
- user customers;
- beneficiary customers;
- paying customers;
- regulatory customers; and
- (although it sounds a contradiction) ‘supplier customers’.

External or internal customers

The most obvious customers, particularly for consumer services such as banks and restaurants, are the individuals or groups of people, external to the organisation, who are receiving and often paying for the service. In many of these situations there is a clear time connection in the sense that service will be provided on receipt of the required price, as in a fast-food restaurant or retail store. These customers tend to be the people in mind when managers and employees talk about ‘customers’.

However, much of the material in this text can also be applied to internal customers. Internal customers are individuals or groups of individuals who are a part of the same organisation but from a different unit or operation. For example, for the diagnostic service provider this will include the ‘non-operations’ departments such as the accountancy department and the IT department, all of which provide services to the other parts of the organisation. It also includes the operations departments such as technical customisation, field service and so on. The recognition of internal customers, and the need to provide them with services and good experiences, is one of the key elements of many quality improvement programmes. These programmes are based on the important premise that the quality and cost of service provided to external customers depends upon the quality of the service provided to and by the network of internal customers. Or, put simply (and referred to as the ‘internal service rule’), the level of external customer service will never exceed the level of internal customer service.

Many organisations recognise the value in refocusing from their ‘putting customer first’ philosophies to ‘putting employees first’, realising that the level of external service is constrained by the level of internal service. While many organisations see their quality improvement activities as being about improving the quality for external customers, it is also important that organisations improve their levels of internal customer service.

Intermediaries, end users or consumers

One of the design issues under debate for many service supply chains is the question of whether or not to use intermediaries – the ‘middlemen’ who sell a product or service to an end user on behalf of one or more suppliers. Some financial services, for example, have removed the intermediary stage of an independent ‘retail’ insurance broker and set up their own direct operations. They have done this largely to reduce the transaction costs for commodity-type services such as car insurance, but also to gain ownership of the end user. This has been possible to achieve as increasing customer knowledge about industry prices has forced companies and customers alike to re-evaluate the worth of the broker network.

In the case of the diagnostic service provider, it may provide its services directly to some hospitals (end customers) while also providing some of its specialist services to other (maybe even rival) service providers who act as intermediate providers in the network. This can sometimes be a difficult relationship. The situation that many organisations face is the need to manage their direct customers, such as brokers or retailers, while at the same time being aware of the needs of the end consumer or user; they have to encourage the intermediaries to give the desired service to their customers.

'User' customers

In some complex markets, and healthcare is often one of them, it is necessary to distinguish between several types of customer who could play an important role in purchasing a service. The bottom-right part of the diagnostic service supply network illustrates this type. In this case, the 'user' customers are the staff at the hospitals or clinics who will be using the service. These are the nurses, doctors and administrators who are responsible for integrating the service into the other processes within the healthcare operation. They will generally be interested in the operational convenience of the service: how responsive and reliable it is, how accurate it is and so on.

'Beneficiary' customers

Regardless of the type of customer, or the type of service, all customers expect some kind of benefit from that service. However, in some cases they have neither chosen to be the recipients of the service, nor will they pay for it directly. In the case of the diagnostic service, the patient whose 'sample' is being tested will probably not even be aware of which diagnostic service is being used, and if they pay for it (as opposed to the payer being a private or state insurance scheme) the fee is likely to be included in the total cost of treatment.

'Paying' customers

In many service situations, for example, public and voluntary services, there may be a clear distinction among (and indeed conflicts among) payer, beneficiary and user. Nor is this conflict confined to non-profit organisations. In some business-to-business services, such as photocopier leasing, it is possible that the purchasing department may have cost-reduction targets for its overall spend, which may conflict with the need for high copy quality in the user functions. In the case of the diagnostic service, the hospital financial managers will be concerned with the cost-effectiveness of the treatment. In many sectors, including healthcare, it is not easy to make judgements about cost-effectiveness. How does one balance limited resources against the (possible) health benefits to patients? The trade-offs between paying, user and beneficiary customers can become extremely difficult in many public services. These are funded by taxpayers, but the budget is determined by politicians who (supposedly) represent the views and interests of their constituents. In the case of the police service, the beneficiary is again society at large, although the participants (criminals and offenders) may not see the actions of the police as a benefit. Even the most law-abiding citizens may be annoyed when stopped by the police for what seems to them to be a trivial matter.

'Regulatory' customers (or stakeholders)

Sometimes 'customers' may not receive benefits directly, but nevertheless have a responsibility to take part in the decision to purchase a service. For example, in many countries certain industries are regulated by publicly appointed bodies, such as health and safety regulators. In the healthcare sector, most countries have some form of regulatory bodies that, at the very least, attempt to prevent dangerous therapeutic treatments and, where medical services are paid for by the state, will judge the cost-effectiveness of treatment.

'Supplier' customers

How can suppliers also be customers? Answer: it is in the operation's interest to 'serve' customers by providing sufficient information, assistance and even finance, to better supply them. Although this is expanding the definition of what constitutes a 'customer', it is certainly worth considering the benefits of thinking about suppliers in this way. Not only does such a view fit in with the idea of co-creation (see Chapter 1), it is especially beneficial when a supplier is seen as a long-term partner. (Partnership supply relationships are discussed in Chapter 10.)

Case example

The Prison Service

The Prison Service provides an interesting example of the complexity of 'customer' or stakeholder requirements, to some extent reflecting the mixed task it faces. Society requires the Prison Service to carry out potentially conflicting activities:

- to ensure that 'dangerous criminals' are locked up for the safety of society;
- to provide a regime that will punish wrongdoers as a means of payment for their crimes; and
- to support inmates, providing counselling and training to rehabilitate and reform them, to reduce the likelihood of reoffending.

The principal stakeholders and their requirements are as follows:

- *Government ministers* with responsibility for the Prison Service will be concerned to fulfil manifesto promises while meeting spending targets. At the same time they will be concerned about stories of prisoner escapes or drug abuse that may be damaging to their personal reputation, possibly forcing their resignation.
- *Prison governors* will seek to provide an appropriate environment for inmates, while keeping to strict operating budgets.
- *Prison officers* will be concerned to strike a balance between building a rapport with inmates and enforcing discipline.



Peter Dazeley/Getty Images News/Getty Images

- *Offenders* will have a wide range of requirements depending on the nature of the offence, length of term, desire to change and so on.
- *Families of offenders* may wish to maintain contact with inmates.
- *Members of society* want to feel safe from criminals, but will also believe that some help should be provided for those who wish to reform.

The relationships between these stakeholder groups are often complex and highly political. Clearly, politicians ultimately report to those who elect them, including prison officers and families of offenders. Prison governors, with hopes of career advancement, may feel that they must satisfy the demands of the current party in power, which may be at odds with the requirements of other groups.

5.2 What are the benefits of retaining good customers?

A key priority for some operations managers is retaining those customers who are particularly valuable. However, for others, retention may be only of limited concern. For example, operations such as local government services, housing associations, police, charities and health services may not be able to choose their customers, or have customers who have no or little choice. These organisations have to accept and deal with whoever 'comes through the door'. Nevertheless, they still need to

have relationships with them (see later) and manage those customers as well as they can. But for those services that wish to, retaining valuable customers provides significant benefits. In summary, valuable customers are those who:

- are easy to deal with;
- act as advocates and provide positive word-of-mouth advertising;
- assist in service provision;
- reduce operating costs;
- increase revenues;
- help the organisation maintain and improve its services;
- do not place undue demands on the service;
- generate long-term revenue streams (high lifetime values);
- spend more than other customers;
- increase spending over time;
- may pay premium prices.

A key problem in changing the emphasis to retention and/or building relationships with customers is that many organisations do not have adequate means of either measuring retention or calculating the value of loyal and valuable customers. Few companies know the value of a loyal customer or the true cost of a lost customer, or even worse the cost of an upset customer who stays. If organisations could calculate these values, they might be in a position to make more accurate evaluations of investments designed to develop relationships with customers.

Measuring customer retention

There are several simple measures of customer retention to put alongside sales or revenue figures. Retention, for example, may be assessed on an annual basis – for instance, by tracking the number of customer accounts still ‘active’ during the year. In practice, of course, this is not always so straightforward. Retail customers frequently shop at more than one store, continuing to make regular purchases in each organisation. Some customers hold several ‘loyalty’ cards – undermining the very concept. Indeed, studies into the behaviour of supermarket customers⁵ have identified large segments of ‘promiscuous customers’ who switch loyalty to whichever provider is currently offering the best deal. In this case, the issue is more ‘share of the wallet’ than customer loyalty. Information systems linked to loyalty cards enable retailers to track trends in spending patterns to assess the ‘loyalty’ of various customer segments.

For some business-to-business services, customer retention is easy to measure because the organisation may have only one or two major accounts. Loss of a customer in these cases will mean that the business may not even survive. While this situation is not usually a challenge for many mid-range businesses, retention may yet be a problem. One company that supplied chemicals to a wide range of business customers appeared, superficially, to be healthy, with reasonable annual sales growth. This hid the fact that in a nominal customer base of over 100 business accounts, more than 20 per cent had not placed an order in the last 12 months and a further 15 per cent had reduced their order value in the last six months. This analysis prompted the organisation to re-examine the nature of its customer relationships in order to reverse what had become a trend that threatened the business’s future profitability.

Customer lifetime value (CLV)

Customer lifetime value (CLV) is the total worth to a business of a customer over the whole period of the customer’s relationship with that business. It is a particularly important measure because it usually costs less to keep an existing customer than it does to acquire a new one. This means that increasing the value of your existing customers is an effective method of driving

revenue growth. It is also why many businesses track lifetime value as a part of their customer relationship effort. Moreover, it provides a degree of motivation for personnel who may deal with high numbers of short customer transactions each day. The customer who makes a regular £10 purchase may not seem that important in the grand scheme of things, but this viewpoint might be changed if this spend equates to £3,000 annual spend multiplied by the expected loyalty lifetime in years. That couple who call at their local pub every night on the way home from work might just buy the one drink each. However, the astute landlord recognises that, over five years, their custom will pay for a new carpet.

Customer lifetime value (CLV) can also give focus to marketing activities. However, there are a number of issues to be resolved when examining lifetime value. The first is to understand what 'lifetime' really means, and to what extent this can really help in promoting and providing service. If the argument about lifetime value is followed to its logical conclusion, would this lead service providers to ignore all customers over a certain age? Clearly not, because the direct revenue gained is still valuable, and the value of word-of-mouth advertising and referrals (social network value) is impossible to calculate. Certainly, for the purposes of employee motivation, it may be useful to calculate a value such as annual spend, which makes the point that the £10 transaction customer is someone worth looking after and at the same time does not make potentially exaggerated claims about worth.

Customer lifetime value can also help to shape overall strategy. For example, equipment-based service providers are often particularly keen to calculate CLV based on the economic life of the piece of capital equipment, its original sales price plus expected service, maintenance and repair revenues. This has enabled them to create competitive original equipment-pricing strategies, and to understand that significant resources must be made available to support these revenue streams. For example, a supplier of railway rolling stock may choose to make little or no profit on the sale of the original equipment if there is good compensation from future service revenues.

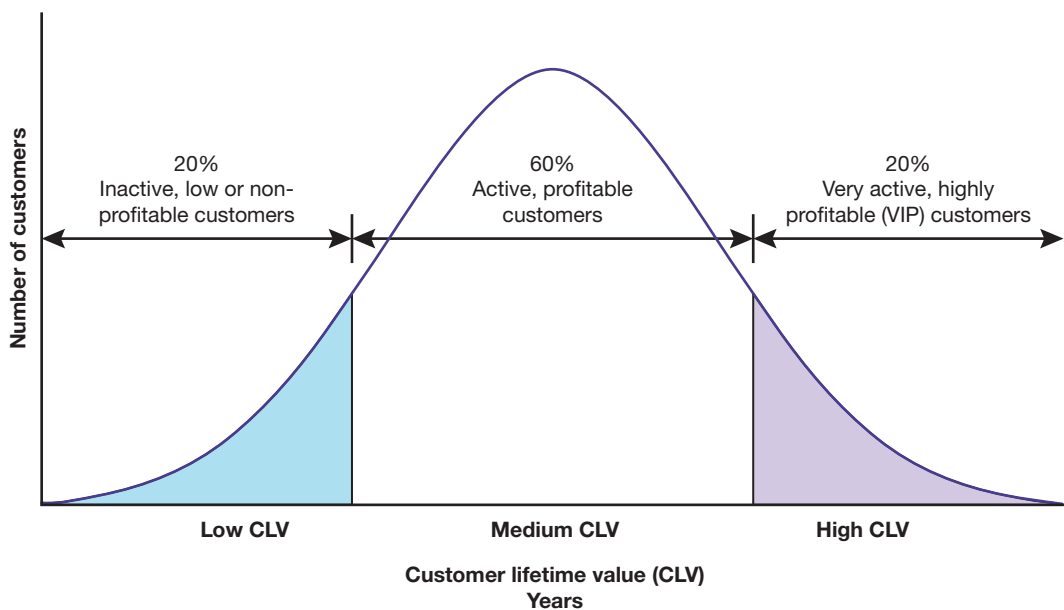
It is estimated that Amazon Prime members spend a little over twice as much as non-Prime shoppers⁶. Based on this measure of customer lifetime value, Amazon has increased its focus on Prime members. More defensively, some mobile phone services used to supply handsets at a fraction of their true cost in a bid to gain a significant market share and future rental revenue. However, they discovered that many customers were not paying line rentals for a sufficiently long period to enable the promotional equipment discount costs to be recouped. The result was that the providers introduced a wider range of tariffs and contracts to reduce the deficit.

When thinking about the value of the customer, it is useful to generate estimates of the following:

- The current and potential annual spend of customer segments, recognising that customers may use more than one service provider.
- The duration and durability of customer relationships. How long do customers remain loyal and is there potential for this to be extended?
- The number of points of contact with customers. How many different services do they buy? Is there potential for cross-selling of services?
- What is the current profitability of the customer? Is it costing more to keep this customer than we are likely to recoup?

Arguably, the most useful practical result of understanding the CLVs of individual customers is that it helps to identify those particularly profitable customers (who could receive special attention) and, by contrast, those unprofitable customers (whom an organisation might not want to retain). Most customers will fall somewhere between these extremes, as shown in Figure 5.4. The debates that all organisations should have are, first, where should the boundaries between the three zones in Figure 5.4 be (our suggestion of 20 per cent is only an approximate indication) and, second, how should the extremes be treated?

Figure 5.4 Understanding the spread of CLV among a customer base can help focus on profitable customers



5.3 How can managers develop good customer relationships (B2C services)?

There are some differences between developing customer relationships when the customers in question are individuals and when they are businesses. As we discussed in Chapter 2, B2C and B2B relationships, although sharing some characteristics, have different priorities. In this section, we look at some of the models and issues that are particularly relevant to B2C relationships, and later in the chapter we look at B2B relationships.

Whether B2C or B2B, the prime objective of developing positive customer relationships is to foster loyalty in customers, who then presumably go on to provide revenue for the organisation. But, there is a difference between having a relationship with the customer and customer loyalty. It is easy to confuse the two. For organisations such as train companies, mass transit systems and even financial service providers, customers may be extremely loyal in the sense that they use them every day, but they do not have a 'relationship' with the organisation (indeed they may despise the company). Sometimes their 'loyalty' is based on the lack of any alternative service, or the avoidance of the costs (possibly in terms of effort and disruption) of switching to an alternative. Such 'loyalty' is essentially fragile. Conversely, a service may consider that it has a deep and committed relationship with a customer, only to find that, when offered a better deal, the customer is willing to defect. Nevertheless, there is a general, and reasonable, assumption that the deeper the relationship with a customer, the greater their loyalty will be.

Relationship marketing

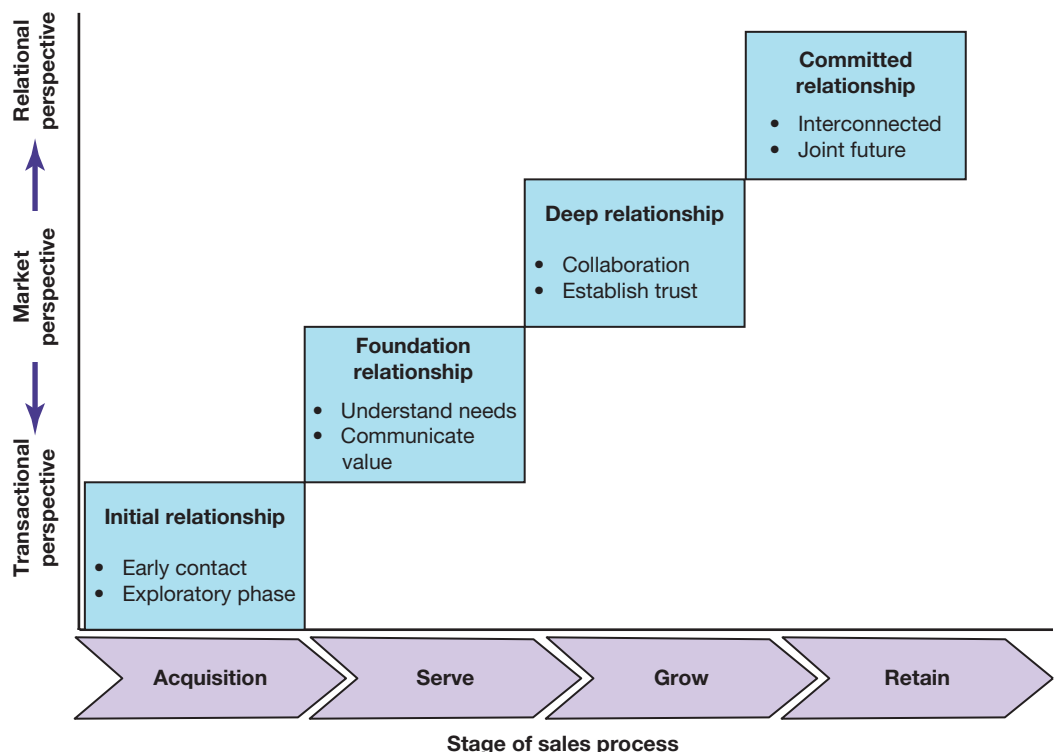
The importance of managing customer relationships has been emphasised by the emergence over the last few decades of the idea of relationship marketing. The reasoning behind relationship marketing is that customer relationships should be developed over the long term so that customers, once acquired, will be retained. Although referred to as relationship *marketing*, some proponents

see it as a broader business philosophy based on the need to conserve a core of existing customers who are committed to the organisation. The implication is that organisations should prioritise strengthening relationships with current customers so as to retain them, as opposed to putting all effort into acquiring new ones. It is about establishing, maintaining and enhancing relationships with customers for mutual benefit. Hence, relationship marketing has been seen as representing a move from attracting customers to satisfying and maintaining them, and from transactional exchanges between organisations and customers to relational ones.

If relationship marketing is a philosophy, then customer relationship management is how it is operationalised. Figure 5.5 shows customer relationships as building through four stages. The first stage establishes the initial relationship, which is essentially exploratory in nature. It includes preliminary considerations that establish whether the organisation has the appropriate capabilities to satisfy customers' needs. In terms of conventional sales activities, it represents the acquisition phase. Having established initial contact, the organisation can establish the foundation, or basic relationship. The organisation needs to put effort into fully understanding customer needs through the way it serves them, and demonstrate it to customers. The third stage grows and deepens the relationship through close collaboration between the organisation and its customers. Such collaboration may involve multiple departments becoming involved and working to cultivate the customer relationship, which in turn establishes a greater degree of mutual trust. The eventual stage is one where the chances of retaining customers over the long term is high because they are committed partners. The organisation is interconnected with its customers in such a way that both parties see their future together.

Like all so-called 'progression models' of this type, it is something of a simplification. The 'stages' are never distinct, clearly delineated phases as such, neither are the stages exclusive. Rather, they are intended to give a general and cumulative illustration of how relationships can develop. Nevertheless, Figure 5.5 does give the broad idea of how both market perspective and sales priorities can build over time as the relationship with customers deepens.

Figure 5.5 A progression model of customer relationships



Types of customer relationships

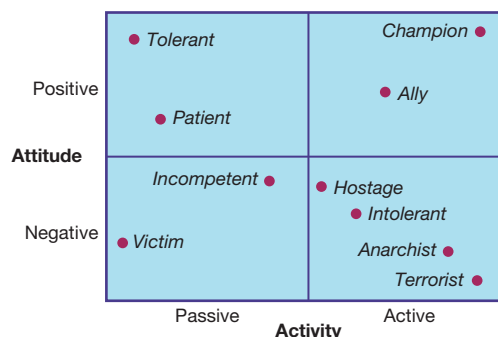
Not all customers are alike. Not all organisations want to develop the same type of relationships with their customers. Not surprising then that there are many different types of customer relationships. Nor is it surprising that there are many different methods of classifying customer relationships. Here we examine two methods of doing so. The first looks from the customers' perspective and distinguishes between customers' (positive or negative) attitudes to a service provider and how active (or inactive) they are in pursuing their attitudes. The second approach looks more from the organisation's perspective and distinguishes between 'portfolio relationships', 'personal relationships' and 'temporary relationships'.

Customers classified by attitude and activity

Figure 5.6 identifies ten types of customer, classified by their attitude to the service they receive, either positive or negative, and how active they are in acting on their attitude:

- *The Ally*. These valued customers usually arrive in a positive frame of mind, willing to help and give positive feedback to facilitate the service. The most helpful Ally is the customer whose opinion is respected by others. If the Ally is happy, then other customers will infer that the service must be good.
- *The Hostage*. These customers require service, but may be 'locked in' to a particular service provider contractually. An example is customers who must have their car serviced by the dealer appointed by the manufacturer. The service may cost rather more, but if an approved dealer is not used, their warranty will be invalid. These customers may not be in the most positive moods and will become very difficult whenever service performance deteriorates.
- *The Anarchist*. These customers dislike rules and systems. Indeed, notices suggesting what should and should not be done present a challenge. It is tempting to let the customer 'get away' with not following the system, but this may set up problems with other customers who feel that they have not been treated fairly.
- *The Patient*. These customers are very similar to the Hostage in that they are locked into the service, such as a hospital patient or a student at a school or university. These customers may be positively or unequivocally oriented towards the organisation and are willing to submit themselves to rules and regulations. However, unnecessary restrictions may turn them into a Hostage or Anarchist.
- *The Tolerant*. These customers may be passive, always waiting patiently for service providers to acknowledge their presence and deliver service. In fact, they may be so patient that they become invisible to service staff and get ignored as a result. It may be dangerous to trade on their apparent goodwill.

Figure 5.6 Customers classified by attitude and activity



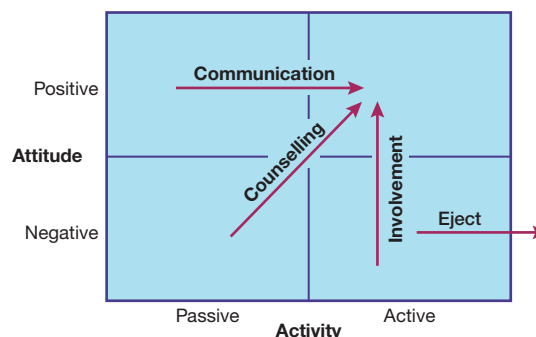
- *The Intolerant.* These customers are seldom passive or patient, often causing stress and problems within the service for themselves, the service providers and other customers. Although initially they may be positively disposed to the organisation, without careful handling these people can easily turn into Terrorists.
- *The Victim.* When something goes wrong in service organisations, some customers appear to attract bad luck. Some jobs seem to be dogged by ill fortune. Victims may react in a number of ways, perhaps blowing up incidents out of all proportion, or alternatively becoming resigned to their inevitable fate.
- *The Terrorist.* The Terrorist is the customer who mounts a damaging attack when you least expect it. An example might be the customer who declares their dissatisfaction loudly in the middle of a crowded restaurant, having said earlier how good the food was.
- *The Incompetent.* Front-line staff should pay particular attention to these customers. It is possible that new customers may be confused by the organisation's procedures and, if not 'trained' by staff, may find the experience threatening, with the result that they do not return. It is possible, of course, that some customers are incapable of being trained.
- *The Champion.* What all organisations want – valued customers who are not only supportive of the staff and its service and helpfully participate in the process, but who also make a point of providing positive word of mouth about the organisation, its services and staff.

Improving customer relationships – creating allies

Operations managers and their staff need to develop an understanding of the nature of individual customers and their resultant behaviour, particularly when these customers are the direct recipient of the service delivery process, and may in fact be an integral part of it. The nature of the customer could significantly influence the type of service provided, how they need to be dealt with by staff, and their potential impact on other customers in the operation.

Of all the necessary tasks of converting customers to the top-right quadrant of the matrix in Figure 5.6, moving them from the top-left quadrant is the easiest. Allies are already positively disposed to the organisation but require engaging in the service process. Providing information, good communication and explanations and involving them in process development through soliciting feedback may easily convert these customers to Champions. More difficult are the negatively disposed Victims in the bottom-left quadrant, who may require counselling and support to turn them into Allies. The risk here is that even after considerable effort, Victims can easily turn into Hostages or Anarchists. However, Anarchists and Terrorists are the most difficult, yet most important, group of customers for the operation to deal with. Deselection (removal from the organisation) may be the best way out (see Chapter 8). On the other hand, if these activists can be employed to the good of the organisation by harnessing their negative energy through personal involvement in the organisation and its processes, they can make powerful Allies, or even Champions, for the organisation and its cause (see Figure 5.7).

Figure 5.7 Improving customer relationships – creating allies



Portfolio, personal and temporary customer relationships

This classification looks at customer relationships from the operation's viewpoint, identifying three main types of customer relationships. First, a relationship based on a portfolio of services or products frequently found in higher-volume operations. Second, a personal relationship created between an individual customer and an employee, particularly prevalent in low-volume professional service organisations. Thirdly, we also cover here temporary customer relationships, recognising the transactional, one-off nature of many services.

We will also cover the risk in a customer relationship and the means of managing customer relationships in high-volume consumer services – customer relationship management (CRM).

Portfolio relationships

Portfolio relationships involve the 'capture' of the customer using a variety of products or services. Banks, for example, work hard to establish a relationship with their customers by selling multiple 'products', such as current accounts, loans, house loans, insurance and executor services. This provides the customer with benefits such as a single point of contact for their service/product portfolio, discounts for new services/products bought, loyalty bonuses, etc. The downside for customers who wish to switch is often the difficulty in untying themselves from the set of services/products. The benefits for the organisation are that portfolio relationships provide higher-value customers, a longer-term revenue stream, opportunities to cross-sell other services or products to customers who are already engaged with the organisation, and also valuable information from and about that customer base.

Many service providers, such as retailers, airlines and restaurant chains, actively promote portfolio relationships and loyalty on existing services and products through loyalty schemes such as frequent-flyer programmes or 'club' cards for supermarkets. Most of these are, in essence, discount schemes – encouraging the customer to earn points by spending more money with a particular provider rather than the competition. Such providers are 'buying loyalty' rather than building relationships. However, the relationship can be developed by holding information about a customer's needs: for example, some hotels store information about their card-holding customers so that these customers are provided with a room that meets their requirements. Customers may also gain certain privileges: airline loyalty customers may be provided with access to executive lounges, free seat reservations, cheque-cashing facilities, company newsletters, opportunities to participate in special events and opportunities to provide information to the organisation.

The Harley Owners Group, described in the case example, demonstrates that there is more than one way to build loyalty with customers who have some affinity with the company, its products and services, and with each other. This case demonstrates that Harley-Davidson has clearly understood the breadth of the service concept, recognising that customers are buying rather more than a manufactured product. With this knowledge, Harley-Davidson has been able to capitalise on what has become virtually a cult of owners, each fiercely loyal to the brand and some even having the name of the company tattooed on their bodies.

Case example

Harley Owners Group (H.O.G.)⁷

Harley-Davidson does not just make world-famous motorbikes – it sells a dream. From its start more than 100 years ago, Harley-Davidson has had a profound impact on the sport of motorcycling and the people who ride motorbikes.

From its humble beginnings in a small shed in Milwaukee where three friends turned out their first bike, the company now produces hundreds of thousands of bikes a year, generating an income of over \$5 billion a year. Besides making its famous bikes, such

as the Ultra Classic Electra Glide touring bike weighing over 370 kilograms with a twin-cam 1500 cc engine, the company also produces parts and accessories and a range of branded clothes and collectables. It is a global company, selling bikes all over the world; the fastest growth area in bike sales is currently in Asia.

Not content with simply owning a bike, Harley owners wanted to have an organised way to share their passion and show pride in their bikes so, in the 1980s, Harley-Davidson established the Harley Owners Group (H.O.G.). Within a short time over 50 local chapters had sprouted around the USA, and by 2020 H.O.G. had well over 1 million members worldwide, making H.O.G. the largest factory-sponsored motorcycle organisation in the world.

H.O.G. has a simple intent: 'To ride and have fun'. The organisation is split into local chapters where people who share the Harley passion come together. Each chapter is sponsored by a local dealership, with events organised by the members. Membership provides a range of benefits, including *HOG Magazine*, the official publication of the Harley Owners Group. A H.O.G. handbook provides maps, dealer locations, climate information and riding laws for members planning long-distance trips. The local chapters organise member events, including national and international rallies, touring rallies, open houses and pit stops. There is also a members' website with details, dates and information about all H.O.G. activities and events.

Personal relationships

Personal relationships exist in many professional and low-volume, high-margin services, where there is time and value in developing one-on-one relationships with clients or customers. These relationships, often using key account managers (see later), create multi-layered or deep personal relationships with customers.

The objective on the service provider's part is to create a situation where the customer thinks of them when the customer next needs the service, or when planning to place more orders. For personal relationships in B2B organisations there are advantages on both sides. The provider gets to know the customer's business well and this leads to a more effective service with a faster response, because providers do not have to go through another development phase. Many B2B services take place over weeks, months and, in some cases, years. Management consultants may work alongside the client's employees, and it is frequently crucial that effective relationships are built in order to carry out the assignment. Technical expertise is clearly only part of the requirement for an effective consultant; the ability to build personal relationships with clients and clients' employees is also essential.

There are four key elements to a personal relationship between service provider and customer:⁸

1. *Communication*. The extent to which there is two-way communication; the ability to deliver clear messages and the ability to listen carefully.
2. *Trust*. The degree to which one partner depends on the work or recommendation of the other, without seeking extra justification or collaboration. In some cases, the partner may commit the other to work without prior consultation.
3. *Intimacy*. The extent to which each partner shares their plans, strategies, profits, etc.
4. *Rules*. A mutual acceptance of how this particular relationship operates: what is acceptable and desirable, and what is not.

Developing personal relationships often has significant operational implications. In Table 5.1 we compare two organisations, one a professional service (business-to-business), the other a high-volume consumer service (business-to-customer), and identify the issues that must be dealt with by operations managers. As we can see from Table 5.1, there may be considerable resource implications in adopting an approach based on broadening the relationship between customer and provider. Some of these implications are listed below:

- Processes and activities become less well-defined and harder to predict.
- Capacity management is less precise and efficiency goals become harder to achieve.
- Processes must be more flexible in order to meet requirements that are ill-defined at the start of the relationship.
- Staff will require a different set of competencies.

Table 5.1 Developing personal relationships

	<i>Professional service: management consultant</i>	<i>Consumer service: restaurant chain</i>
Communication	Two-way Free-flowing Transfer of knowledge Relates to business possibilities as well as current contracts A significant amount of time is devoted to communication	Largely one-way – from provider to customer, apart from order-giving and paying Formal communication Relates to formal service offer No budget for significant informal communication
Trust	Built between individuals (clients and consultants) in the course of the involvement May involve significant amounts of confidential and sensitive information	Built between customer and organisation largely by reliability (delivery to promise) Scope strictly limited to providing value-for-money meals in safe surroundings
Intimacy	Consultants become completely involved with the life of the client's organisation and are often regarded as semi-permanent employees Part of the team	Involvement between employees and customers may be limited to order-taking and basic service Customer intimacy is often linked to fortuitous discovery of common interests
Rules	May be developed as part of the initial relationship-forming process Negotiation as to who does what is often part of initial evaluation, but the brief may change as the relationship develops	Largely set by the organisation or service sector Based on established 'scripts', expected behaviour and assumed knowledge

Temporary customer relationships

High-volume consumer services often require the formation of temporary relationships, where customer connections are made quickly. Many sales processes depend on the ability of the salesperson to establish common ground with the prospective customer. When the customer is buying something that cannot be readily assessed, part of the purchasing process may include a conscious or unconscious assessment of the competence and honesty of the organisation's representative.

A combination of perceived risk and lack of knowledge on the customer's part will mean that the possibility for a relationship will increase, given the need for reassurance on the customer's part. Examples might include purchasing a used car or a personal pension, where the customer is often incapable of making a totally informed decision.

These relationships might, at face value, appear relatively shallow, but there are clear implications for the service operation that recognises their value. The development of information systems to give customer history, training of customer contact staff and allocated time for each customer transaction (performance targets) are examples of areas that can be addressed. Some contact centres have intentionally relaxed their 'talk time' targets to allow more space for these temporary relationships and have found that although each agent may talk to fewer customers, orders of higher value are being taken as a result of the effectiveness of the temporary relationship.

Risk and relationships

There is often a link between customers' perceived risk in purchasing or using the service and their desire for a personal relationship with the provider (see Table 5.2). Where the customer does not

Table 5.2 Links between customer relationship and customer-perceived risk

	<i>Weak relationship (transaction based)</i>	<i>Strong relationship (partnership based)</i>
High customer-perceived risk	Opportunity	Protected
Low customer-perceived risk	Buy loyalty	Familiarity

feel that there is much risk, either in making the purchase or in receiving the service, there may be limited opportunity for relationship building. The majority of supermarket customers probably do not have any depth of relationship with Tesco or Walmart, though they may have preferences as to which store they shop in. This reluctance on the part of supermarket customers to build a meaningful relationship with Tesco or Walmart only applies, of course, when things are going well. If there is a significant service failure, customers may move quickly from low to high perceived risk. We will discuss this in more depth in the section on learning from problems in Chapter 16. Where there is high customer-perceived risk, but as yet a weak, transaction-based relationship, there is an opportunity for the organisation to build stronger links.

Where there are strong personal relationships in situations where the customer feels there is significant risk, the emotional switching costs for customers are high. It is likely that these customers will not move unless the relationship is significantly damaged in some way. An example of services of this type is a consultant who may have both a particular expertise and intimate knowledge of the client's company and markets. These relationships are most common in professional services and/or B2B services.

Of course, strong personal relationships may exist where there is low perceived risk, though they are probably rare in commodity services. In many cases these may be one-sided relationships, where the customer has a stronger emotional bond to the company than is possible for any one employee to reciprocate. Again, we will return to these customers in our discussion of service recovery in Chapter 16, but it is sufficient to say that if there is service failure, these customers may feel personally let down, rather than merely angry that something has gone wrong.

It is important to recognise that in many cases the relationship is formed at the deepest level between individuals rather than with the organisation as a whole. This is particularly true with professional services. When a senior partner leaves to join another firm, their clients may follow them. The risk for the client in forming a relationship with an unknown quantity, even from the same organisation, may be too great.

In this instance, risk may also have an explicit or implicit cost dimension. The time spent on the client's behalf so that the professional can understand the issues fully in order to make informed judgements will represent a personal investment that will not be undertaken lightly. Cost is clearly not the only issue. If the process demands that client and professional work together for significant periods of time, then 'personal chemistry' may well be a significant factor.

Customer relationship management (CRM)

Customer relationship management (CRM) is an amalgamation of strategies, activities, processes and technologies that are used to manage and analyse the data that derives from interactions with customers. CRM systems collect and organise customer data between customers and an organisation across different channels and points of contact, such as a company's direct salesforce, website, contact centre, direct mail and social media. The purpose is to improve customer service relationships and help to retain customers. Well-implemented CRM systems should give customer-facing staff comprehensive intelligence on customers' personal characteristics, purchasing record and history and, by extension, their buying preferences and interests.

The term CRM was first used extensively in the 1990s to describe a system whereby every contact with a customer could be tracked. It was soon popular with marketing and sales professionals,

later becoming increasingly used by customer service and support teams to manage after-sales service. But the essential difference between CRM and other approaches to customer retention was that the identification and enhancement of customer relationships is facilitated by technology. All early CRM systems were hosted in-house on internal physical servers. Later, they moved to being cloud-based applications. This had the advantage of making all data available through an internet browser on mobile devices.

CRM attempts to integrate the many communication channels between an organisation's units and its customers – for example, recording information about customer preferences and then using the information to develop and strengthen the relationship and the profitability of the customer. When compared with less integrated approaches to tracking customer relationships, CRM has a number of advantages:

- It lets a business keep the information on all its customers, potential customers and other sales contacts in one (virtual) place.
- It allows an operation to track all customer interactions over time and understand the dynamics of customer behaviour, from them being initial prospects through to the final conversion stage.
- It can present customer information in an easy-to-understand visual manner.
- Some CRM software can utilise sophisticated algorithms and AI routines to analyse large amounts of data in order to gain insights into how customers are behaving.
- The insights can help to conveniently segment customers, selecting different groups of customers to receive appropriate treatment as part of sales campaigns.

In addition to the issues described in the counterpoint box, another danger inherent in CRM implementation is ignoring organisational aspects. The worked example on Site Steward Archaeological Tours demonstrates that CRM demands much more than the introduction of effective IT systems, but also demands significant changes in the way the company operates. Not least, CRM requires the commitment of customer-facing staff to think behind the raw data from IT systems to apply insight to each customer transaction.

Counterpoint

Like any technology-based system, CRM has not always lived up to the expectations of the systems vendors, who have a vested interest in promoting it as a solution to an important problem. It certainly has the potential to contribute to any organisation's understanding of its customer base. But some potential pitfalls of implementing such systems have emerged. One is assuming the assumption that the more sophisticated the CRM technology is, the better the benefits will be. In fact, customer relationships can be managed in many ways, some of which do not require significant investments in technology. For example, simply motivating employees to be more aware of customer needs can sometimes match

more technological solutions.⁹ Operations in the early stages of CRM adoption could adopt a hybrid of low- and high-tech elements that allows managers to investigate what they should be doing to foster relations with their most valuable customers. A related issue is that some organisations try to implement CRM before they have developed their customer strategy. Marketing authorities often remind practitioners that effective customer relationship management should be based on good sound segmentation analysis. Implementing CRM without undertaking a basic segmentation, targeting and positioning analysis is, in effect 'working blind'. CRM is a tool for facilitating customer relationships, it is not a substitute for them.

Worked example

Site Steward Archaeological Tours

Site Steward Archaeological Tours is a UK-based travel company that specialises in archaeological, cultural and historical holidays. Founded and still largely run by archaeologists, it conducts small groups of interested people around archaeological sites in Europe, the Middle East and South America. Dr Cat Tramell, who founded the company, explained some of the company's recent issues:

Over recent years, we have grown to the size where we really do need to take a more professional approach to how we think about our customers, and how we interact with them. This issue has become more urgent in the last year as a number of political developments in some of our more popular regions means that some tours are either 'out of bounds' or have become problematic.

Although customer feedback was good, and the company's Tripadvisor scores were excellent, customer retention was only around 30 per cent annually. Two years previously, Cat had authorised extra

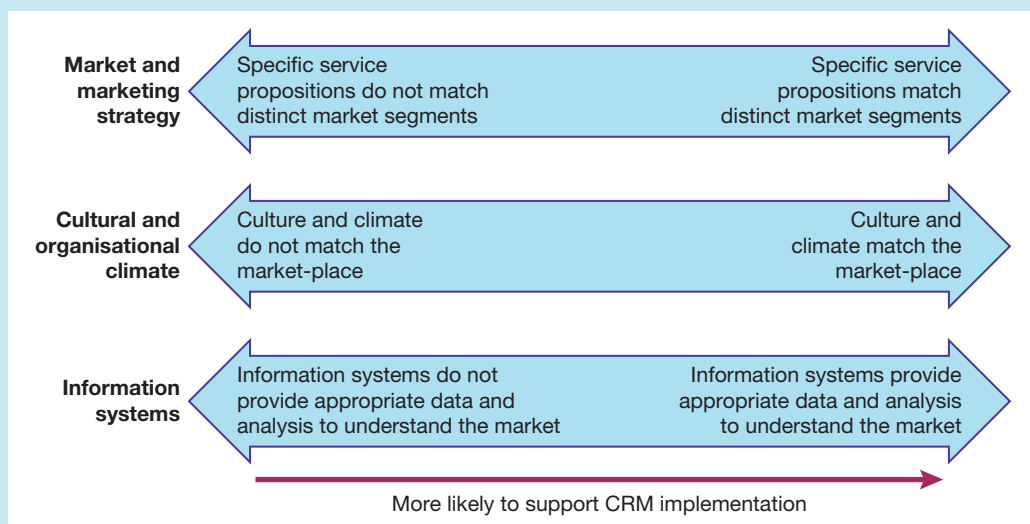
spend on the company's sales efforts, but the results proved disappointing.

What the company did

Because of the failure of the sales efforts, the company's senior team decided to focus on a more customer-relationship-focused strategy; most particularly, it decided to invest in a customer relationship management (CRM) system. After advice from a specialist, the company began with a systematic audit of its state of readiness for CRM. This covered three areas: the state of its marketing strategy, the nature of its culture and the state of its information systems (see Figure 5.8). It defined these conditions as follows:

- **Market and marketing strategy.** The set of decisions concerning the segmentation and selection of target customers and the value propositions made for them. (CRM is helped where specific service propositions match distinct market segments.)

Figure 5.8 CRM, however well designed and executed, can only work with an environment delineated by appropriate marketing, cultural and information system conditions



- *Culture and organisational climate.* The organisational culture, values and the practices, procedures and rewards of the company. (CRM is helped where culture is aligned to the marketplace and commonly held throughout the company, yet still remaining flexible.)
- *Information systems.* The software and hardware systems, data and information processes and their supporting organisational structures and systems. (CRM is helped where information systems provide appropriate data and analysis to understand the market.)

Reviewing these three areas proved illuminating, as Cat confirmed:

It became clear that our understanding of customer retention was weak and that while customer data from across the organisation was gathered and organised centrally, it was not analysed so that we could identify customer segments and value

propositions. Since we improved our analysis it has led to the development of meaningful customer segments and tailored value propositions for each of these segments in order to gain a single view of the customer. Nor was our culture appropriate for developing customer retention strategies. The marketing strategy had traditionally focused on rewarding sales rather than longer-term customer relationships. Since realising this, we have been trying to improve customer retention by adopting a complete cultural realignment. Training programmes were introduced and staff are now rewarded not only for acquiring customers but also for improvements in customer retention and customer satisfaction. Reshaping our information systems will take longer, but we have already started to move towards being able to track the information that helps us move towards developing and maintaining long-term, mutually trusting and profitable relationships with customers.

Customer training

Customers, like employees, require training. In some organisations this can be provided by other customers. For example, we observe other customers to know what to do and how to behave. We take the supermarket trolley back because we see others do it (or we are motivated by the fact that it has our coin in it). We talk quietly in restaurants because everyone else is doing so. Sometimes organisations need to allocate time and resources to customer training. Although this may incur set-up costs, it may pay dividends in the long run. A security alarm company discovered that many of the service calls it received were avoidable, but tied up expensive resources in answering them. It embarked on a programme of training key personnel in its customers' organisations. The result was significantly fewer false alarms, which improved productivity and customer satisfaction. At bowling alleys, staff take time to explain to customers that they have to change their shoes, how to operate the equipment, even how to bowl a ball. All this protects their equipment and helps customers have a good time. In some organisations, universities and prisons for example, managers will provide a set of rules and procedures, and even ask their customers to sign their agreement to them. Many organisations, including business-to-business, use 'scripts' to explain to their customers, usually on the first encounter, what is required of them. Customers who know what to do, and do it well, not only ensure a better service for themselves but also make it more efficient for the organisation.

Case example

IKEA's customer training

IKEA, the most successful homeware company in the world, revolutionised retail services with its large stores, self-service, impressive range of goods and

famously its flat-pack furniture. Like nearly anything bought at IKEA, its cleanly designed and practical furniture can be ideal for many homes. The

advantages of flat pack are that it is easy to transport and store, both for the company and its customers. It also helps to keep costs down. The disadvantage for some of IKEA's customers is that the furniture needs assembling at home. And although there are some customers who actively enjoy the process of assembly, even experienced do-it-yourself enthusiasts can have a tough time navigating the cryptic instructions and sometimes complex parts lists that are included.

IKEA did buy a company called TaskRabbit, an online and mobile platform that allows its customers to get help with everyday tasks, including handyman work such as assembling flat-pack furniture. However, assembling furniture oneself is still the preferred option for many customers. Which is why an IKEA store in the UK, at Greenwich, started offering workshops on how to assemble its furniture.¹⁰ They also taught people how to take it apart again. Apparently, some people 'go rogue' and don't follow the given instructions. But, even those who do follow the instructions can become confused, or may not have the skills required to complete the assembly. The workshops were offered both as a help to



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customers and as part of the company's sustainability efforts. It was keen to combat the idea that its furniture was not simply cheap and disposable, but rather that customers should be encouraged to take it apart when they moved home and put it up again in their new home. The Greenwich store, where the training was first introduced, was IKEA's first sustainable store in the UK, equipped with solar panels, rainwater recycling and a roof garden. Moreover, it is conveniently accessible by public transport. Staff are even banned from using their cars to get to work.

Customer removal

This is particularly important in social situations where one group of customers may damage the experience for the majority, but it can also apply to customers who are suspected of being deliberately difficult. For example, one customer at a UK department store was banned from shopping there after buying and returning 12 television sets in three years. He claimed that all of them were faulty, with issues including 'ghosting', 'calibrating' and 'pixelating'. Eventually, the retailer's operations manager sent a letter reading: 'We shall not process any orders you attempt to place by telephone or online channels. We have taken this decision in our firm belief that we are unable to meet your service needs, nor do we believe our range of products will meet your expectations. We would therefore ask you not to visit [our] store or any other branch. If you do we shall ask you to leave immediately.'¹¹

Banning customers because of excessive returns or complaints is not unknown, but most retailers are reluctant to do it unless they are subject to severe provocation. Garment retailers may close a customer account if they have obviously worn and/or damaged a garment before returning it. Amazon has closed customer accounts for excessive returning of goods. And shops will usually ban repeat shoplifters, or customers who abuse self-scan facilities. Some hairdressers have been known to ban customers who, despite reminders sent as text messages to their mobile phones,

repeatedly miss appointments without cancelling. The law varies between jurisdictions, however in most countries, a shop is the property of the owner, who can refuse access to individuals, but not always. A cinema in Spain was fined €3,000 for preventing customers bringing food and drink in from outside.¹²

5.4 How can managers develop good business relationships (B2B services)?

The obvious point to make about B2B service customers is that, compared with B2C services, suppliers of service are likely to have fewer of them, if only because there are fewer businesses than individuals. This does not mean that B2B services are all low volume. There is the range of relatively high volume to relatively low volume that one would expect. Nevertheless, B2B services are

Case example Revenge of the taxi driver¹³

The rise of platform-based services has, arguably, made it easier to track customers' behaviour, and take action when necessary. The type of passenger who consistently leaves their litter in taxis, pressurises drivers into breaking speed limits, or is bad-mannered and rude towards drivers, could potentially be banned from using that taxi service for life. This was confirmed when Uber, the world's biggest ride-hailing company, declared that it will ban passengers in some of its markets if they are rated as appreciably below average by its drivers. After every ride, Uber drivers rate passengers, using a rating system that awards between one and five stars.

Similarly, passengers can also rate the driver. Passengers can find out their average score by viewing their ratings on the Uber app. As it announced the policy, Uber did not say how bad a customer's score would need to be before he or she was banned.

Uber explained its justification for the policy as being based on mutual respect. Drivers are expected to meet a minimum rating standard (which varies from city to city), so passengers should also be held accountable for their behaviour. Drivers with persistently bad ratings can, eventually, be removed



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by the company, so bad customers should expect the same fate. However, Uber did make clear that they expected only a small number of customers to be impacted by ratings-based 'deactivations'. Moreover, customers on a low rating would have plenty of warning when they were getting close to being banned. They would also be given tips on how to improve their scores. For example, these might include being courteous to drivers, not leaving litter in the vehicle, putting on their seat belt and being ready on time.

more likely to be lower volume, higher variety and higher value. This last point, that individual B2B services are likely to have greater value, has two important implications. The first is that ‘relationship’ rather than ‘transaction’ is more likely to be important (we shall deal with this later). Conversely, B2C is more likely to be focused on transactions, with the goal of selling services through increased brand recognition. The second implication is the importance of expertise. Many of the services purchased in B2B markets are essentially expertise based. Again, B2C marketing is more concerned with the value a brand can bring to the customer. This is not to say that customer relationships are less important in B2C markets. Both B2B and B2C service providers probably find that it is more cost efficient to maintain existing customer relationships than to constantly chase new customers.

Several researchers, most prominently the work of the Industrial Marketing and Purchasing (IMP) Group over the last 50 years, have demonstrated that building business relationships is different to building ‘customer’ relationships, though business relationships will involve many personal relationships.¹⁴ In essence, business markets are often made up of a small number of powerful customers who are seeking solutions to problems. Many business relationships are close, complex and long term, and each relationship is part of a network of relationships; others are short term and adversarial in nature. The drivers for improving B2B relationships, and the benefits of doing so, generally include such things as growth and gain in market share, with potential reduced costs, hence improved profitability. In the longer term, healthy relationships can differentiate one’s services, and shift customer behaviour to bring improved cooperation, increased trust and enhanced capacity for problem solution.

Forms of business relationships

Business relationships exist in many forms.¹⁵ Some are complex and long term, often forming part of a wider network of relationships. Others are short term. Some are close and collaborative while others can be contract-driven and quite adversarial in nature. Some of the most frequently encountered business relationships include the following:¹⁶

- *Contracts* are often non-equity agreements ‘specifying the cooperative contributions and powers of each partner’,¹⁷ where greater power usually lies with the purchasing ‘partner’.

Counterpoint

Seeing B2B and B2C customer relationships as being very different could be viewed as too much of a simplification. Purchasing a business service obviously includes consideration of objective criteria such as total price, guarantees, delivery reliability and service levels, but there are likely to be other, more subjective, criteria that influence the purchase decision. For example, B2B services also may choose a supplier that has a reputation that will enhance, rather than compromise, their own public image. Similarly, they may choose a supplier that is attractive to their own employees rather than one with an imperfect ethical relationship. In other words, there is a mix of ‘objective’ and other

criteria that could enhance the buyer’s reputation or reduce the risk of making the purchase decision. This is not so different from the mixture of ‘rational’ and ‘objective’ criteria and the ‘brand-related’ criteria that will influence consumers of B2C services. Of course, B2B procurement managers should seek the best price they can get, ensure that specifications are met, comply with any regulatory conditions and follow ethical practices, but that will also be influenced by other more subjective emotional issues. It is a mistake to see B2B relationships as exclusively rational. In practice, the differences between business and consumer service relationships are not so clear-cut.

- *Partnerships*, sometimes also referred to as alliances, may be contractual or informal, and tend to imply parity-type relationships built on equal input of both partners with shared goals and for mutual benefit. Some partnerships are focused on short-term activities; others might be a prelude to a full merger of two or more companies.¹⁸
- *Strategic alliances*, sometimes also referred to as global alliances, are ‘voluntary arrangements between firms involving exchange, sharing, or co-development of products, technologies or services’,¹⁹ though they tend to exist as asymmetric relationships since they often involve one party acquiring a partial stake in the other.²⁰
- *Partnering* is concerned with developing closer relationships between the partners in an environment of openness and trust.
- *Joint ventures (JVs)* are one form of alliance and involve the partners creating a new, separate body or subsidiary, jointly owned, to exploit a particular opportunity.
- *Networks* are structures of interconnecting partnerships, alliances or JVs, which can take many different forms.

Importantly, all inter-organisational relationships are created, developed and influenced by the mindset and behaviours of a small number of individuals who form and hold the relationships through their words and actions. Typically, as these players change, so can the nature of the relationship.

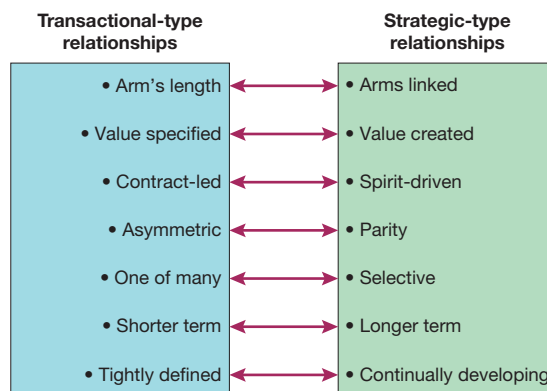
Transactional and strategic relationships

Research and consultancy work has shown that though inter-organisational relationships exist in many forms, there are only two main types of relationship – transactional and strategic – each with their own distinct set of characteristics.²¹ Both types are valid, though the differences are commonly misunderstood. The important point to remember is that the two types need to be managed and measured quite differently. The key characteristics of these two types are summarised in Figure 5.9.²²

Typically, any one organisation is likely to have only a very small number of truly strategic relationships, so for many managers the challenge is how to become the best they can at the transactional level. It is no simple task moving from a transactional to a strategic relationship. The decision is likely to involve a change of strategic direction – a move usually seen as the prerogative of the CEO. While some of the issues and approaches contained in the previous section on customer

Figure 5.9 Transactional versus strategic business relationships

Source: Developed by SHAPE International (www.shape-international.com).



relationships apply also to business relationships, there are three additional aspects to managing business relationships: measuring business relationships, using key account managers and additional ways of developing personal relationships.

Measuring business relationships

Among the questions frequently considered by managers involved in inter-organisational relationships are:

- Where is the relationship currently?
- Why is it like that?
- What is the best the relationship might be?
- What might need to change to get there?
- How should we monitor progress?

These questions highlight an area that is of key concern to operations managers: how to assess and measure relationships. ‘Regular assessment of a customer relationship is a prerequisite for conscious, purposeful intervention in it. Assessment is particularly valuable when any major change in the relationship is being considered, such as developing or adapting an offering or investing in operational capability for the relationship.’²³ Yet, surprisingly, given its importance, measurement of relationships is poorly understood. From an operational perspective, managers need to assess and measure relationships to understand where the deficiencies are, in order to work on them with their suppliers or partners. Measurement of existing relationships will also influence decisions about which partners to use in the future.

It is vital to recognise that the two types of relationships call for completely different approaches to measurement.

Assessing transactional relationships

Managing highly contractual transactional relationships is often fraught with difficulty. This is particularly true where an aspect of the customer’s business has been outsourced to a specialist provider. Examples of this lie in the area of facilities management or information technology support.

Measurement of transactional relationships tends to be concerned almost entirely with financial and hard measures of operational performance, such as price and on-time completion or delivery quality, and is frequently defined by service-level agreements (SLAs), which are often imposed on the supplier by the purchaser.

It is important to be aware that relationships, by definition, are ‘owned’ by both parties. They are fundamentally two-way and shared, so this approach, while perfectly valid in a transactional context, cannot be seen as genuinely measuring the relationship. What is actually being monitored is the performance of the supplier against the contract – something which in itself is entirely proper – but it should not be confused with measurement of the relationship, which is something that can only properly be measured jointly. Table 5.3 gives examples of key measures included in typical SLAs.

The advantage of SLAs is that the measures provide a basis for review of how well the contract is working. The disadvantage is that it is impossible to describe all facets of service provision through an SLA. If the working relationship deteriorates to a ‘nit-picking’ review of performance against an increasing list of measures, it is likely that it will not continue. Worse still, SLAs are sometimes used to exert undue pressure on suppliers. For example, if a supplier has performed very well against the agreed measures, instead of providing thanks and an extended contract the purchaser may try to reduce the price on the assumption that the supplier had more resources than necessary to meet the performance targets. (We will cover more about SLAs in Chapter 10.)

Table 5.3 Examples of service-level agreement (SLA) measures

Helpdesk support	
Telephone response	95% within 3 rings
Problem resolution	65% through first-line support within 8 hours
	35% through second-line support within 24 hours
Complaint escalation	To first-line manager after 8 working hours
	To senior manager after 16 working hours
Request for software fix	Initial response within 5 working days
	Outline proposal within 15 working days
Equipment maintenance	
Response to non-critical fault	2 working days
Response to critical fault	2 hours
First-time fix rate	95%
Schedule adherence	95% within 2 working days
Spares availability	95% within 48 hours
	100% within 5 working days

Assessing strategic relationships

As part of a strategic relationship, partner organisations trying to work closely together in a long-term relationship, and with mutual benefits in mind, will wish to assess the nature or strength of that relationship and how together they might develop it. Though many operations managers would claim that it is difficult, if not impossible, to measure some of the softer, often more personal characteristics of a relationship, such as attitude, behaviour and trust, it is usually these softer characteristics that are essential for the success of the relationship.²⁴ Our conclusion is that it is only possible to understand and manage a relationship from both parties' points of view, rather than simply carrying out supplier assessments or customer satisfaction exercises.²⁵

This conclusion calls for a radically different approach – one that reflects the mindset and aspirations of the parties to the relationship. This is almost always based on the joint development of a process for capturing and monitoring an agreed set of hard and soft metrics. One extremely successful way of doing this has been perfected by SHAPE International, a firm that specialises in the facilitation of business relationships. It involves facilitated agreement of the important characteristics of the relationship – typically a selection of elements of the seven dimensions of business relationships,²⁶ shown in Table 5.4. The jointly agreed scores then form the basis for discussion and agreement of action plans for improvement.

Key account management (KAM)

An approach appropriate for those situations where organisations have a relatively small number of strategic customers is key account management. KAM recognises that these relationships are complex, with more than one channel of contact between provider and customer. Figure 5.10 illustrates the transition from a traditional ('bow tie') approach to buyer–supplier relationships, to the KAM approach represented by the diamond.

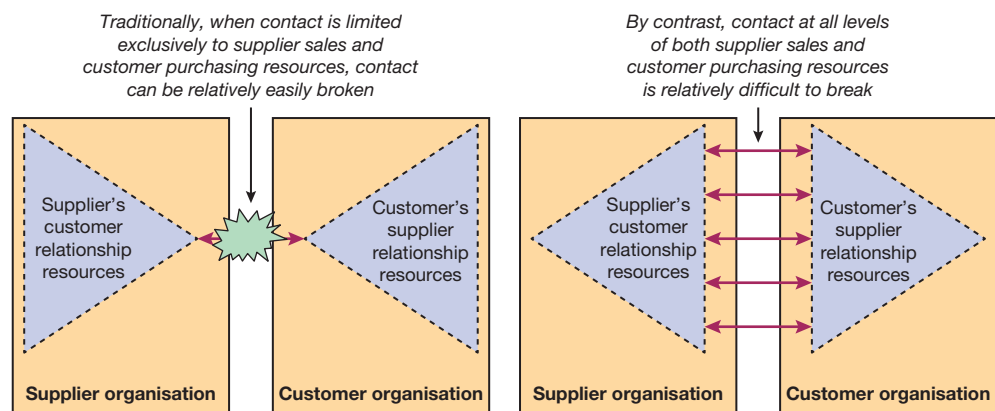
Table 5.4 The seven dimensions of business relationships

Dimension	Definition
Partner selection	Who you choose to work with
Nature of contract	Impact of the contract on the relationship and vice versa
Understanding each other	Understanding each others' expectations and perceptions
Interpersonal relationships	One-on-one relationships at work and socially
Ways of working	Relationships at an organisational level
Dealing with problems	Dealing with and learning from problems
Performance management	Using measures to drive action and improvement

Source: Developed from Johnston, R. and Staughton, R. (2009), 'Establishing and developing strategic relationships – the role for operations managers', *International Journal of Production and Operations Management*, 29 (6), 564–590.

Figure 5.10 Single-contact (bow-tie) and multiple-contact (diamond) relationships

Source: Based on Payne, A., Christopher, M., Clark, M. and Peck, H. (1995), *Relationship Marketing for Competitive Advantage*, Butterworth Heinemann, Oxford.



In the traditional approach, transactions are channelled through one point of contact – a sales or contract manager. As Figure 5.10 indicates, the weakness of this approach is that the relationship is only as strong as the link between a single buyer and the sales or contract manager. This relationship is vulnerable to changes in personnel, so some organisations regularly change their buyers in order to maintain ‘arm’s length’ trading conditions. The danger for the supplier is that a change in a buyer might lead to a less favourable environment. The key point to note is that the relationship may be easily broken by competitors who manage to forge a strong contact with other influencers in the customer organisation.

The aim of KAM is to turn the traditional ‘bow-tie’ relationship into a much stronger ‘diamond’. In this format, links are encouraged across the boundary between the two organisations. The role of the key account manager is now not to act as a conduit through which all communication must flow, but rather to act as an enabler for the relationship. If the customer has a particular need, KAM is focused on setting up the dialogue between the appropriate parties. Of course, the key account manager must monitor the effectiveness of these relationships to avoid the occurrence of problems that will damage the long-term business.

This approach is particularly useful for professional service firms that employ individuals or groups that are encouraged to be entrepreneurial in business development. It is not uncommon for customers to be approached by numbers of these, all from the same organisation, effectively in

competition with each other for the same business, thus giving the customer the impression that the firm does not know what it is doing.

For B2B customers, the customer retention approach is so vital that it is almost a ‘blinding flash of the obvious’ to say that the organisation should focus on customer loyalty. The loss of a customer can threaten the existence of many of these services. The relationship-growth approach has to be the main emphasis here, looking to build more links and broaden the base of business connection.

Building interpersonal relationships in business

Enhancing business relationships can easily be overlooked by organisations that are operationally focused and busy delivering services, and also by organisations at the other extreme, which are market focused and intent on increasing their customer base. Interpersonal business relationships can be established and enhanced in four key ways:²⁷

- *Going the extra mile.* Providing higher-than-expected levels of service on a current project, such as providing enhanced documentation, analyses, explanations or even presentations, and/or greater accessibility to staff.
- *Increasing the amount of client contact.* Making frequent visits or telephone calls, creating contacts at different levels in the organisation, scheduling meetings and feedback/development sessions.
- *Building the business relationship.* Putting on special seminars for the client, helping them make other contacts, assisting with benchmarking, sending useful articles, even referring business to the client.
- *Building a social relationship.* Providing social activities and tickets for events, remembering personal anniversaries, etc.

5.5 Summary

Who are ‘customers’? – A ‘customer’ is the recipient and often also a provider (co-producer) in a service process. The word ‘customer’ refers to all the individuals, units or even organisations to whom, and often with whom, an individual, unit or organisation provides service. Customers may be external, internal, intermediaries, end users, stakeholders, payers, beneficiaries, participants and valuable or non-valuable. Operations managers need to develop an understanding of the nature of individual customers and the customers’ likely attitude and behaviour. To do this, they need to classify different types of customer. There are many ways to do this; we group the various approaches into three sets. First, those approaches based on the nature of their purchasing behaviour; these are primarily used by sales people to judge how best to make a sale. Second, those approaches based on the characteristics of customer groups; these are used primarily by marketing people to segment the market. Third, those approaches based on where a customer is positioned in the supply network; these are used primarily by operations people to determine the best way to serve customers.

What are the benefits of retaining good customers? – A key task for operations managers is retaining valuable customers. The benefits of retaining valuable customers, for those organisations that wish to do so, include increased revenues, reduced costs, positive word-of-mouth recommendations and providing long-term revenue streams. Retention can be measured in various ways, including the number of active accounts, or by calculating lifetime values. Customer lifetime value (CLV) is the total worth to a business of a customer over the whole period of the customer’s relationship with that business.

How can managers develop good customer relationships (B2C services)? – Managing customer relationships is about establishing, maintaining and enhancing relationships with customers for mutual benefit. There are some differences between developing customer relationships when the customers in question are individuals and when they are businesses. The importance of managing customer relationships has been emphasised by the emergence over the last few decades of the idea of relationship marketing. If relationship marketing is a philosophy, then customer relationship management is how it is operationalised. But not all customers are alike. There are many different types of customer relationships and many different methods of classifying them. One method looks from the customers' perspective and distinguishes between customers' (positive or negative) attitudes to a service provider and how active (or inactive) they are in pursuing their attitudes. Another approach looks more from the organisation's perspective and distinguishes between 'portfolio relationships', 'personal relationships' and 'temporary relationships'. There is often a link between customers' perceived risk in purchasing or using the service and their desire for a type of relationship with the provider. Customer relationship management (CRM) is an amalgamation of strategies, activities, processes and technologies that are used to manage and analyse the data that derives from interactions with customers. It attempts to integrate the many communication channels between an organisation's units and its customers. Some customers benefit from training on how to use a service. Others may have to be discouraged from using a service altogether.

How can managers develop good business relationships (B2B services)? – Building business relationships can be different to building many consumer relationships. B2B services are more likely to be lower volume, higher variety and higher value. Business markets often comprise a small number of powerful customers who are seeking solutions to problems. Many business relationships are close, complex and long term, and each relationship is part of a network of relationships; others are short-term and adversarial in nature. There are many types of business enterprise, such as contracts, partnerships, alliances, strategic/global alliances, partnering, joint ventures and networks; each of these encompasses slightly differing forms of relationships. Measuring business relationships is the key to improvement. Service-level agreements (SLAs) are often used in contractual transactional relationships. Strategic relationships require jointly developed metrics. Key account management (KAM) is helpful for organisations with a small number of strategic partners. Building personal relationships underpins many business relationships.

Discussion questions and exercises



1. If you search online under the single word 'relationships', you will be bombarded with advice on personal relationships. Also, the language used by authors to describe customer relationships often echoes the language of personal relationships. Are customer relationships like personal relationships?
2. Reread the case example on The Prison Service. Why is it valuable to consider all the stakeholders in this particular example?
3. Calculate your lifetime value for three service organisations that you use – for example, supermarket, clothing retailer, music download website, bar or bank. What are the problems in assessing lifetime values?
4. Reread the case example 'Revenge of the taxi driver'. What do you think are the problems of platform services such as this rating both providers and users of a service?
5. Reread the case example on the Harley Owners Group (H.O.G.). Why does Harley-Davidson put so much effort into promoting this club?
6. As described in the chapter, some customers abuse service providers. How would you: (a) try to reduce the number of customers who return garments that have been worn to an online clothes retailer; and (b) reduce the number of clients who do not turn up for their hair appointments?

Case exercise

P-Mecxx Cyber Services (P-Mecxx)

In today's risk environment, no one is immune to security breaches and data loss incidents. But we believe that we are particularly well equipped to help to identify vulnerabilities, and close those gaps that put our clients' systems at risk. We know that information security issues, such as data breaches and employee misconduct, are a persistent worry for all types of organisation, but particularly those operating in financial markets. They are particularly sensitive because they know that cybersecurity challenges put sensitive data at risk and can cost them time, revenue, and most importantly, reputation.

(Travis Bickley, CEO and Managing Partner, P-Mecxx Cyber Services)

P-Mecxx Cyber Services (known internally simply as P-Mecxx) was a European vendor of cybersecurity systems and consultancy advice. Originally a division of a general risk management business, based in London and Frankfurt, it was split off after the financial crisis in 2008 forced its parent company to divest some of its businesses. It became a small, but focused consultancy, specialising in cybersecurity mainly in the financial services industry. After a difficult period, it developed a reputation as a technically knowledgeable, rather 'geeky' firm, that could be relied on to be up to date on current cybersecurity risks – a fast-moving area – and provide industry-recognised cyber-experts who could help clients towards high levels of cyber-resilience. P-Mecxx put most of its service and support efforts into selecting the most appropriate systems and operating practices for its clients.

Services

The firm offered what it called 'end-to-end cybersecurity software and consulting services'. It did not create its own software, but was a registered agent for several cybersecurity systems providers. Although it was resource-intensive to keep familiar with so many providers' products, it did allow P-Mecxx to recommend the most appropriate products for its clients, and for some of its clients with more complex needs, it could 'pick and mix' from several providers' products to create more bespoke and scalable cybersecurity solutions. But, although

the firm's knowledge of cybersecurity systems was important, Travis was keen to stress that it was the total package of service that its clients were wanting:

Our mastery of the currently available systems is vital, otherwise we would not spend so much time, effort and expense keeping abreast of that world, but what really counts is setting cybersecurity into the context of risk management. We have tried-and-tested protocols to conduct a full range of internal and external assessments to evaluate clients' systems and applications, including cyber-risk assessment and analysis, vulnerability assessment and penetration testing, wireless security assessments and process review. After this, we have all the expertise and resources to investigate and help identify the source of any intrusion and evaluate how to best safeguard systems from future attacks. Most important, we can protect our clients' reputations and help them re-establish trust with the stakeholders who have been impacted by any security breach.

The future

It's fair to say that for the last ten years we have been establishing ourselves in the market by focusing on our internal resources. People with the right blend of technical and advisory expertise are difficult to find and retain. But we have a good remuneration package and I like to think that we provide the kind of working environment that helps our people to develop. Now we must move to a new phase. It's time to understand our markets better. So far, we have assumed that all customers are more or less the same, they just vary in their security budget, but this is patently untrue. The fact is that different clients have different needs, and we must understand them better.

(Travis Bickley)

The senior team at P-Mecxx decided to launch three related initiatives as a starting point. The first was to estimate the business value of its clients by calculating each client's customer lifetime value. The second was to attempt to distinguish between

its different customers, the better to understand their needs and to assess their overall satisfaction with the service that they were receiving. The third was to streamline the way in which the firm interacted with its clients, probably by adopting some kind of key account structure.

Using customer lifetime value

P-Mecxx had used customer lifetime value (CLV) calculations shortly before the split from its old parent group, but its use had ceased after the split. Now it had come to believe that without measuring CLV, it was in danger of spending too much to acquire customers whose lifetime value was not going to be worth the cost. It would also identify the most valuable group of customers in what was then an emerging market:

We believed that it was going to be important to focus on providing customer relationships that were tailored to their individual corporate needs. Only by doing this could we differentiate ourselves from the growing number of consultancies that were offering similar services.

(Travis Bickley)

The firm measured CLV by assuming the length of customer lifespan would be, on average, at least five years, retention rate would be very high during this time, and the average profit margins per customer would be predictable, depending on the nature of the contract with the client. Of the several different ways of calculating CLV, the firm used the simple and traditional formula on a historic basis. Historic CLV is based on existing customer data from a specific period of time. This led to the simple formula as follows:

$$\text{CLV} = (\text{Annual revenue per customer} \times \text{Customer relationship in years}) - \text{Customer acquisition cost}$$

Client segmentation

You have to be careful when trying to segment a market such as ours. Every client believes they have unique issues, although in fact the problems are fairly common. What differs is the nature of the solutions that they need. Also, remember that segmentation is not an objective classification. It's an artificial construct that we put on the market so that we can better understand it. This is especially true of a consultancy where the clients are actually asking us to tell them what kind of clients they are.

(Travis Bickley)

In fact, P-Mecxx informally classified its clients by how actively they required intervention and advice on an ongoing basis. This varied considerably. Some clients simply required a straightforward risk and vulnerability assessment followed by help in installing appropriate security software and procedures, with little or no follow-up support. At the other extreme, some clients with higher levels of vulnerability wanted more extensive systems and advice together with periodic support as new risks emerged. This spectrum of client requirements more or less corresponded to their CLV. The CLV of the clients with particularly demanding requirements was up to 10 times that of some less-active clients. This led to the firm classifying clients as either 'low-contact', 'medium-contact' or 'high-contact'. Table 5.5 shows the number of registered clients (with currently active contracts) in each category.

The attitude survey was particularly revealing, the results of which are shown in Table 5.6. What surprised almost everyone in the firm were the relatively poor results from the medium-contact clients. However, some of the senior team were less than happy with the survey.

Table 5.5 P-Mecxx clients, classified as either, low-, medium- or high-contact (previous financial year)

Type of client	Number of clients	Average CLV (€0,000)	Annual revenue (€0,000)
Low-contact	42	47.7	2,003.4
Medium-contact	164	107.7	17,662.8
High-contact	64	372.1	23,814.4

Table 5.6 The satisfaction of clients with the service they receive from P-Mecxx

Type of customer	Percentage reporting as 'very satisfied'	Percentage reporting as 'satisfied'	Percentage reporting as 'less than satisfied'
Low-contact	40.2	53.1	6.7
Medium-contact	21.9	56.0	22.1
High-contact	47.9	49.9	2.2
Average	31.2	54.8	14.0

We hired a specialist agency to survey our clients, and looking back at the questions that they asked, I believe that there was a bias towards rating overall satisfaction as 'less than satisfied' when only a relatively small problem had occurred. Nevertheless, although I think that the results look worse than they actually are, we need to think about how we can make better connections with our clients.

(Travis Bickley)

the client. It was a practice that had worked well for a number of years and the firm was considering designating key account managers for all its clients.

Obviously, we will have to make sure that all consultants have a portfolio of clients to look after, with the more senior people having a higher proportion of high-contact clients.

(Travis Bickley)

Key account management

Although P-Mecxx had never had a key account management (KAM) programme, it had informally had a senior consultant designated as being responsible for relationships with the top (in terms of revenue) 50 or so clients. Usually, the responsible consultant was the one who had originally made contact with

Questions

1. What advice would you give to Travis Bickley regarding the way the firm classifies its clients?
2. What should be done to improve its relationships with its clients?
3. Is the adoption of key account management a good idea for P-Mecxx?

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Notes



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Chapter 6

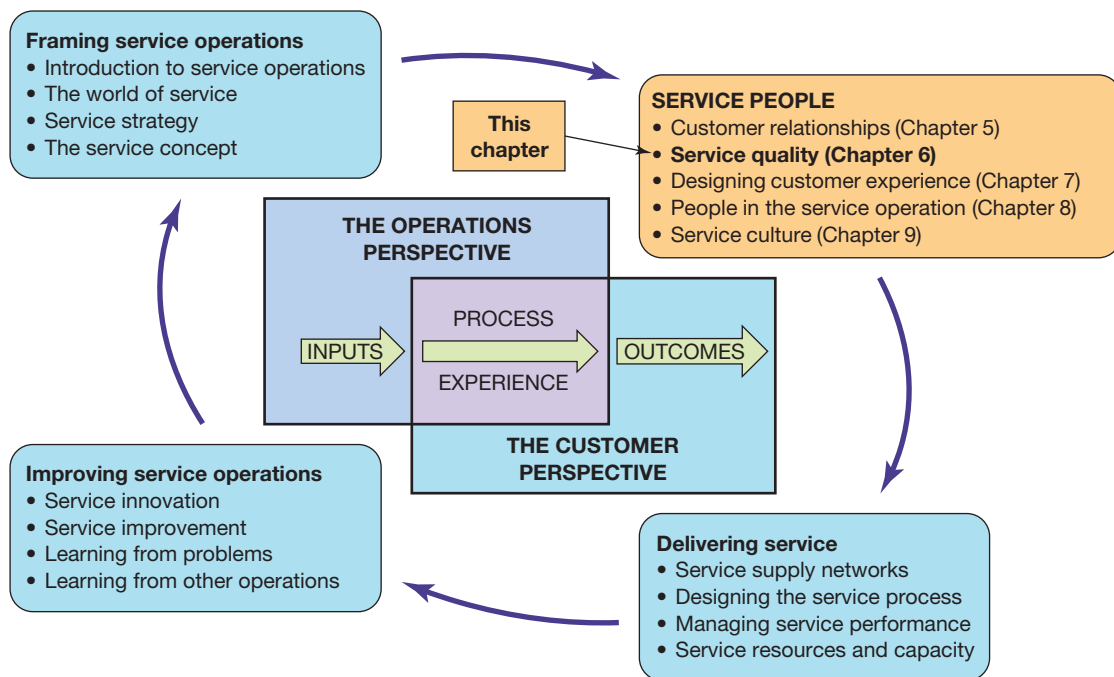
Service quality



This chapter is about the nature of customer satisfaction, service quality and how service quality can be measured and managed. It develops the idea that service quality is best thought of as the gap between customers' expectations and perceptions. After which, it looks at how customers' expectations and perceptions can be managed and operationalised. Figure 6.1 shows where this topic fits in our model of service operations management.

Learning objectives

- To be able to explain the basis of customer satisfaction
- To be able to define service quality in terms of customers' expectations and perceptions
- To understand some of the issues involved in how expectations and perceptions can be 'managed'
- To be able to list some of the factors that can be used to operationalise service quality

Figure 6.1 This chapter looks at service quality

Introduction

Just as service can be seen from two perspectives – service provided (the operation’s) and service received (the customer’s) – the quality of the service can also be defined from these same two perspectives – operations service quality and customer-perceived quality. Operations service quality is the operation’s assessment of how well the service was delivered to its specification. Customer-perceived quality is the customer’s judgement of (satisfaction with) the quality of the service – their experience, the quality of the ‘products’ and the perceived benefits – compared to their needs and expectations.

In terms of customer-perceived quality, operations managers need to understand, and influence, their customers’ expectations to ensure they provide a service that meets or possibly exceeds those expectations. If, as a result, customers are satisfied, or indeed delighted, they are more likely to become valuable customers who not only use the service again but are positively disposed towards it and may even recommend it to others. This disposition is sometimes referred to as customers’ post-purchase intentions. Customers are the ultimate arbiters of the quality of the service.

The need to satisfy customers is intuitively obvious; however, this assumption can become a problem for organisations. Rather than asking and checking what customers really want, an organisation can simply make assumptions that turn out to be false. Customers may have been consulted at one time, but their needs and wants inevitably change over time. Without review, the understanding of customer needs can at best become irrelevant, and at worst can be damaging to the service operation and its customers. Such ‘blind spots’ can develop in any service environment, but professional services, where customer needs can be ambiguous and service is delivered by ‘expert’ service providers who may think that they know best what customers need and want, are more vulnerable than most.

Worked example

Europa Conference Centres (ECC)

We learned a valuable lesson,

said Katherine Stratford, Chief Facilities Officer, ECC.

No matter how much experience you have, or how confident your consultants sound, it is always a mistake not to ask your stakeholders before committing resources.

ECC provided a range of business services, from temporary office space and meeting rooms, to large-scale, 3,000-delegate conference and meeting centres. The company, whose conference centres were located in major metropolitan areas around the European Union, had been extraordinarily successful when it began to expand its provision for the most popular small- to medium-sized (300-delegate) conferences and meetings. The plan was initially to acquire 10 sites around the EU and to build a range of dedicated conference facilities. A key component of the service would be the 300-seat theatres. ECC sought tenders from a number of architectural firms, and selected architects with a track record of designing energy-efficient and 'green' buildings with use of passive cooling, natural light solar energy and ground heat pumps.

The winning architects designed a lecture theatre with large windows behind delegates to provide natural light for note-taking. However, when, quite late in the commissioning process, a number of presenters were consulted, they pointed out that the bright natural light could at certain times of the day wash-out projection screens. One presenter also commented that he was likely to get a migraine headache at certain times of day from having to look towards the bright daylight. The passive cooling design also required remotely operated high-level window vents to be opened in advance of presentations so as to begin the air circulation on which the system depended. More

sceptical facilities managers commented that it was likely that the vents would be open late in the day, and, as a result, summer temperatures in the theatres would be very high. Additionally, there was concern that in northern Europe, the commonplace rainy day would result in water falling on delegates. The ECC commissioning managers recognised the problems but thought the architects' designs were so exciting that they would go ahead anyway.

What the company did

ECC had built three of the new conference centres when problems started to become apparent. Delegates would often complain about overheating, but the most frequent complaint concerned the natural light from behind delegates' heads. Delegates could not see the washed-out screen, as was predicted, but nor could they see the laptop and tablet screens on which they took notes. Inevitably, both delegates and presenters asked for the shutters to be closed over the rear windows. The only trouble was that this action closed off any opportunity for emergency venting of a lecture theatre that became too hot.

We halted the rollout of the new build after two years and decided to modify the theatre design. The new design incorporates traditional (albeit solar-powered) air conditioning, as well as a 'standard' but artificial lighting suite. Most importantly, we have modified our commissioning and facilities management processes to ensure that there is always a user panel that advises facilities designers at an early stage, and has the power to veto designs if they feel they don't meet customers' requirements.

In addition to developing a way to conceptualise customer-perceived service quality, we also need to consider operational service quality. Service operations managers need to create a specification for their service that reflects customer needs and expectations, and evaluate the extent to which delivered service meets this specification. Both are problematic; however, let us start by examining perceived service quality from the customer's perspective.

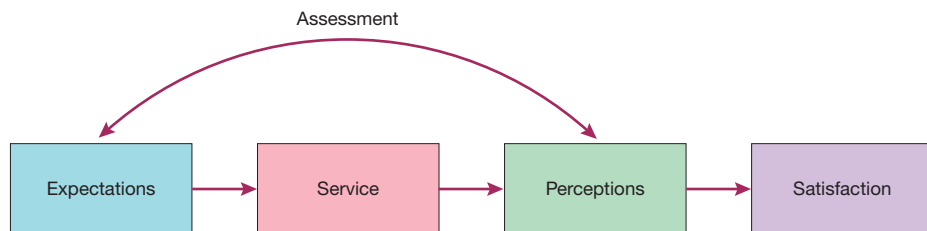
6.1 What is customer satisfaction?

In a service encounter, customers respond to the service they received, and make a comparison between their expectations and their perceptions of that service. The comparison may be rational, emotional or, more likely, a combination of conscious judgement and more general feelings about the service.¹ The result of the comparison is what we refer to as ‘satisfaction’ or, more accurately, a ‘level of satisfaction’. On receipt of service, customers may not think in abstract terms about ‘service quality’ as such, but instead arrive at a state in which they are satisfied or dissatisfied to varying degrees. Similarly, the variable that is judged will not be the single variable, ‘service quality’, but rather a composite assessment of service aspects such as ‘service products’, benefits obtained, value for money and so on. Figure 6.2 illustrates this comparison of perceptions and expectations, which is the basis of customer satisfaction, and our conceptual understanding of service quality.

The understanding of what satisfies and delights customers requires continual review using a variety of methods and questions. Old questions generally result in old answers, and old categorisation models can result in new answers and new information falling into well-established patterns. Customer satisfaction can be managed obviously by changes to service delivery, but also to some extent by influencing customers’ perceptions and expectations of service delivery. The ability to influence demands a comprehensive understanding of the nature of customer satisfaction.

It is no accident that companies with a reputation for excellent service spend time and money listening to customers. Disney, for example, invented its own term for the activity of collecting information from customers: ‘guestology’ reflects Disney’s approach to treating its visitors as guests rather than mere ‘customers’.²

Figure 6.2 Customer satisfaction



Case example

Guestology at Optiker Söderberg³

Optiker Söderberg is a chain of Swedish opticians. The company has 11 retail outlets in Gothenburg, Borås and Jönköping and sells prescription and fashion eyewear. Latterly, the company has begun to sell high-end hearing aids. All outlets have at least one consulting room for eye and hearing tests. In each city is a ‘hub’ store, which has a lab that can make up prescription lenses and fabricate custom-moulded

hearing aids. The hub stores support the satellite stores.

Founder, owner and managing director Paula Söderberg was formerly a consultant ophthalmologist, but after reading for an MBA degree decided to leave healthcare and move into the eye care industry. Paula wrote her MBA dissertation on ways in which service businesses had learned from The Walt Disney

Company. When Paula set up her first store, she was keen to incorporate the Disney principles of customer satisfaction, or 'Guestology', into the store design.

Paula could see that there was huge potential in increasing satisfaction levels to the point where repeat use of her service was almost guaranteed:

Once a customer needs glasses, that need rarely goes away, but there are many other low-cost operators who can fulfil that need, more recently via online sales.

Worse, customers routinely get cheap or free eye tests in traditional stores and then take the prescription to the online seller. It is usually difficult to compete on price with the online stores or the larger chains, but by providing exemplary service, I can and do hold on to customers.

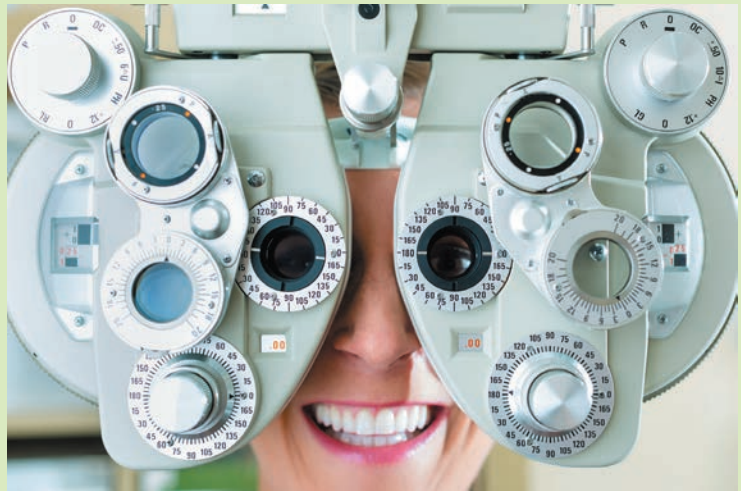
Walt Disney's philosophy of how he wanted to serve his guests was simple. Keep it clean, keep it friendly, make it a real fun place to be. The result is a guest experience that keeps park visitors – and their wallets – returning over and over again.

Paula explained some of the Guestology principles that she had incorporated into her customer service manual, and which she applied to make Optiker Söderberg such a success.

Know when you are on stage

Disney guests do not want to overhear Princess Jasmine complain about last night's argument with Aladdin. When Disney employees (aka cast members) are on stage, and in view – or within earshot – of guests, they are not allowed to have a bad day. Cast members are expected to leave their problems at the door, staying in character at all times. So it is at Optiker Söderberg:

We have on-stage and off-stage areas for our staff members. If they need to have a coffee, snack, rant about a difficult patient, or talk their teenager through the latest Instagram-induced calamity, they are required to make sure it takes place off-stage.



Kzenon/Shutterstock

Seek out interactions

Disney cast members take great pains to engage and interact with guests – they do not avoid them. For example, if a cast member notices a family struggling to fit everyone into a selfie, she offers to take the photograph. Guests who visit to celebrate a birthday or special event are given a badge to wear. The badge signals to cast members that they are to receive special treatment and splendour everywhere they go.

The pace of operations in our stores can make patients seem like a nuisance. But I always remind my staff: your patients are the reason you have a job, and they are the reason your practice exists. So I say, the next time you're tempted to rush past a customer to the checkouts, don't. Instead, slow down, smile, and have a talk. Complement them on their choice of spectacle frames for example. Always check the patient's test charts for their birthday. If it is close, then wish them well. Making patients feel like guests . . . feeling special and cared for makes all the difference, and will bring them back.

Rethink where the magic begins

One thing that Disney thought a lot about is where the customer experience starts and finishes. For the Disney parks, the start point is most likely the guest car park, but could also be the exit ramp from the highway. In the journey from home to the customer experience, the guest encounters challenges that might

be outside the service, but which will nonetheless colour perceptions of the service. The car park should be clean, security should be visible, signage will be obvious, and cast members are everywhere. Why does Disney dedicate so many resources to such a utilitarian space? They know that a bad first impression is notoriously difficult to overcome (see the section on the zone of tolerance later in this chapter). If a guest navigates the 300 m car park, is greeted by litter and oil stains on the ground, then treks 2 km to the park entrance, it is going to take a lot of 'magic' to return the guest to a happy state of mind.

So it is at Optiker Söderberg. Our patients' experience does not begin in the examination room, or even in the waiting room. It may begin with a phone call, and yes, in our parking lot. I say to

all at Optiker Söderberg, take the time to identify places where an important 'first impression' could occur. Then, make sure our practice is represented well. Is there enough lighting in our car park? Are any bulbs broken? How about all those kids toys and magazines in the waiting room? Are they clean and tidy, are the magazines out of date? It's easy to overlook these details, but everyone needs to make an effort to see things from the patient perspective.

Paula planned further growth of Optiker Söderberg by acquisition. Many independent opticians in Sweden were struggling to compete against the large chains and online retailers. These smaller outlets were ripe for acquisition and nurturing, using Guestology principles.

Figure 6.3 extends the idea that customers' summary judgement of service quality will be a 'level of satisfaction' on a continuum. If customers' perceptions (P) of the service match their expectations (E), we have $P=E$ and so customers should be satisfied (or at least satisfied).⁴ If customers' perception of the service exceeds their expectations ($P>E$) then they will be more than satisfied, even delighted. If customers' perceptions of the service do not meet their expectations ($P<E$) then they may be dissatisfied, even disgusted or outraged. The main point of the illustration, however, is that satisfaction is a variable on a continuum, from extreme delight to extreme dissatisfaction. As such, satisfaction is amenable to measurement or quantification. In the figure, we use a +5 to -5 scale to represent scale points in this continuum.

So far, the discussion, as for most of this chapter, is concerned with customers' overall assessment of service. However, services can be complex, and involve several stages. The customer can react positively to one stage, and negatively to the next. While service managers need to appreciate satisfaction levels overall, there will inevitably come a point, usually when they are trying to improve service, where they need to deconstruct the assessment and understand how the customer reacts to individual steps (transactions or 'touchpoints'). This kind of deconstruction

Figure 6.3 The satisfaction continuum

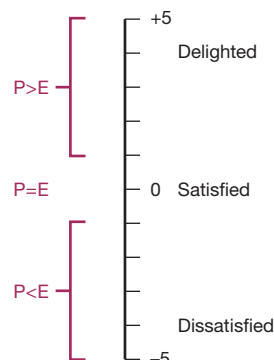
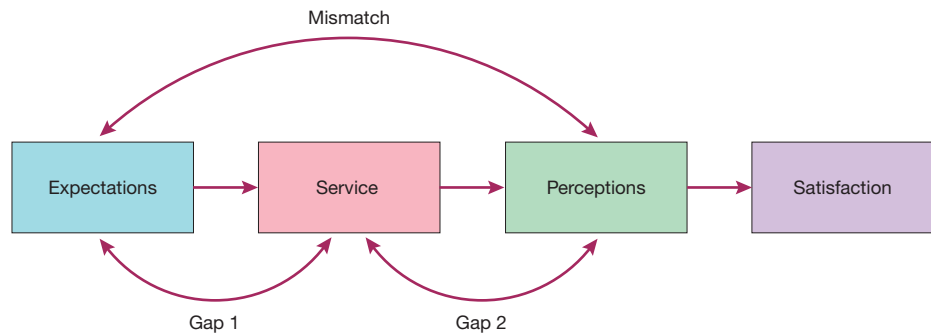


Figure 6.4 The simplified gap model

Source: This is a very simplified version of the gap model developed by Parasuraman, A., Zeithaml V.A. and Berry L.L. (1985) 'A conceptual model of service quality and implications for future research', *Journal of Marketing*, 49 (4), 41–50.



leads to an understanding of what is often referred to as ‘transaction satisfaction’, and we will explore the idea in more detail in the section on managing perceptions later in this chapter, and in Chapter 7.

The perceptions–expectations gap

If there is a mismatch between perceptions and expectations, this, in simple terms, is usually caused by either a mismatch between expectations and the service (Gap 1) and/or a mismatch between the service and customers’ perceptions of it (Gap 2). Figure 6.4 illustrates the two gaps.⁵

There are several reasons why Gap 1 might exist: the service may have been inappropriately specified, designed or enacted, or there may be insufficient resources to meet expectations. It is also possible that the customer may have inappropriate expectations. An inappropriate specification or design for the service may be the result of managers’ imperfect understanding of customer expectations. Managers may have not put enough time and effort into either specifying the service or obtaining feedback from customers about what they feel to be an appropriate type or level of service. Insufficient resources may be the result of, for example, an incomplete understanding of market requirements or demand profiles.

These ‘internal’ cause factors for Gap 1 can stem from a lack of determination to design for and deliver consistent standards. A common complaint by service operations managers is that their organisation does not commit the investment required to understand what customers need, and when they need it. The result is that the service design process is flawed from the outset. The design flaws result in poor delivery and resource utilisation.

Inappropriate expectations may be the result of unsuitable marketing, over-promising by the organisation and ill-advised word-of-mouth referrals. The customer may also have pessimistic negative expectations as a result of an adverse organisational image, which in turn derives from past service experience. It is also worth noting that service operations will have to deal with a proportion of customers who have quite unrealistic expectations, and who can be a great nuisance as a result. The expectations of such customers need to be reshaped before or during service delivery, or alternatively, and if feasible, a decision can be made to remove these customers.

Gap 2 could be the result of either incorrect provision of a service, or customers perceiving the service in ways not intended by the service organisation. Incorrect provision is not unusual in service organisations. Service operations are often complex, human-based activities where things do go wrong. A mismatch as a result of poor service provision would ideally be ‘designed out’ at some point, but can also be removed or at least reduced through service recovery (see Chapter 16). The problem of customers perceiving the service ‘incorrectly’ is also fairly commonplace. For

example, healthcare services or car maintenance services are such that customers can make judgements about outcomes, but may have little or no idea about whether the delivery process conforms to specification. In other words, customers in such contexts find it difficult to judge service provided or operational service quality. They would need a medical degree or mechanics training to make informed judgements. Instead, the customer makes judgements on the basis of partial aspects of the experience and delivery process: hospital food, or the coffee in the garage waiting room, respectively.

Additionally, customers' perceptions of operational service quality may not be the same as the quality of the service received, because customer-perceived quality is by definition a matter of personal perception (see the section on perceptions that follows).

Table 6.1 summarises the cause factors underlying the gaps that result in dissatisfied customers.

Disadvantages of the expectation–perception conceptualisation of customer-perceived service quality

While the expectation–perception approach to understanding perceived service quality is extremely useful in focusing on the outcome of customer satisfaction and helps identify mismatches between operational and customer views of quality, it does have several disadvantages:

- *Service could be perceived to be 'good' when it is 'bad'*. For example, if customer expectations are particularly low (and indeed may have been deliberately created that way), poor operational service quality may be perceived as highly satisfying because expectations have been exceeded. For example, many online shopping services will promise delivery lead times that are longer than are achievable by the service provider. When the customer receives a notification that their item has shipped early, they are rarely disappointed and satisfaction, or even delight, is the result.
- *Service could be perceived to be 'bad' when it is 'good'*. For example, if expectations are very high due to over-promising, then what is actually a good operational service may nonetheless be seen as inadequate.
- *Service that was 'good' last time may only be 'OK' this time*. If a service was perceived to have been 'good', then the customers' expectations may be raised for next time; thus, they may well be less satisfied on subsequent occasions, despite the fact that the operational quality of the service has remained unchanged. This problem of rising expectations is often encountered by the Disney organisation. Visitors' first encounter with the Magic Kingdom is often so good, so much better than expected, that subsequent visits are sometimes reported to be poorer in quality, i.e. less satisfactory.
- *Satisfied customers may switch*. Even though a particular service may meet customers' expectations so that customers are satisfied, if there is a choice, customers may nevertheless switch suppliers. Alternative service providers may offer a superior level of service, additional service features, or customers may be naturally disloyal or inquisitive. Customers can also be actively encouraged to switch by consumer advocacy groups, dedicated switching websites and national governments.

Table 6.1 Reasons for gaps

	Gap 1	Gap 2
Internal causes	Lack of understanding of customer expectations Inappropriate specification and/or provision Poor service design Insufficient resources	Incorrect or inappropriate service provision
External causes	Inappropriate expectations of the service experience and/or outcomes	Inappropriate perceptions of the service experience and/or outcomes

Case example

uSwitch⁶

Judging service quality on the gap between perceptions and expectations is generally a robust approach, but it can lead to some anomalies. Take the example of uSwitch, a price comparison service based in the UK. The service is available via phone, or through its website uSwitch.com. Consumers can compare prices for utilities such as energy, broadband and phone services, as well as personal finance and insurance. The company also has a business arm: uSwitchforBusiness.com. There are no direct costs to switchers, with uSwitch earning its money from supplier commission should a user decide to change supplier. Additionally, uSwitch earns money from supplier payments, which increases its exposure on the uSwitch websites. uSwitch has a remarkable record of honesty and transparency. Of the 3,742 uSwitch reviews on Trustpilot, 90 per cent are 'Excellent', and the company's overall score is 4.7/5. The uSwitch reviews on Trustpilot are overwhelmingly positive, and a common feature of the reviewer comments relates to clarity and accuracy of

communication. Not every experience is perfect, but often problems with the service derive from problems with the referred energy supplier. uSwitch has also, not surprisingly, received many industry awards for the clarity of its communication. The company was the first comparison website to achieve the Plain English Campaign's Internet Crystal Mark and it is accredited under the UK Office of Gas and Electricity Markets Confidence Code.

However, although the service from uSwitch is regarded as excellent, consumers switching via uSwitch do not necessarily receive better service quality with their new supplier. They may have been perfectly satisfied with what could have been an undifferentiated utility service. The switching decision may have been taken largely on the basis of price. Other customers may not switch, even if the uSwitch service has been outstanding. So, notwithstanding high levels of satisfaction, provided it reaches a qualifying threshold, service quality may have little impact on switching behaviour.

When it comes to measuring satisfaction, we need also to measure the customers' post-purchase intentions; in particular, will they return? (See the section on the Net Promoter Score in Chapter 12.) Consider, also, that some dissatisfied customers will not, or perhaps cannot, switch (please see the counterpoint example on airlines towards the end of this section).

These issues reinforce the need to link closely the creation of expectations in the minds of customers with the capabilities of the service process – that is, to communicate messages, set appropriate expectations, design and deliver service to meet these expectations and manage them during the service process. However, as the Le Berceau des Sens case example illustrates, on occasion, managing and measuring expectations is not always straightforward. In that restaurant, customers agree to participate and to co-create not just a meal, but a learning experience. This makes the setting of clear expectations a challenging exercise. More generally, the greater the degree of co-creation, the more one pushes against the limitations of the perceptions–expectations conceptualisation of service quality. (We explore this issue in more detail later under 'Fuzzy expectations'.)

Case example

Le Berceau des Sens⁷

Le Berceau des Sens (the cradle of the senses) is a fine-dining restaurant in École Hôtelière de Lausanne (EHL), a famous school that is consistently rated as the best hospitality school in the world, and where

the teachers cook with the help of their students. The restaurant offers a contemporary culinary style, based on use of seasonal and fresh local products of the local area (Canton Vaud), with the cuisine scoring

exceptionally high marks and every dish showing great finesse, accompanied by impressive service. The décor of the restaurant, like EHL the school, is contemporary, and it is set in the hills above Lausanne, overlooking Lac Léman. In 2019, Le Berceau des Sens earned a Michelin star, and is unique in being the only school-run restaurant to earn this accolade. What is interesting about the Michelin entry for Le Berceau des Sens, is that Michelin make no 'allowance' for the fact that Le Berceau des Sens is a training restaurant. The service succeeds on its own merits, regardless of its unique operations.

Customers both value and make allowances for the special nature of the restaurant staff. A typical comment is:

... it is only fair to remember that this is a training establishment, and diners must make allowances for nerves, shyness, or slightly slower service than in a restaurant offering comparable cuisine at more than twice the price. I love dining here because it is stimulating to meet students from all around the world who share a commitment to becoming the high-flyers in a very demanding industry.

Guests are served by students on EHL's *l'année préparatoire*, a practical application year in which students learn about real hospitality operations before they begin their academic studies for the Bachelors in Hospitality Management. At the table, students are introduced to all aspects of service in a fine-dining restaurant. When they start, some students can be shy and hesitant, but all are keen to learn and work hard. Their teachers supervise in a firm, but benevolent and supportive style so that students are enthusiastic and motivated.

Customers are clearly managing their own expectations, and service elements that might elsewhere result in negative perceptions are, at Le Berceau des Sens, a source of delight. And, while guides such as *The Michelin Guide* are clear about the derivation of their rankings, customers' expectations are influenced by a range of inputs and information concerning the teaching nature of the restaurant. Customers also talk about the charming or 'cute'



SEBASTIEN BOZON/AFP/Getty Images

nature of minor student failings. Another typical comment is:

... excellent restaurant from the staff, professors and students of the top hospitality school in the world. Obviously the chef is not a student but very experienced and has worked in some of the best French restaurants. However, most waiters and waitresses are going through the very demanding curriculum of the best hospitality school in the world. Very occasionally they do make mistakes, minor ones that do not affect the overall quality, but they are cute and eager to learn. The food is excellent, creative and certainly deserves a detour.

Clearly there is more going on here than a dining experience. As another commentator put it:

... It's great cuisine paired with an interesting experience, or perhaps the other way round ... [The students] try very hard with great charm and sometimes make eminently forgivable mistakes. Their tutors take such occurrences very seriously and act on them immediately: while feeling a bit sorry for the 'offender', you also really feel a part of the learning process ...

Another insightful commentator maybe puts their finger on an aspect of Le Berceau des Sens that is less obvious than the issues discussed above, but is perhaps critically important to the charm of the

restaurant, and that is the potential for interaction and immersion:

... It's interactive, great food and at a good price too ... Interactive with learning students that get smartly/invisibly corrected by their teachers. Go there knowing that you will be served by someone who probably never served in his/her life. With that in mind you will enjoy the little mistakes and will be able to see the teachers around correcting and giving advice to future hospitality

managers. It is to me a chance to experience first-hand the students learning by taking care of you. Don't mistake the words above, everything is impeccable and you will be well served and taken care of.

In becoming a customer of Le Berceau des Sens there is an implicit agreement to participate in a bigger learning experience. Many customers really enjoy this idea ... of not just dining, but being a part of something special.

Confidence

Before we spend time developing the notion of customer satisfaction through a better understanding of customer expectations and the formation of perceptions, we would like to introduce the related but distinct notion of customer confidence.

Whereas satisfaction is an assessment by the customer following a service experience, customer confidence, or the lack of it, does not require previous experience or contact with the service organisation. Customer confidence is an important notion for all organisations, and especially those where most people may have no or little routine and direct contact. Examples include social services, police, fire services, coroners' courts, hospitals, local schools and legal services.

Confidence is about having belief, trust or faith in an organisation, its staff and services. Our feeling of confidence in organisations such as the police will not only affect our feeling of well-being and our quality of life but, importantly, it may well influence how we interact with that organisation. This means our predisposition towards it. For example, if we feel confident in the local police service, we may be more than willing to cooperate when caught for a minor speeding offence. Conversely, if the same speeding ticket is set against a background of rising burglaries, shoplifting and petty crime, we may be less positively predisposed to the police. Furthermore, if we feel confident in the police, we may be more willing to provide assistance as a witness at an incident, or provide information about suspicious events, or even support officers attending incidents (or at least not make their jobs more difficult). All of which helps to improve the performance of the police service itself. Confidence may also affect our willingness to fund the police through local taxation. For many organisations, understanding and measuring customer confidence may be more appropriate than customer satisfaction. Indeed, some people might argue that customer satisfaction is a wholly inappropriate measure to be applied to some of the police service's customers (i.e. criminals).

Case example

Banged up

In most countries, the prison service is one that receives minimal attention and care from society. The notion of 'satisfaction' is perhaps of little relevance to anyone except the members of government

departments who are customers of public and private prisons. However, 'confidence' is of huge importance to government customers, prison workers, and especially the families and friends of prisoners.

Families and friends have access to government prison performance ratings. Additionally, there are the independent reviews and handbooks published by various ex-convict organisations. The UK Ministry of Justice publishes its official statistics bulletin, which reports on many measures of prison performance. The bulletin provides a league table of prisons overall, and also provides information on the extent to which the various prisons address government targets for measures such as public protection, safety and order, reform, operational effectiveness, offender management, self-harm and so on.



Jack Sullivan/Alamy Stock Photo

Families' confidence in the prison service will vary considerably. A recent review of UK prisons by the UK Ministry of Justice revealed 33 per cent of prisons having performance that is 'of concern', and an additional 13 per cent with performance of 'serious concern'.⁸ In addition, the popular press features league tables rating prisons on overcrowding, violence, drug prevalence, cleanliness and food quality.

Offenders and their families generally do not have much say in where the offender will be incarcerated. There are some exceptions in respect of juvenile offenders, but generally criminals are imprisoned wherever there is space available. With most prisons in the UK being overcrowded, a prisoner could

be located anywhere. Approximately 25,000 prisoners, over one-third of the total prison population, are held more than 50 miles from the court town in which they were committed, though there is usually some attempt to locate the prisoner near to family, as visits and general contact with society are seen to help in reducing reoffending rates. The extremely unlucky prisoner could be accommodated at Dartmoor prison, which is rated as the least accessible prison in the UK. Any people visiting the prison must get a train to Plymouth, followed by a bus to the village of Yelverton and a six-mile taxi journey. Buses run only every two hours on Sundays.

Customer pre-service confidence is informed primarily by three societal characteristics, over which the organisation may have very limited control or influence. These are:

- *Personal beliefs.* Beliefs held by the individual about that organisation.
- *Media coverage.* For example, internet media, television (news or even drama) coverage of the organisation.
- *Word-of-mouth reports.* The communicated experiences of others.

But there are also three organisational characteristics that are subject to some degree of control and influence. These are:

- *Visibility.* The visibility and societal presence of the organisation, its services and its employees.
- *Familiarity.* Familiarity with the organisation's employees, services or abilities.
- *Communication.* Knowledge of the service and its abilities.

By managing these factors, organisations can have an important impact on their potential customers and the reputation, efficiency and effectiveness of the service they deliver. In the case of UK prisons, described in the case example, the communication by prisons is minimal. Filling the gap to provide at least a modicum of confidence for both offender and their families are organisations such as the Prison Reform Trust, which provide help, guidance and practical support.

Counterpoint

An interesting question is 'Is satisfaction always important?'. Certain sectors appear to be almost immune from the impact of poor customer satisfaction. In the airlines business, while there are penalties for poor performance (for example, for late or cancelled flights), these penalties do not appear to have much of an impact on profitability or repurchase intention. Customer service is writ large in airline advertising, but often is not an operational priority. Seat width and the sideways space between seats appears to shrink every year (while passengers get bigger). Baggage fees, and other hidden charges, are rife. Food, even when you have to pay for it, can be poor. Then there are questionable practices, such as charging a premium for families to sit together or deliberately separating family members, even if the aircraft is not full.

These issues aside, no matter how often customers complain about high ticket prices and supplementary charges, indifferent cabin service or long

delays, they continue to buy tickets. In part this may be because of limited choice of carrier on any particular route, but there may be other factors in play too. Some industry insiders believe that even the most aggrieved customers do not 'vote with their feet'. High load factors (full aircraft) may help to cover operating and capital costs but can also cause discomfort to customers. However, passenger complaints do not generally result in fewer ticket sales. Customers complain, but the airlines do nothing because the whole industry, with a small number of exceptions, operates the same way. Nor does the attitude of customers help the situation. For many, by far the most important consideration is low fares. Customers often purchase the lowest-price ticket despite poor consumer review reports, even when those customers' own experience of an airline has been poor. The generally accepted belief by both customers and the airlines is that price is the single most important issue. Customers are effectively accomplices in an industry-wide service failure.

6.2 What influences expectations and perceptions?

Since the degree of satisfaction, or dissatisfaction, is the result of customers' perceptions compared to their expectations, it is appropriate to spend a little time defining expectations and perceptions and explaining how they come about.

Perceptions

Our perceptions are our own personal impression and interpretation of the service provided, and so customers will perceive each service in their own personal, emotional and sometimes irrational way. We use our senses of vision, smell, touch, taste and hearing to experience the world around us and the services we receive. How we perceive a service (and all other events) depends upon the experiences each of us has had in our past, our culture, language, beliefs, values, interests and assumptions. The artist David Hockney said about art, 'We see with memory, which is why none of us sees the same thing, even if we're looking at the same thing.' 'Reality' is not always real. For example, much has been written about the placebo effect, where reassurances or incantations from a doctor (or other 'professional'), with or without a pill with no medicinal properties (or a professional's report), has a significant effect on many a patient's psychological and/or physical well-being.

A service received is what we each, individually, perceive it to be. For example, if the customer has had a privileged background and is used to being looked after, their experience of a high-class restaurant may well be quite different to someone from a more humble background (or a different country). While the privileged person may experience and perceive attentive staff and appreciate well-laid tables, the other person may find the staff obsequious and overbearing, and the number of knives and forks confusing or even anxiety inducing.

In service (and indeed in business and life situations) we may filter our experiences even more. Types of filtering include the following.

- *Selective filtering.* Where we tend to notice only what is relevant to current needs and ‘ignore’ other parts of the experience. The ‘privileged’ customer may notice a mark on the tablecloth and complain, the less-privileged customer may not even notice it.
- *Selective distortion.* Where we tend to modify and seek information that supports personal beliefs and prejudices. The European visiting a US restaurant may well notice the size of the portions being served, confirming their personal prejudices about US eating habits.
- *Selective retention.* Where we tend to remember only those things that are relevant to our needs and beliefs. After a restaurant meal, some diners may remember and talk about the quality of the food, others the state of the bathrooms, and others the attentive, or attractive, staff.

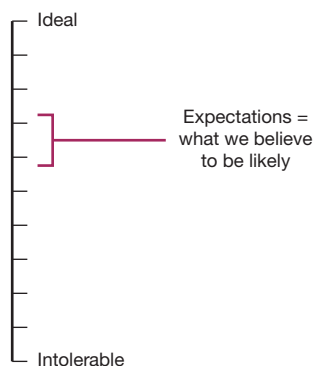
Expectations and the ‘zone of tolerance’

Our expectations of a service will lie somewhere on a range, or continuum, between ideal and intolerable (see Figure 6.5). An intolerable train journey may be one that arrives very late, or even not at all, where the carriages are filthy and the staff abusive. An ideal train journey might be clean, on time, very fast, and include chauffeur-driven transport at either end.

Some points on this continuum could be defined as follows:

- *Ideal.* The best possible.
- *Ideal feasible.* The level of service that a customer believes should be provided given the price or the industry standard.
- *Desirable.* The standard that the customer wants to receive.
- *Deserved.* The level of performance that the customer ought to receive, given the perceived costs.
- *Minimum tolerable.* The minimum tolerable standards – those that must be achieved.
- *Intolerable.* The standards that customers should not receive.

Figure 6.5 Range of expectations



An important point here is that we should be careful when asking customers about their ‘expectations’. The following questions, for example, would each provoke a different response, as they refer to different points on the scale:

- What would you like?
- What should be provided?
- What would be acceptable?

Our expectations, defined as what we believe to be likely – that is, what we believe will happen, rather than should happen – may not be a single point on our scale but a range. This range, or zone, of expectations, as shown in Figure 6.6, is sometimes referred to as the ‘zone of tolerance’ – the zone of what could be considered to be an ‘acceptable’ level of service by a customer.

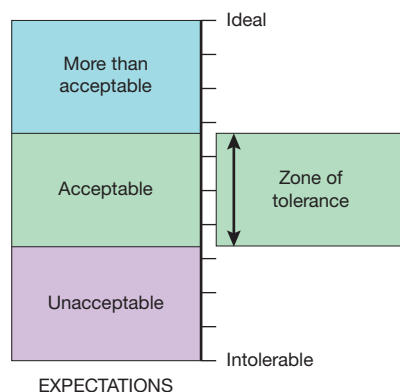
The importance of this zone of tolerance is that customers may accept variation within a range of performance, and any increase or decrease in performance within this area will have only a marginal effect on perceptions. It is only when performance moves outside this tolerance range that it will have any real effect on perceived service quality.

It has been suggested that the width of this zone of tolerance is inversely proportional to the customer’s level of involvement and commitment. This involvement refers to a customer’s level of interest in a service, the importance they attach to it and their emotional commitment to the service. For example, students who are highly engaged, committed to and paying for a particular programme of study will be sensitive towards the level of tuition provided. They will carefully scrutinise the quality of learning materials, the support provided for additional work and the quality of marking, for example. They will raise issues and concerns when things are not felt to be right. Less committed and involved students may be willing to accept whatever happens along the way.

Fuzzy expectations

Occasionally, customers’ expectations may be unclear because they may not be certain about what to expect from a service, although they may have quite clear views about what is unacceptable. This phenomenon, in which the customer has only a vague idea about what is required, has been referred to as ‘fuzzy’ expectations.⁹ A customer’s expectations as a whole may not be fuzzy, yet they may include several elements that *are* fuzzy. The customer may be clear about the general nature of a high-level outcome, but find that the detail of the requirement eludes them. In some cases these expectations may be implicit and not actively or consciously thought about by customers, but they may become explicit when expectations are either not met or exceeded. In some ways, service failure results in a redefinition of expectations.

Figure 6.6 Range of expectations and the zone of tolerance, or acceptable outcomes



Whether customers' expectations are fuzzy or crystal clear, operations managers have to be certain about the expectations they are trying to meet. They need to understand expectations, define them and then specify them to ensure that what they deliver meets that specification (see the section on service specification towards the end of this chapter). In many cases, this understanding will necessitate the provision of clear guidance to customer-facing staff to encourage them to ask questions to clarify the real needs of the customer. Staff need to be encouraged to break away from the assumption that what they are being asked for is actually what is required. Customers are often afraid of looking foolish in front of other people (both customers and staff), and may ask for something quite inappropriate, leading to eventual dissatisfaction and defection. Asking such questions of customers requires tact and extreme sensitivity. If it is done without sensitivity it is easy for the service provider to come across as presumptuous and arrogant.

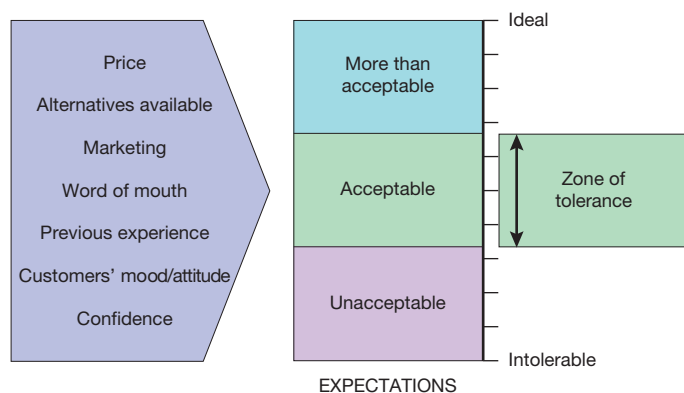
In trying to establish expectations against a background of customer uncertainty, service operations managers would be advised to revisit their service concept (Chapter 4) to identify possible gaps between what is in the mind of the customer and what is in the mind of the service provider.

Influencing expectations

The positioning of our expectations on the continuum between intolerable and ideal will be influenced by many things (see Figure 6.7). Our expectations about a train journey might be influenced by our previous experiences and the price we are paying, for example:

- *Price* often has a large influence on expectations. The higher the price, the higher up the continuum towards ideal are customers' expectations. Expectations of a customer flying economy class from Paris to Chicago will be at a different level to customers flying business or first class. All three customers will have similar expectations about safety and timeliness, but expectations about legroom, quality of food, attentiveness of the service and ease of check-in may vary considerably. Price is perhaps one of the most important influences as customers are concerned not just about the service and their experiences and outcomes, but also its value (see Chapter 3).
- *Alternative services available* will also help define and set expectations. If you know that one airline provides a limousine service when flying business class, you may expect other carriers to do the same.
- *Marketing* can have a considerable influence on expectations. Marketing, image, branding and advertising campaigns help set expectations, often at great cost to the organisation.
- *Word-of-mouth* marketing, which is less controllable than many other influences, can have a profound effect on a customer's expectations. Indeed, in certain situations, word of mouth may have a stronger influence than organisational marketing. Word of mouth is today systematised and amplified by web services such as Wirecutter, Tripadvisor and Trustpilot, as well as by the plethora of smaller niche websites that focus on specific service types.

Figure 6.7 Expectations – primary influences



- *Previous experience* will help shape expectations. Prior knowledge makes expectations not only clearer and sharper but allows customers to more accurately quantify their expectations. The modern customer can be armed with ‘experience in context’, when they compare their own history with quantified stories from the review websites. In this way, previous experience acts as a moderator on marketing information either from the organisation or via word of mouth. It is worth noting that previous experience may not be of the service provider in question but other service providers, and not necessarily those offering similar services. For example, our expectations for how we will be treated when we phone our electricity supplier with a query will be influenced by our experiences with other contact centres, such as other utilities, retailers or financial services. This aspect of customer comparison behaviour is often forgotten by service organisations. Being as good as any other organisation in your sector is not necessarily good enough!
- *Customers’ mood and attitude* can affect their expectations. Someone in a bad mood or with a poor attitude to an organisation may have heightened expectations; someone less concerned and more tolerant may have a wider zone of tolerance and thus a wider range of expectations.
- *Confidence* about an organisation, even before we have used an organisation, will also influence our expectations. If we have confidence in our child’s new school because of its reputation, for example, we may have a higher set of expectations as to how we and our child will be treated.

Expectations are also dynamic. They are not fixed on a continuum between intolerable and ideal – they will change over time and, indeed, during the service itself. Customers are continually consuming services and experiencing many service situations. Their expectations are under continual review and change. So, what a customer may have considered acceptable ‘last time’ may well be different ‘next time’, as expectations are influenced by the factors explored above.

Expectations of a service never used

Because our expectations can be based on what we believe to be likely, we therefore do not need to have experienced a service to have expectations about it. People who have not experienced a funeral may have some clear expectations about the nature, mood and style of the event, and more fuzzy expectations about the actual series of events. These may be quite clear and explicit if they have, for example, witnessed such events second-hand, on screen or in novels, for example.

6.3 How can expectations and perceptions be ‘managed’?

If service quality is to be defined as the difference between customer expectations and perceptions, it is reasonable for service operations managers to attempt to manage and influence customer expectations as well as managing (even manipulating) customers’ perceptions during the service process. In this section, we will cover this as well as expanding the discussion on the concept of the zone of tolerance.

Managing expectations

While one might argue that managing expectations is predominantly the role of marketers, operations managers also play two significant roles. First, it is the duty of operations managers to ensure the marketing and strategy functions within an organisation know the capabilities of the operation – that is, the nature and quality of service that the operation can deliver and, perhaps more importantly, what it cannot deliver. An understanding of operations capability helps the marketing function to influence customers’ expectations so that there is an increased likelihood those expectations will be met. Second, the operation has an opportunity to influence and shape customer expectations during the early stages of a service process. Setting the right expectations with the customer requires careful attention to the design of the initial process stages or steps of the

service, as well as the clues and messages sent to the customer by service providers and the service environment (see Chapter 7). For example, a customer entering a restaurant notes the way that it is set out and will draw conclusions about the level of service provided. If the tables and chairs are functional and there are no tablecloths or decorations, customers will expect simpler service than if they see a restaurant with plush seating, tablecloths and ornate decoration.

Managing perceptions, and the zone of tolerance

Managing customer-perceived quality during the service process is a dynamic activity. Figure 6.8 combines the figures from earlier in the chapter (the figures that look at levels of expectation and the zone of tolerance, and also the levels of satisfaction and dissatisfaction), and shows how expectations give way to a perception of satisfaction during the service process and the customers' experience of it. The figure shows the zone of tolerance extending from expectations, through the process/experience, to the level of satisfaction. In other words, the zone of tolerance has a time dimension as well as a range.

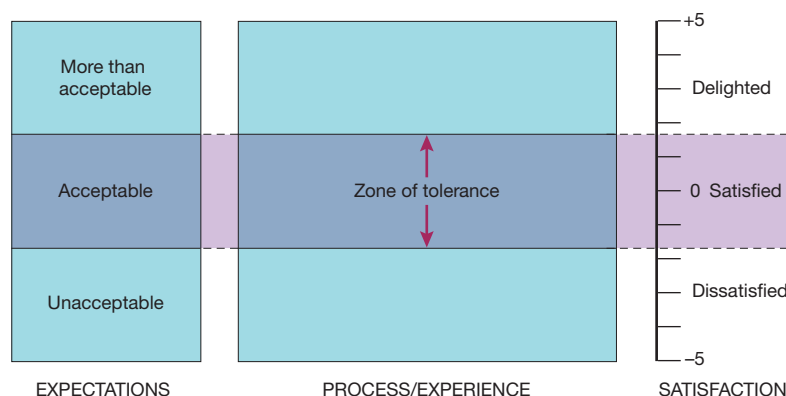
Peak, beginning and end experiences

Overall satisfaction may not be an 'average' of the customer's perception of satisfaction within the various stages of the service process. Overall satisfaction is heavily influenced by the strength of experiences felt when satisfaction was at its peak (best or worst) and how the experience felt at the end of the service process.¹⁰ This phenomenon is sometimes referred to as the 'peak-end rule'.¹¹ While a very good or very bad transactional experience will override other experiences, customers are also likely to be heavily influenced by the final stage (transaction) of their experience. By designing a good end to an experience we can manipulate customers' overall feeling of satisfaction (providing there have been no particularly bad experiences). We would also argue that the early stages in the process can also be important. These opening stages can set customers' expectations and create a good initial impression. Arriving at a hotel's reception where the customer is dealt with quickly and pleasantly, the forms are pre-filled only needing a signature and a glass of champagne – or other appropriate beverage – is offered, can lower the zone of tolerance so that follow-on, otherwise satisfactory, stages may be perceived as excellent. Similarly, many service providers, especially high-end hotels, will take great pains to assess satisfaction before the service experience ends. This is to provide time for an uplifting resolution to any problems. We can use the zone of tolerance to illustrate these phenomena.

Here, it is worth looking at the application of the zone of tolerance concept in Figure 6.8. The figure is a representation of a customer journey similar to a control chart (see also Chapter 15), but the data that informs Figure 6.8 is qualitative rather than quantitative. We will explain the development of this type of analysis in Figures 6.8 through to 6.15.

Figure 6.8 Managing perceptions during the process

Source: Adapted from Johnston, R. (1995) 'The zone of tolerance: exploring the relationship between service transactions and satisfaction with the overall service', *International Journal of Service Industry Management*, 6 (2), 46–61. Reprinted by permission of Emerald Group Publishing Limited.



Using the zone of tolerance idea, managers can first identify customer expectations – what is acceptable, less than acceptable and more than acceptable (see the section on operationalising service quality, later in the chapter) – and then assess the impact of each stage, touchpoint or transaction during the service process/experience. Deconstructing the service experience in this way helps managers understand how they can design their service to include interventions at appropriate times and places so as to achieve the desired level of satisfaction.

For example, if we consider a patient with an appointment to see a doctor for a routine medical examination, we might consider there to be seven stages (touchpoints) in the customer's journey:

1. arrival at the clinic;
2. reception;
3. waiting for the doctor;
4. introduction to the examination by the doctor;
5. examination;
6. discussion of findings;
7. departure.

Expectations will possibly have been managed (influenced) by the medical practice through, for example, its code of conduct, which informs patients that they should have to wait no longer than 10 minutes to see the doctor, that they will be treated with care and consideration, that their privacy will be respected, that all medical facts will be explained to them in a meaningful way, and so on (see Figure 6.9, which – for the sake of clarity – depicts just three of the many aspects of service on which customers would have expectations).

A number of outcomes are possible:

- Performance within the zone of tolerance results in satisfaction. Provided the customer's perception of the various transactions is not greater or less than acceptable, the outcome will be a 'satisfied' customer with a 'score' somewhere within their zone of tolerance (see Figure 6.10). Variation in the quality of service performance within the customer's zone of tolerance may not be consciously noticed, so for an organisation wishing to make an impact it will need to build-in positive (or maybe even negative) interventions.
- Sufficient incursions above the zone of tolerance threshold, particularly at the start or end of the process, will result in a highly satisfying outcome (delight). By introducing something that delights the customer (by introducing 'enhancing' factors – see the later section on hygiene and enhancing factors), the doctor's surgery may be able to delight the patient. For example, the receptionist greeting the patient by name, inviting them to take a seat and bringing them a coffee might be quite unexpected (at least on the first occasion) and delight the customer (see Figure 6.11). The satisfaction 'score' may not be the mean score, but delighting (and indeed dissatisfying) incidents like this may have the effect of skewing the resulting level of satisfaction.

Figure 6.9 Managing perceptions at a clinic

Source: Adapted from Johnston, R. (1995) 'The zone of tolerance: exploring the relationship between service transactions and satisfaction with the overall service', *International Journal of Service Industry Management*, 6 (2), 46–61. Reprinted by permission of Emerald Group Publishing Limited.

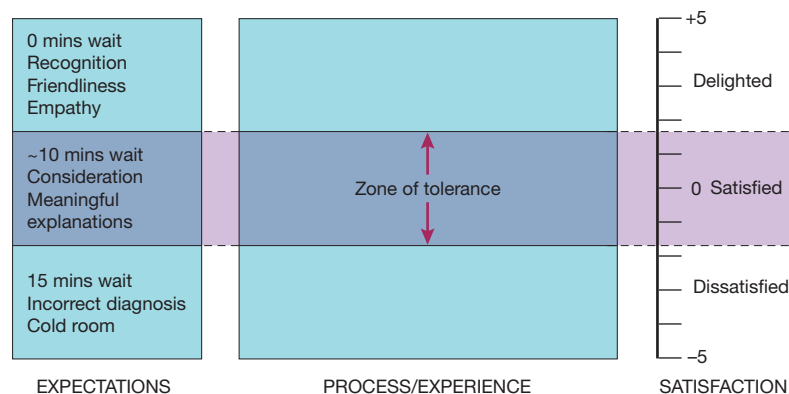
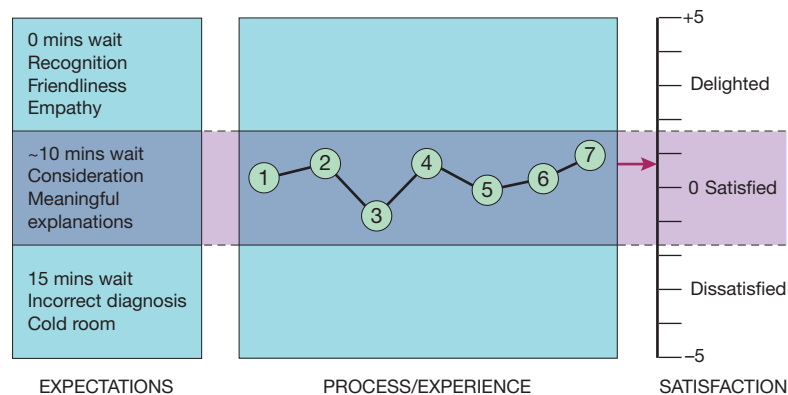
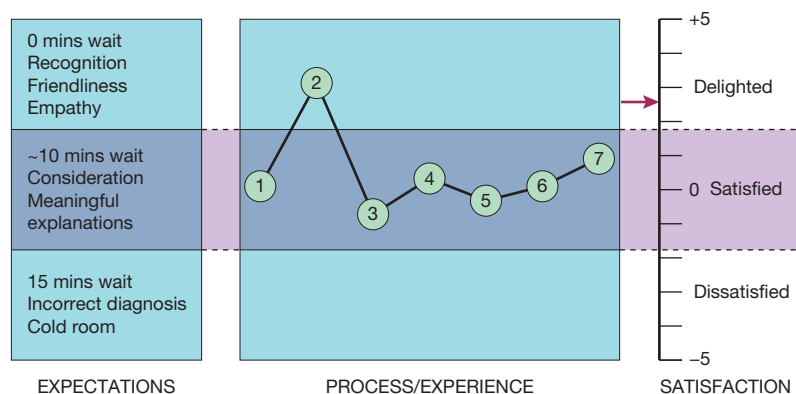


Figure 6.10 Adequate performance satisfies the customer

Source: Adapted from Johnston, R. (1995) 'The zone of tolerance: exploring the relationship between service transactions and satisfaction with the overall service', *International Journal of Service Industry Management*, 6 (2), 46–61. Reprinted by permission of Emerald Group Publishing Limited.

**Figure 6.11 Using enhancers to delight the customer**

Source: Adapted from Johnston, R. (1995) 'The zone of tolerance: exploring the relationship between service transactions and satisfaction with the overall service', *International Journal of Service Industry Management*, 6 (2), 46–61. Reprinted by permission of Emerald Group Publishing Limited.



Sufficient incursions below the zone of tolerance threshold will result in a dissatisfying outcome. A delay of 12 minutes (an example of a 'hygiene' factor, see the later section on hygiene and enhancing factors) may be forgiven, but if coupled with brusque treatment and a cursory examination, may well lead to dissatisfaction (see Figure 6.12).

Within the same service process, dissatisfying and satisfying transactions may be compensatory. Lack of spaces in the car park, resulting in a walk of 500 metres in the rain to the surgery, will count as a dissatisfying transaction, but a profuse apology from the receptionist coupled with a hot drink and particularly caring treatment by the doctor may compensate for the initial problems (see Figure 6.13).

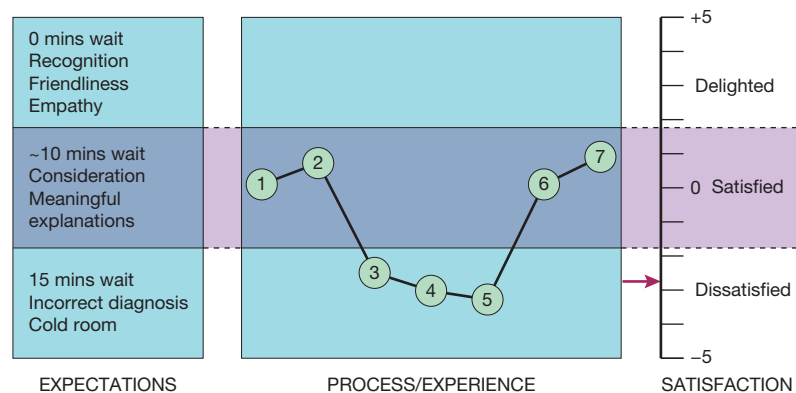
More than one satisfying transaction may be needed to compensate for a single dissatisfying transaction. It could be that one dissatisfying transaction will require compensation by several delighting transactions (as above).

Shifting the zone of tolerance

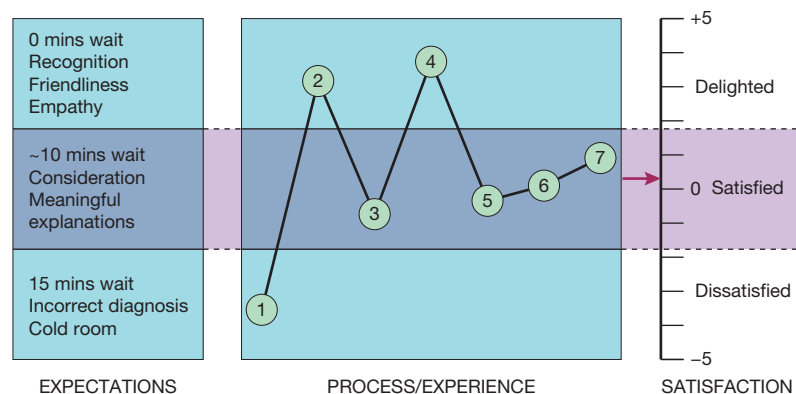
A failure in just one transaction may raise the dissatisfaction threshold. A dissatisfying experience may also have the effect of shifting the whole zone of tolerance upwards, and/or may possibly reduce the width of the zone. For example, if patients have had to walk 500 metres in the rain their

Figure 6.12 A dissatisfying outcome

Source: Adapted from Johnston, R. (1995) 'The zone of tolerance: exploring the relationship between service transactions and satisfaction with the overall service', *International Journal of Service Industry Management*, 6 (2), 46–61. Reprinted by permission of Emerald Group Publishing Limited.

**Figure 6.13** Enhancers compensate for failure

Source: Adapted from Johnston, R. (1995) 'The zone of tolerance: exploring the relationship between service transactions and satisfaction with the overall service', *International Journal of Service Industry Management*, 6 (2), 46–61. Reprinted by permission of Emerald Group Publishing Limited.



dissatisfaction with this transaction may be such as to negatively dispose them towards the remainder of the service. This predisposition could mean that future transactions, which previously would have been within the customer's zone of tolerance, are now felt to be dissatisfying (see Figure 6.14). This shifting of the zone increases the likelihood of the outcome being a feeling of dissatisfaction.

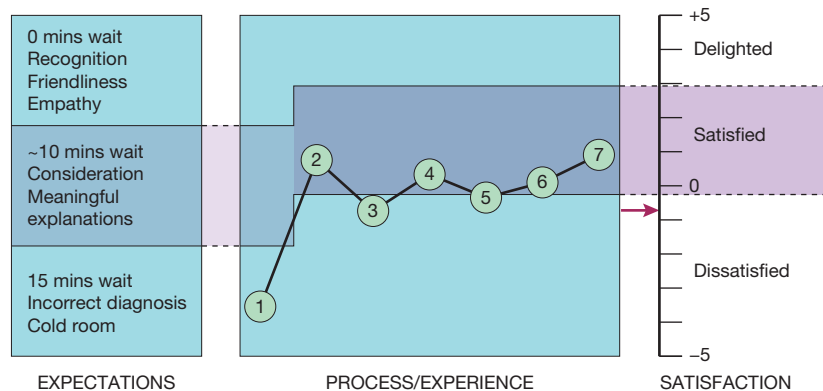
A delighting transaction, especially effective if located at the start of the process, may lower the zone of tolerance. An enhancing transaction may lower the zone of tolerance (and/or widen it) so that subsequent transactions, previously within the acceptable range, are now felt to be delighting. This outcome is often referred to as the 'halo effect'. Prompt treatment by the receptionist, a feeling of being expected and welcome, with all the forms ready to be signed, for example, may not only delight but positively dispose the patient to the remainder of the service, increasing the likelihood of a delighting outcome (see Figure 6.15).

Manipulating the width of the zone of tolerance

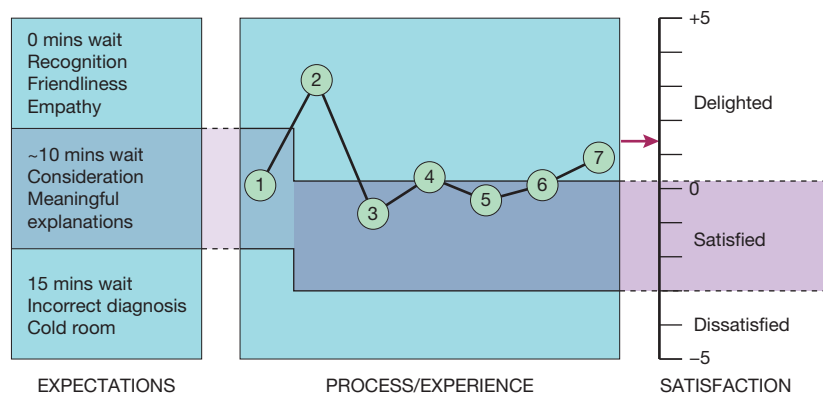
Organisations seeking to merely satisfy their customers need to ensure that there are no problems during the service process, i.e. that there are no failures on 'hygiene' factors (see the section on hygiene and enhancing factors). Delighting transactions are unnecessary, and potentially costly, for

Figure 6.14 Dissatisfaction shifts the zone of tolerance

Source: Adapted from Johnston, R. (1995) 'The zone of tolerance: exploring the relationship between service transactions and satisfaction with the overall service', *International Journal of Service Industry Management*, 6 (2), 46–61. Reprinted by permission of Emerald Group Publishing Limited.

**Figure 6.15** Delight shifts the zone of tolerance

Source: Adapted from Johnston, R. (1995) 'The zone of tolerance: exploring the relationship between service transactions and satisfaction with the overall service', *International Journal of Service Industry Management*, 6 (2), 46–61. Reprinted by permission of Emerald Group Publishing Limited.



mere satisfaction; the organisation is more likely to satisfy customers if their zone of tolerance can be made as wide as possible by appropriate marketing of the service.

For organisations seeking to delight their customers, a narrower zone of tolerance will increase the likelihood of delighting, but also increase the risk of dissatisfying the customer. Delighting transactions will be needed – ideally at the beginning of the service process – to affect the level and possibly the width of the zone of tolerance. A delighting transaction at the end of the process may also serve to put the ‘icing on the cake’. Although a delighting early transaction can have considerable impact, a build-up to a strong end-of-process experience results in higher perceived service quality.

Making the intangible tangible

A final method of manipulating service perceptions is by making the intangible tangible. Earlier, when we discussed expectations, we explained how an organisation needs to ensure that early signals and messages in the service process can help set the right expectations for the customer. Such signals can also be used to manipulate perceptions. For example, the managers of vehicle emergency recovery services recognise the importance of their patrols looking smart and tidy and

having clean vehicles. Customers may associate these signals and messages with professionalism and capability, and thus perceive a more competent repair having been made to their car. Similar tactics can be used to create an air of seriousness and professionalism. For example, consider how the ‘faux clinical’ outfits worn by make-up sales assistants in department stores give them, and the products they sell, an appearance of credibility.

Such intangible factors are vital to many service experiences, and customer perceptions of them can be strengthened simply by trying to make them tangible at appropriate places in the service process/experience. The toilet paper folded into a point in the hotel bathroom is a tangible representation of less tangible cleanliness and care. A paper mat on the floor of a recently serviced vehicle informs the customer that mechanics took care not to dirty the vehicle. A management consultant’s wristwatch/jewellery or well-cut suit/dress and expensive car are tangible representations of success, and possibly reliability and professionalism.

6.4 How can service quality be operationalised?

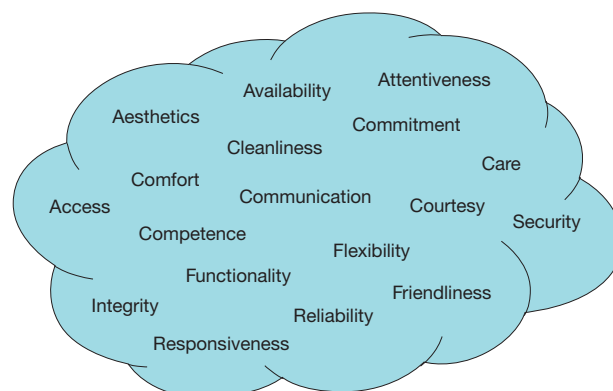
Customers and service organisations can easily come to summary judgements about operational and perceived service quality. However, in practice, such assessment is *initially* made on one or more partial aspects of service quality. Customers, in particular, will rarely make initial judgements on overall service quality, but will rather make specific assessments of: the welcome from service staff, signage, the taste of the coffee, the cleanliness of the carpet . . . and so on. Both operational service quality (see the section on service specification later in the chapter) and perceived service quality can be defined in terms of these and similar characteristics, which we usually refer to as the ‘quality factors’, or dimensions of service quality. The quality factors enable operations managers to capture and operationalise expectations, which in turn helps understand the nature of expectations and perceptions, creates instruments to measure customer satisfaction and creates service specifications.

Service quality factors

The service quality factors are those attributes of service about which customers may have expectations and which need to be delivered by the service operation at some specified level.

Figure 6.16 provides 18 quality factors, which attempt to capture the totality of service quality. These 18 may be consolidated into broader dimensions and indeed may not capture every aspect of service quality for every organisation. However, they are at least a starting point to help us define, deliver and measure service quality.

Figure 6.16 Eighteen service quality factors



The 18 quality factors have been defined as follows:

- *Access*. The physical approachability of the service location, including the ease of finding one's way around the service process or route through the process.
- *Aesthetics*. The extent to which the components of the service and customers' experience of it are agreeable or pleasing. Aesthetics encompasses both the appearance and the ambience of the service environment, the appearance and presentation of service facilities, 'products' and staff.
- *Attentiveness/helpfulness*. The extent to which the service, particularly contact staff, either provide help or give the impression of being interested in the customer, and show a willingness to serve.
- *Availability*. The availability of service process, facilities, staff and 'products' to the customer. In the case of contact staff, availability relates to both the staff/customer ratio and the amount of time each staff member has available to spend with each customer. Availability also incorporates both the quantity and range of services (and 'products') available to the customer.
- *Care*. The concern, consideration, sympathy and patience shown to the customer. Care is a measure of the extent to which the customer is put at ease by the service and made to feel emotionally (rather than physically) comfortable.
- *Cleanliness/tidiness*. Cleanliness is concerned with the extent to which the inputs to the service process are neat, clean and tidy. An assessment of cleanliness would include the service environment, facilities, equipment, the contact staff and even other customers.
- *Comfort*. The physical comfort of the service environment and facilities.
- *Commitment*. Service staff's apparent commitment to their work, including the pride and satisfaction they apparently take in their job, their diligence and thoroughness.
- *Communication*. The ability of service staff to communicate with customers in a way they will understand. Communication relates to the clarity, completeness and accuracy of both verbal and written information communicated to the customer, and the ability of the service to listen to and understand the customer.
- *Competence*. The skill, expertise and professionalism with which the service is executed. Competence is about the implementation of correct procedures, correct execution of customer instructions, the degree of 'product' or service knowledge exhibited by contact staff, the provision of good, sound advice and the general ability to do a good job.
- *Courtesy*. The politeness, respect and propriety shown by the service, usually contact staff, in dealing with customers and their property. Courtesy includes the ability of staff to be unobtrusive and not to approach customers unless appropriate.
- *Flexibility*. A willingness on the part of the service worker to amend or alter the nature of the service to meet the needs of the customer.
- *Friendliness*. The warmth and personal approachability (rather than physical approachability) of the service, particularly of contact staff, including a cheerful attitude and the ability to make the customer feel welcome.
- *Functionality*. The serviceability and fitness for purpose of service.
- *Integrity*. The honesty, justice, fairness and trustworthiness with which customers are treated by the service organisation.
- *Reliability*. The reliability and consistency of performance of the service and its staff. Reliability includes punctual service delivery and the ability to keep to agreements made with the customer.
- *Responsiveness*. The speed and timeliness of service delivery. Responsiveness includes the speed of throughput and the ability of the service to respond promptly to customer service requests, with minimal waiting and queuing time.
- *Security*. The personal safety of customers and their possessions while participating in or benefiting from the service process. Security includes the maintenance of confidentiality.

The quality factors will be assessed by the customer, and managed by the service operation in all aspects of a service, though clearly the emphasis on certain factors will change depending on the process stage:

- *Inputs*. For example, staff availability, appearance and competence; the appearance, aesthetics, accessibility and comfort of the facilities.

- *The service process.* For example, process reliability, staff responsiveness and communication skills, the functionality and reliability of the technology.
- *The service experience.* For example, staff friendliness and courtesy, and a feeling of security.
- *Outcomes.* For example, the functionality and reliability of the service received.

Hygiene and enhancing factors

The service quality factors will vary within the service process, from organisation to organisation and also from customer to customer, but can be divided into four broad groups. These groupings are defined in terms of a factor's potential to dissatisfy and/or delight (see Figure 6.17):¹²

Hygiene factors are those that need to be in place: if they are they will satisfy, if not they will be a source of dissatisfaction. Hygiene factors are not likely to be a source of delight. For a bank or airport check-in, security, integrity and functionality, for example, are expected to be acceptable; if they are not acceptable they will dissatisfy. On the other hand, if these factors are overspecified they will not delight. A very large number of security checks – consider contemporary airports – will not delight customers; indeed they could result in dissatisfaction. Having all bank cash machines in perfect working order, all of the time, will not delight customers either. Hygiene factors are the 'givens' of service. If they are not in place at an acceptable level of performance, then the service is 'not a player'.

Enhancing factors have the potential to delight if they are present but if they are not there, they are not likely to dissatisfy the customer. Customers of a bank may be delighted with a warm, caring approach by a member of staff or their flexibility in dealing with a problem; however, these aspects of service are not necessarily expected so, if they are not provided, their absence may not lead to dissatisfaction. Similarly, the option of an express lane to bypass security queues at an airport may be a helpful perk to some, but they are not essential.

Critical factors have the potential to both delight and dissatisfy. Responsiveness, communication and competence, of both airport check-in and bank staff and systems, must be at least acceptable so as not to dissatisfy the customer, but if more than acceptable they have the potential to delight.

Neutral factors have little effect on satisfaction. The comfort or aesthetics of a bank branch may play no part in customers' satisfaction or dissatisfaction. Contemporary customers rarely use branches anyway. Similarly, the airport check-in need not have exciting architecture, or soothing music. Most travellers are content to rush through as quickly as possible (see Figure 6.18).

Managers should not only be aware of the expectations of their customers but should also realise the importance and relative potential effect of the various factors (see the case example on Campwaggen Conversions). They need to know which factors will delight and which will dissatisfy in order to manage the perception of satisfaction during the service process. How they can find these factors and identify the 'enhancers', 'hygienes' and 'criticals' is explained in the next section.

Figure 6.17 Delighting and dissatisfying factors

Source: Adapted from Lockwood, A. (1994) 'Using service incidents to identify quality improvement points', *International Journal of Contemporary Hospitality Management*, 6 (1/2), 75–80. Reprinted by permission of Emerald Group Publishing Limited.

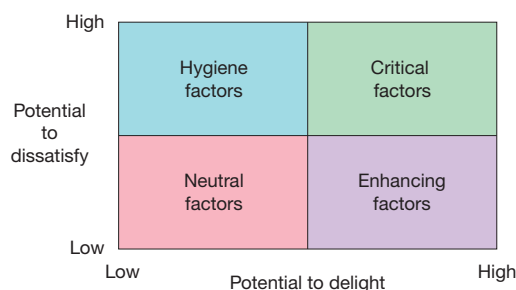
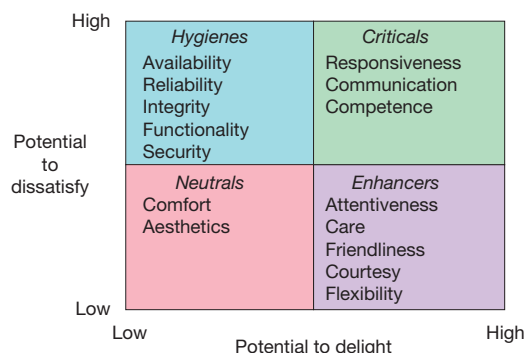


Figure 6.18 Four types of factors for a bank and, for a similar environment, an airport check-in

Source: Adapted from Lockwood, A. (1994) 'Using service incidents to identify quality improvement points', *International Journal of Contemporary Hospitality Management*, 6 (1/2), 75–80. Emerald Group Publishing Limited.



Case example

Campwagen Conversions

Campwagen Conversions provided new-build, conversion and tuning services to owners of panel vans, kombi vans and minibus vans. Panel vans and kombi vans were simple, slab-sided vehicles, which combined minimalist passenger facilities at the front, and a large load bay at the rear. The vans were originally designed and built to be commercial vehicles, but provided an ideal base for conversion to leisure vehicles. Campwagen Conversions specialised in Volkswagen vehicles, although they occasionally served customers who wanted some type of specialist conversion of another make. Most customers wanted to convert their vehicles to campervans or 'day vans' for leisure use. The company was based in the south east of the UK and had grown from a one-man camper-roof-fitting operation to an operation employing over 40 staff including van designers, mechanics, upholsterers,



Thomas Barwick/Stone/Getty Images

welders, painters and audio technicians. The company promoted its services by writing online articles for its website and also by contributing to enthusiast magazines such as *VW Bus Magazine*, *VW Camper* and *Commercial* and *Campervan*.

Typically, customers would negotiate by email or phone the range of modifications and other services to be provided and set a suitable time to bring their vehicle in. This was an opportunity for customers to be offered advice and for the company to understand customers' requirements. At an agreed time, customers would drive their van to Campwagen Conversions' premises, then stay overnight at one of the local hotels while their van was being converted. For example, adding a pop-top roof to a camper was typically a one-day job. Any job involving exterior paint could take two or three days. Upgrading the wheels or lowering the suspension would take half a day.

The company aimed to satisfy customers in every job, and exceed customers' expectations in the conversion of their vans by providing reliable and efficient conversion services at an affordable price. Campwagen prided itself on being fair in pricing but also in having the highest standards for its conversions. Just as important was the conversation with customers prior to the work. Sometimes customers wanted to know what would be best for their particular requirements and were particularly appreciative of the advice.

The operation was run by husband-and-wife team, Ami and Tom Platt, who were the co-directors of the company. Ami explained their role:

I cover the accounts and company secretary activities, whereas Tom looks after product development, and the management of the workshop. When he has time, he also plays a role in the design of our conversions. He also spends a lot of time with the shop-floor team and the supervisor,

trying to provide direction and emphasising our strategy. I think that we are successful, and profitable, because we don't just provide a good core service at a good price. We also are passionate about what we do, and are, to some extent, 'geeks' when it comes to camper conversions. What that means in practice is that we have to be willing to take time to communicate our enthusiasm and a passion to our customers. Our customers obviously expect us to do a good job at a good price, but also they want to relate to us – to be part of a group of enthusiasts – when they bring their vehicle in for a conversion. Again, in practice that means we have to give time to our customers. We have to value them, and communicate clearly that they are important to us, which, of course, they are. We have to make them feel special. That translates as being affable, pleasant and personable and more than anything else to be willing to give up time to discuss the fine details of their conversion.

Tom added:

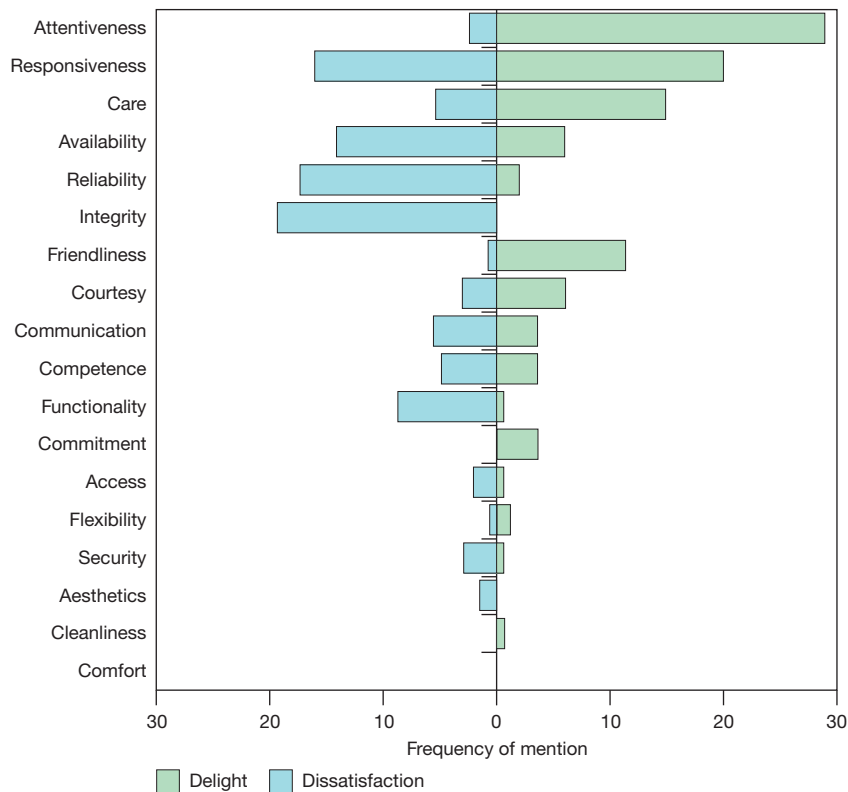
In the early days of setting up the business, I often had my technicians and designers complain that they were forever being distracted by customers. Customers wanted to talk for sometimes an hour about their van, the campervan life, and so on. It has taken me a long time to persuade them that this is okay. Ami and I do factor in the extra work associated with relating to our customers and making them feel special. It's a never-ending job though, we are always reassuring our team that they can spend time talking with customers.

The quality factors do not always fall neatly into one category or another. Figure 6.19 shows the relative frequency of mentions made of the factors in one study of UK banks. Perhaps not surprisingly, the factors with the tendency to dissatisfy (hygienes and criticals) are systemic and concern the organisation's ability to deliver its core services: functionality, reliability, competence, etc. Whereas the factors with a tendency to delight tend to be the more interpersonal factors, such as attentiveness, friendliness, courtesy, etc.

Care should be exercised in trying to identify neutral factors: in the bank research cited, the fact that few people mentioned security does not mean it is a neutral factor. It simply indicates that there were no instances of security having been the source of dissatisfaction or delight.

Figure 6.19 Delight versus dissatisfaction in one study of UK banks

Source: Adapted from Johnston, R. (1995) 'The determinants of service quality: satisfiers and dissatisfiers', *International Journal of Service Industry Management*, 6 (5), 53–71. Reprinted by permission of Emerald Group Publishing Limited.

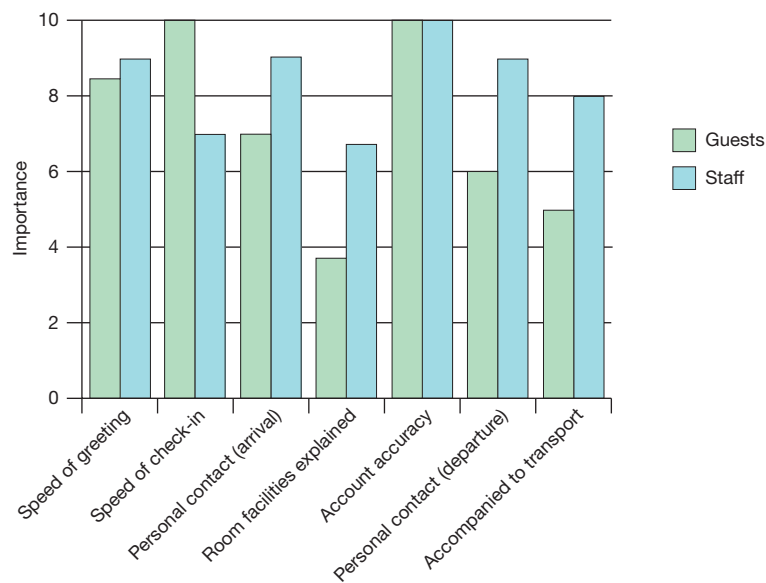


6.5 How can managers discover customers' expectations?

The 18 quality factors identified previously provide a basis for understanding and defining customer expectations, for both internal and external customers. In turn, the factors help service operations managers define required levels of performance. That is, they provide a set of dimensions for creating operational quality specifications. The factors also underpin a method of measuring customer satisfaction, which we will cover in Chapter 12.

Methods to capture customer expectations

There are many different methods available to gather information about customers' expectations of a service. Quantitative methods, such as questionnaires and surveys, can be structured around all, or a locally relevant subset, of the 18 quality factors, and service can be analysed by each factor. Other, more qualitative approaches tend to collect descriptive data and provide the interpretation of events by customers in their own words. Qualitative approaches can create difficulties in analysis and interpretation when attempting to extract meaningful summaries and conclusions. They do, however, have the benefit of providing rich ideas and examples – or stories – that managers and employees can discuss to better understand and improve their services.

Figure 6.20 Importance of various aspects of a hotel – staff and guests

- *Questionnaires and surveys*, written or verbal, can be a good means of soliciting opinions about an organisation's services, and of identifying what customers find important. Figure 6.20 shows the results of a questionnaire asking customers of a hotel (midweek guests only) to rate the importance of various aspects of the service. The staff were also asked to do the same. There are several interesting mismatches between the views of staff and guests.
- *Focus groups* usually comprise groups of about 15 customers supported by a trained facilitator. Customers can be brought together to discuss one or a few aspects of an existing or planned service.
- *Customer advisory panels* are similar to focus groups but are likely to meet regularly, with a more structured agenda.
- *New/lost customer surveys* are very useful ways of finding out what attracts customers to the organisation or indeed why they left. While many organisations conduct exit interviews, the most successful rely heavily upon the direct involvement of senior managers to ensure appropriate access, information and action.
- *Complaint/compliment analysis* can be undertaken on customers' voluntary contributions, although voluntary contributions tend to be more negative than positive. Complaints and compliments provide information about the extremes of dissatisfaction and delight.
- *Critical incident technique (CIT)* attempts to identify what delights and dissatisfies customers. Critical incidents are events that contribute to, or detract from, perceived service or product performance in a significant way. The CIT instrument usually comprises two questions. The first question asks customers to think of a time when they felt very pleased and satisfied with the service/product received and to describe, in a few sentences, the situation and why they felt so happy. The second question requires customers to think of a time when they were unhappy and dissatisfied with the service/product they received and to describe, in a few sentences, why they felt this way.
- *Sequential incident analysis* combines CIT, walk-through audits and process mapping (see Chapter 8 for a detailed explanation of walk-through audits and process mapping). Customers are 'walked through' a pre-prepared process map of the service they have recently encountered and asked for their experiences of each stage or transaction in the process. The technique not only identifies critical situations but also potentially critical situations.

6.6 How can a service be specified?

Operational service quality is the operation's assessment of how well the service was delivered to specification, i.e. its conformance to specification (see Figure 6.21). In this final section of the chapter we want to cover the source of the specification, what the specification looks like and how we ensure conformance to it.

Where does a specification come from?

A service specification is an extension of the service concept. The service concept provides a broad description of the service provided, the customer experience and service outcomes (see Chapter 4). The service concept, in turn, should either be based on the needs, requirements and expectations of customers, or alternatively have been devised by the organisation because it believes that there will be a need or desire for it. The specification takes the elements of the service concept and identifies the quality factors associated with each element, details the standards to be achieved for each factor, and begins to set out the organisation's procedures to ensure conformance to the standard (operational control).

What does a specification look like?

As discussed earlier, a typical service will have several quality factors associated with each element of the service (see Table 6.2). An airline, for example, will have many quality factors associated with each flight, such as on-time arrival, safety, professional delay handling, disability provision and access, etc. There will be another set of quality factors associated with the cabin staff and service, such as staff attentiveness, safety awareness, competence, etc. The catering will have its quality factors, such as meal quality, variety, staff competence in serving the meal, etc. There will be standards associated with each factor, some explicit and others tacit. As examples, the airline's standard for 'on-time arrival' might be plus or minus five minutes. The standard for attentive staff might be their level of friendliness and a requirement to have two or three interactions with each passenger. Some of these standards may be set down in operating manuals or in regulations. Others may be more tacit and shared through oral instructions, pictures, or shared understandings through role-play during training.

How do we ensure conformance to the specification?

Service organisations will have a variety of means of ensuring conformance for each of the factors in the service specification (see Table 6.2 and also Chapters 12 and 13). Ensuring on-time departure will require: coordination with ground staff to ensure passengers and bags are loaded promptly; discussions with air traffic control to establish clearance on time; and checks for weather problems to allow for changes in route and increasing average speed to ensure an on-time arrival. The airline's

Figure 6.21 Operational service quality – conformance to specification

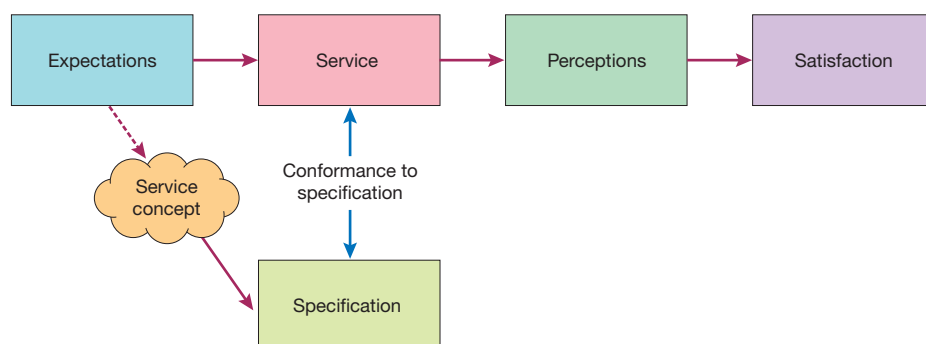


Table 6.2 A simplified service specification

Service elements	Quality factors	Standard	Procedures for conformance
Flights	On-time	± 15 minutes	Pre-flight clearance with ATC and weather checks
	Safe flight	Zero critical mechanical failures	Pre- and post-flight checks plus routine maintenance
Cabin service	Attentive staff	Friendly and frequent interactions	Customer surveys and supervisor checks
	Safety aware	Correct briefing and safety checks	Supervisor checks
Catering	Quality meal	Correct temperature	Adherence to cooking instructions
	Choice of meal	Two choices in economy, three in business	Feedback to caterers

desire for attentive staff will be checked by supervisors on board, providing coaching to members of staff where necessary. Appropriate recruitment and training procedures will also have a role to play in ensuring staff look after their passengers.

6.7 Summary

What is customer satisfaction? – Satisfaction is the result of customers’ overall assessment of their perceptions of the service (the service process, their experiences and outcomes, such as the benefits obtained), compared to their prior expectations. If there is a mismatch between perceptions and expectations it is usually caused by either a mismatch between expectations and the service and/or a mismatch between the service and customer perceptions. A related notion to satisfaction is customer confidence. Confidence is about having belief, trust or faith in an organisation, its staff and services. Unlike satisfaction, which is one outcome of a service, confidence does not require previous experience or contact with the organisation.

What influences expectations and perceptions? – Perceptions are our own personal impression and interpretation of a service. How we perceive a service depends upon our past experiences, our culture, language, beliefs, values, interests and assumptions. Expectations are what a customer believes to be likely, lying on a continuum between ideal and intolerable. Expectations are dynamic and are influenced by price, the alternative services available, marketing, word of mouth, previous experience, customers’ mood and attitude, and their confidence.

How can expectations and perceptions be ‘managed’? – Operations need to ensure the marketing and strategy functions understand the nature and quality of service that they can actually deliver and indeed what they can’t. The design of the operation can influence and shape customer expectations during the early stages of a service process. Customer-perceived quality is a dynamic process and can be influenced through the appropriate interventions during the service process/customer experience.

How can service quality be operationalised? – The service quality factors are those attributes of service about which customers may have expectations and which need to be delivered at some specified level. Neutral factors have little effect on satisfaction; hygiene factors will dissatisfy but not delight; enhancing factors will delight but not dissatisfy; and critical factors both dissatisfy and delight.

How can managers discover customers’ expectations? – The 18 quality factors provide a base to help understand and define customer expectations. The methods available include questionnaires and surveys, focus groups, customer advisory panels, new/lost customer surveys, complaint/compliment analysis, critical incident technique and sequential incident analysis.

How can a service be specified? – A service specification takes the elements of the service concept and identifies the quality factors associated with each, details the standards to be achieved in each and the organisation’s procedures to ensure conformance to those standards.

Discussion questions and exercises



1. Reread the case example on Le Berceau des Sens. (a) What should the restaurant be doing to make sure that its customers' expectations are managed appropriately? (b) At what point do you think customers' tolerance of imperfect service would seriously detract from their experience?
2. Reread the case example on Guestology at Optiker Söderberg. Make the cases for and against drawing on Disney theme park principles as an appropriate model for retail service quality.
3. Reread the case example on Campwagen Conversions. What else could Ami and Tom do to manage their customers' expectations and perceptions of their service?
4. This is an account of what was described as a 'nightmarish' flight:

It was a 13-hour flight that I will never forget. The trouble began when the passenger in the next seat to me boarded. He had just had bad problems trying to check in his luggage at the self-service desk and was very grumpy. I discovered this because he told me all about it. Then he told the man on his other side – at length. Then he summoned a flight attendant and told him all about it. By this time, I was starting to suspect that the man was . . . err, a bit more than obsessed. After a while, I started to work on my laptop. Then I became aware of an unpleasant vibration to my left. My neighbour was jiggling his leg so hard it was rubbing up against mine. He was also taking all the space on the elbow rest between us, which made typing impossible.

'Please would you mind moving your arm?' I asked. 'What's your problem?' he snarled, clamping his arm in place. There were 12 hours to go. I gave up typing, jammed on my headphones and prayed for sleep. He also, presumably started listening to music, because he began to jab his hands in the air and sing, loudly. I asked the flight attendant for another seat, but the flight was full.

What could be done to improve the service quality of this flight, as perceived by the narrator?

5. Some organisations that provide high-volume services, such as retailers and restaurant chains, use 'mystery shoppers' to check on their service quality. Mystery (or secret) shoppers are people whose job is to act as a customer, evaluate their experience, and then report on the experience. What do you think are the advantages and disadvantages of using mystery shoppers to evaluate service quality?
6. Following a survey that revealed that the customers in its most popular branches commented on the fact that serving staff were always 'happy and smiling', a chain of quick-service (fast-food) restaurants issued a manual of 'staff behaviours' that set out how its staff should, and should not, behave towards customers. However, a campaign on social media attacked this as 'sinister', with some describing the manual as reflecting 'a dystopian regime of surveillance and assessment'. What do you see as the benefits (if any) and drawbacks of issuing a manual of this type?

Case exercise

The Northern Breast Screening Unit

Rhian Silvestro, Warwick Business School, and Marilyn Merriam

Breast cancer is the fourth most-common cause of death from cancer in women. The four regions of the UK have made breast cancer and breast cancer screening a major priority, and since the early 1970s breast cancer mortality rates in females have decreased by more than a third (35 per cent). The National Health Service (NHS) Breast Screening

Programme aims to reduce mortality from breast cancer through early identification of symptoms. In England, breast screening is offered to women aged 50 to 71, and there have been trials to examine the effectiveness of offering some women one additional screen between the ages of 47 and 49, and one between the ages of 71 and 73.

The Northern Breast Screening Unit (NBSU) serves some half-a-million residents, with an uptake on invitations for screening of 76 per cent compared to the national target of 70 per cent. The NBSU is part of a major hospital whose mission statement is as follows:

We aim to provide high-quality acute and specialist services, which:

- are responsive to customer needs;
- use leading edge and effective medical technologies;
- are at a cost that compares favourably with the rest of the NHS;
- have motivated and properly trained staff.

To this end, the hospital supports a number of quality audit and improvement initiatives, including ISO 9000 and Investors in People. The NBSU employs 32 members of staff, including part-timers. There are four radiologists, seven full-time radiographers, two breast care nurses and a number of receptionists and office staff. The unit is also supported by several part-time radiographers and visiting surgeons.

Last year, a small patient satisfaction survey was conducted to obtain information about patient expectations and perceptions of the service and to identify areas for improvement. Staff from the different functional areas were also interviewed in order to identify any gaps between patient expectations

and perceptions, and staff perceptions of the quality of service provided.

Thirty-two patients were interviewed. These included 16 patients who had come to the NBSU for screening and 16 patients who had been screened and had been called back to the NBSU because they were diagnosed with breast cancer. Each patient was asked to assign the relative importance, on a five-point scale, of a series of quality factors (importance was used as a surrogate for expectations). They were then asked to rate, again on a 1–5 scale, their perception of the service levels delivered with regard to each factor. Table 6.3 lists the statements that were used to capture each quality factor and Table 6.4 shows the mean values assigned for each factor by the staff and patients.

Staff were provided with the same list of factors and asked to rate on a scale of 1–5 how important they believed the factor to be to the patients, and what service level they believed the patients perceived themselves to be receiving. This would facilitate identification of any mismatches between staff and patient perceptions.

Questions

1. Evaluate the quality of service provided by the NBSU.
2. What recommendations would you make for improvement?

Table 6.3 The statements used to capture each quality factor

Quality factor	Statements used
Access	Was the NBSU easy to find? Were there transport problems in getting here?
Availability	Were you given as much time as you wanted with staff?
Care	Were you shown concern, consideration and sympathy? Were you treated with patience?
Communication	Were you provided with enough information in a way you could understand?
Competence	Were you impressed by the skill, expertise and professionalism of the staff?
Courtesy	Were staff polite and respectful? Were staff discreet and unobtrusive when necessary?
Functionality	Did the equipment seem adequate in delivering the service?
Reliability	Was the NBSU reliable and consistent in performance?
Privacy	Were you given enough privacy?
Responsiveness	Was there much waiting and queuing?
Comfort	Was the unit comfortable?

Table 6.4 Mean values assigned for each factor by the staff and patients

	Access	Availability	Care	Communication	Competence	Courtesy	Functionality	Reliability	Privacy	Responsiveness	Comfort
Importance											
Nurse	4	4	5	5	5	5	4	5	5	4	4
Radiographer	4	4	5	5	5	4	4	4	4	4	4
Manager	4.5	4.2	3.8	4.2	4.5	4.2	3.8	3.8	4.2	3.45	3.75
Screened patients	4.01	4.12	4.12	4.84	4.8	4.71	4.41	4.59	4.74	4.16	4.06
Diagnosed patients	4.12	4.72	4.92	4.88	4.91	4.61	4.98	4.99	4.91	4.86	4.98
Perceptions											
Nurse	3	4	4	4	4	4	3	4	4	3	4
Radiographer	3	2	4	4	4	3	3	3	3	4	3
Manager	4.5	3.2	3.8	4.2	4.6	4.2	4.8	3.8	4.2	2.8	3.75
Screened patients	3.51	4.68	4.68	4.85	4.88	4.91	4.19	4.63	4.35	4.63	4.35
Diagnosed patients	3.62	4.67	4.32	4.51	4.53	4.71	4.55	4.75	4.07	4.21	4.37

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Notes



- 1 See, for example, Bitner, M.-J. and Hubbert, A.R. (1994) 'Encounter satisfaction versus overall satisfaction versus service quality: the consumer's voice', in R.T. Rust. and R.L. Oliver (eds) *Service Quality: New Directions in Theory and Practice*, Sage Publications, Thousand Oaks, USA, 72–94
- 2 The Disney Institute and Kinni, T. (2011) *Be Our Guest: Perfecting the Art of Customer Service*, Disney Enterprises, Inc.
- 3 This example is based on a real retail opticians company, but the name and details of the company's operations have been changed.
- 4 Satisfied means something meets the minimum requirements necessary.
- 5 This is a very simplified version of the gap model developed by Parasuraman A., Zeithaml, V.A. and Berry, L.L. (1985) 'A conceptual model of service quality and its implications for future research', *Journal of Marketing*, 49 (4), 41–50
- 6 The information on which this example is based is taken from: <http://uswitch.com> [accessed 20 April 2020]; MoneySavingExpert Forum discussions; [uk.trustpilot.com](https://www.ft.com/content/69ab36c0-ef00-11e4-87dc-00144feab7de) reviews; Aglionby, J. and Cookson, R. (2015) 'Zoopla to buy price comparison site uSwitch', *FT.com*, 30 April [online] <https://www.ft.com/content/69ab36c0-ef00-11e4-87dc-00144feab7de> [accessed 20 April 2020]; and Samson, A. (2017) 'uSwitch parent ZPG to buy Money website in deal valued at up to £140m', *FT.com*, 7 September [online] <https://www.ft.com/content/68a719db-d3be-3f3d-92fb-90c62e1bfdc7> [accessed 20 April 2020]
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Chapter 7

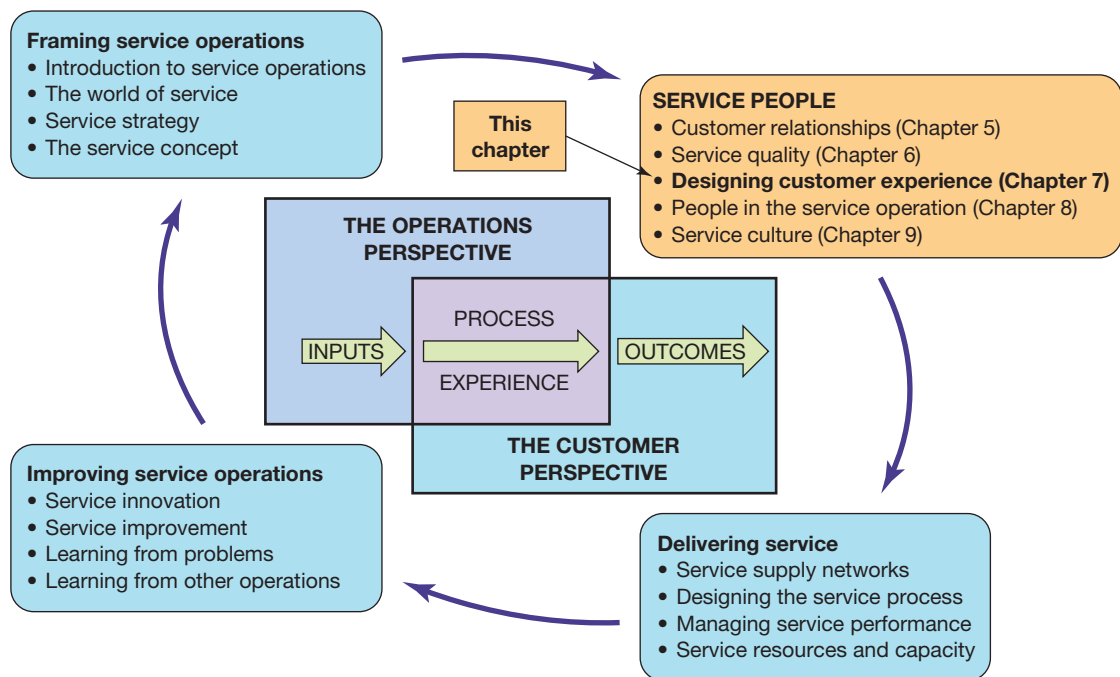
Designing customer experience



This chapter is about how customers experience their journey as they consume a service. It takes a customer perspective on service interactions and discusses what is meant by 'customer experience', particularly in terms of the emotions experienced by customers. It distinguishes between the back- and front-office processes that impact on customers and examines some of the aspects of process design that shape customer experience, such as servicescapes and service technology. Figure 7.1 shows where this topic fits in our model of service operations management.

Learning objectives

- To be able to define 'customer experience'
- To understand the nature and impact of servicescapes
- To be able to explain the impact of front- and back-office processes on the customer journey
- To understand the importance of managing the total chain of processes experienced by customers
- To appreciate the role of service technology in developing the customer experience

Figure 7.1 This chapter looks at designing the customer experience

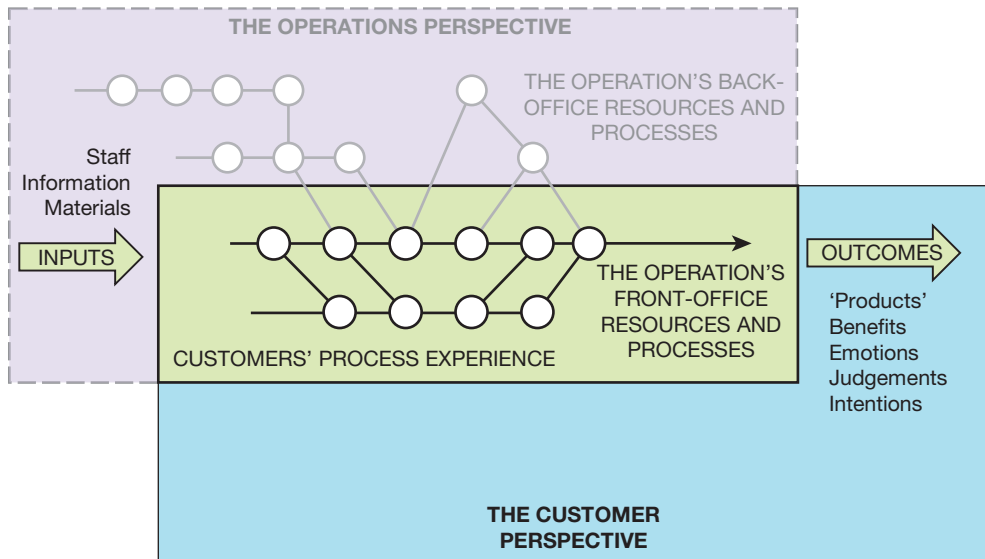
Introduction

Customer experience is how customers perceive the whole of a service as they have contact with its operation's resources and processes. Note the plural in the last sentence. Customer experience relates to the journey that a customer makes through the service operation. For example, a holiday consists of many different activities (services): flights, hotel accommodation, meals and tours, for example. Some of the processes to create and provide those services will be highly visible to the customer, such as check-in or an excursion to a local landmark. But, often, these high-customer-contact (front-office) processes rely on other less-visible (back-office) processes. A holiday company that neglects its 'behind-the-scenes' processes, such as its computerised booking and reservations system, or the cooking and cleaning at the hotels it uses, is likely to fail in its more visible activities. Both front-office and back-office processes are important in shaping the customer experience. In other words, as we have explained in previous chapters, both the operations perspective and the customer perspective should be considered.

In this chapter, we focus on the customer perspective, as shown in Figure 7.2. In Chapter 11, we shift to the operations perspective, when we will cover the design and management of processes from the point of view of the service provider, with a focus more on efficiency. In this chapter, we will focus on providing the right experience for the customer by looking at how we can design those processes with which the customer is personally involved. It will not ignore back-office issues, but it will place more emphasis on those front-office activities that more directly impact on customers.

However, it is important that we reiterate the point that we made in Chapter 2: designing a good customer experience is not just a concern for 'entertainment'-type organisations such as theme parks – it is an issue for every service organisation. Whenever an organisation provides a service, its customers *will* have an experience – good, bad or indifferent. A service always comes with an experience, however mundane or otherwise the service might be.¹ This is why the idea of the customer experience has resonated with practitioners and academics alike, and many managers and service researchers now talk about the customer experience,² often referred to simply as CX.

Figure 7.2 Service processes can be viewed from both the operations and customer perspectives. Here we look at service processes design from the perspective of the customers' experience



Indeed, many organisations are now trying to compete on the experience they provide to their customer, instead of, for example, competing on the range or price of their services.³ The customers' experience of a service also has an important impact on the service outcomes – for example, value for money, level of satisfaction and customer loyalty. Furthermore, really good experiences are said to create close emotional bonds with customers, whereas very poor experiences can lead to emotional scarring.⁴ There is also some evidence that organisations are not particularly good at designing their customer experiences. One survey, across several industries and their customers, found that 80 per cent of the senior executives interviewed said they provided a superior customer experience, but just 8 per cent of their customers agreed.⁵

7.1 What is 'customer experience'?

Service operations often confuse customer service with customer experience, but the terms, though related, are not interchangeable. Customer service refers to each single touchpoint with a service, while customer experience impacts feelings and emotion, and includes all service encounters throughout the entire customer journey. In this chapter, we will focus on that journey (the customer journey) through the service, the impact it will have on the customer (their emotions) and how it can be 'designed' to deliver the service concept.

And therein lies a problem. Because the experience is a personal interpretation of a service, it exists only in the customer's mind. As we saw in Chapter 6, our perceptions are individual to us and may not reflect any kind of 'objective' view of the actual situation; they are our own personal view of 'reality'. No two people can have the same experience.⁶ Indeed, it has been suggested that we can't actually design an experience, only the mechanisms for creating it.⁷ What operations managers can do, however, is to build the right clues and messages into their processes and try to design the customer's journey to create the right experience and emotions (see later in the chapter).

The experience statement

The first critical stage in designing the customer experience is to develop an experience statement.⁸ A customer experience statement is a description of the customer's experience and the outcomes from the point of view of the customer. It needs to be written in an outside-in way, i.e. from the customer's point of view, including the emotions they should feel as a result of the experience and the benefits they should get from it. This information should already be captured in the organisation's service concept. While many organisations define the service they want to provide, some do not extend that idea to define the experience they want their customers to have. Yet it is an important step in designing the experience. For example, the service provided by an express parcel company might be to deliver their customers' parcels on time, every time. An experience *statement*, however, should be about the service received; that is, how the customer will feel as a result of their experience and the benefits they get from the service. For the parcels company, an experience statement might be: 'The customer will have total confidence in us, they will be treated as special and valued customers and can enjoy total peace of mind'. The worked example, 'North Healey Building Society', provides an illustration as to how a financial services firm could go about defining the experience it wanted to provide for its customers.

Worked example

North Healey Building Society

The North Healey Building Society (NHBS) was a UK-based financial institution, which had a strong presence in the north and midlands of England. In the UK, a building society is a financial organisation that pays interest on investments by its members and lends capital for the purchase or improvement of houses. Although an increasing proportion of customer transactions were moving online, NHBS' senior management believed that the in-branch and contact-centre (telephone) experience would continue to be important for the foreseeable future.

Although we have rationalised [closed] about 10 per cent of our branches, they remain an important part of how our customers view us.

(Jane Callister, Development Leader for the Customer Experience Programme)

Consequently, NHBS established a Customer Experience Programme to 'give them the capability to provide a superior experience based on an emotional level'. The issue for the organisation was how to go about it.

What the company did

Jane Callister explained how the company has gone about developing the customer experience:

The first thing we did was to set up a steering group to oversee the work of the project team. It was chaired by the chief executive and included senior people

from around the business, for example the individuals responsible for the branch network and back-office processing. We then did a massive amount of research around what the NHBS experience should be. We carried out customer forums, telephone interviews and discussions with customers, and also talked to industry experts. We tried to involve everyone in the organisation, so we asked our staff to email us examples of good experiences they'd had with companies. Partly this was to understand what great customer experience looks like, and partly so we could go and find out how those organisations were doing it. We visited, mystery shopped, met some of them and talked to their managers. We even took the steering committee out on mystery shopping trips too.

We sat in one of our branches for a whole week and just watched customers coming and going. We recorded their facial expressions, their body language, and listened to their tone of voice. We were trying to identify their emotions and the changes that took place in the branch. We estimated that customers' emotions were changing somewhere between 10 and 15 times in a basic branch interaction. We sat in our contact centres and listened to phone calls. We realised very early that while every customer is different, you can tailor the approach for every customer to make them feel special and valued. Members of staff aim for the same end state, but they have the ability to sense and respond differently to each individual customer. It also means that no matter who the customer speaks to,

or which contact/sales channel they use, they come away with a consistent set of feelings about the organisation each and every time. In adopting this approach, it has been critical to identify the right feelings we are aiming to evoke. Our analysis identified 13 different feelings, but we realised that 13 was too many to ask staff to identify, so we set about coming up with a manageable list. One key session

involved the members of the project team, the chief executive and all of the steering committee members. In an activity resembling a game show, people voted for which of the feelings they were happiest to dispense with. When five feelings were left, no amount of debate or re-votes could dispense with the remaining feelings – so they became the definition of the customer experience.

Emotions

A critical part of the experience statement is the identification of the emotions the organisation wants its customers to feel or, more correctly, the emotions that its customers will want to feel as a result of the service. In this context, emotion can be defined as a complex state of feeling that results in physical and psychological changes that influence thought and behaviour. As we saw in the worked example ‘North Healey Building Society’, the team undertook a great deal of market research to understand the emotional needs of customers. They then spent time refining them into a short, clear and agreed list. Having this set of emotions would have allowed them not only to construct their experience statement but also to redesign their processes and procedures, training programmes, recruitment criteria, customer feedback forms and so on, to try to make sure that these emotions were actually created in the minds of their customers.

Thinking in emotional terms is not straightforward. Although we constantly feel emotions, we tend not to categorise them. For example, if we are having a discussion with colleagues, we don’t stop and think, ‘Okay what emotions am I feeling now, am I proud or compassionate, annoyed or anxious, apprehensive or despairing?’. Yet, as service operations managers and designers, it is helpful if we can become more mindful of the emotional ‘landscape’. Doing so helps to understand how our service may be affecting others. Theorists have identified over 300 distinct emotions, which have been categorised into seven primary emotions: joy, surprise, love, fear, anger, shame and sadness. Joy, for example, includes secondary-level emotions such as amused, cheerful and euphoric. The primary emotions range from weak to strong; love, for example, might range from warm to intimate (see Figure 7.3).⁹

Case example

More than a cosmetic difference¹⁰

Boots (which is part of Walgreens Boots Alliance) is the largest pharmacy health and beauty chain in the UK, with over 2,000 retail stores and around 22,000 staff, of which around 6,500 are registered pharmacists. Over 90 per cent of the UK population is within 10 minutes of a Boots store – a particularly important factor for a business that sells prescription healthcare products. But, like many other ‘bricks-and-mortar’ retailers, Boots struggled to thrive in a retail market that saw increased competition from both online and specialist high-street retailers and



Michael Nagle/Bloomberg/Getty Images

supermarkets. Which is why, when Boots announced a new retail strategy it was based on enhancing and reinventing its customers' retail experience with a dramatic beauty overhaul.

The way consumers find and shop for beauty products had changed fundamentally, with social media playing a far larger part. Consumers tended to have researched products on social media, with its boundless beauty-related video content, and having formed an idea about what they wanted to buy, they then visited a store. Recognising this trend, one of Boots' revamped stores in London's Covent Garden featured a YouTube studio that offered video make-overs and an Instagram zone where people could film or take pictures of their purchases and post them directly on social media. This type of in-store

experience also allowed the service to generate greater engagement from shoppers. The aim was to move from Boots stores being a shop to 'pop into', to one where the interactive and enjoyable in-store elements made it more of a destination in its own right; one where customers could loiter and experiment. Other changes to its store layouts included beauty halls that, instead of having individual branded displays, employed more flexible spaces, made up of 'trending zones' and 'discovery areas'. In addition, live demonstrations carried out by beauty specialists offered shoppers impartial tips and advice about the beauty brands sold in-store. The overall aim, said the company, was to make Boots stores more differentiated and more personalised, with the best brands at the best value.

Emotions are often powerful, subjective feelings with associated physiological states.¹¹ Emotions are managed by our emotional brain, the limbic system, which floods our neurochemical pathways with hormones in response to real or perceived or imagined stimuli. Our response to emotions can be strong and primitive, and this is usually 'regulated' by our pre-frontal cortex – the thinking part of the brain, the rational brain. Positive emotions, such as happiness, release endorphins (with similar properties to heroin), which can improve learning, build the immune system, aid memory, reduce illness and stress, and even extend life.¹² Slightly stressful situations, threats, fear

Figure 7.3 The seven basic emotions – weak to strong

Source: Adapted from Parrott, W.G. (ed.) (2000) *Emotions in Social Psychology: Essential Readings*, Psychology Press, Hove, UK.



and feelings of helplessness cause the brain's performance to deteriorate (downshifting), resulting in poor muscular coordination and muddled thinking.¹³ Highly stressful situations can lead to what psychologists refer to as 'hijacking'. When the heartbeat rises to over 175 beats per minute, cognitive skills break down, vision becomes restrictive, the person becomes aggressive and muscles contract and become difficult to use. As the emotional brain takes over, reactions become emotional and primal.

There are three important points here. First, although most managers believe they, and their customers, make decisions based on rational argument, most decisions are driven by more emotional responses to situations. Indeed, psychologists have repeatedly shown that our ideas about rational decision making are delusional.¹⁴ Emotions, even at a subconscious level, have a powerful influence on 'rational' decision making.¹⁵ Second, our response to feelings of emotion are swift and strong (and sometimes wrong) but, if positive, can create powerful emotional bonds between a customer and an organisation, and if negative can create lasting emotional scars in customers.¹⁶ And third, relatively few organisations have articulated and agreed the emotions they actually want their customers to feel, despite the fact that all their customers will feel emotions as a result of their experiences with them. Thus, service designers need to ensure their service is designed to try and create the right emotions in customers.

7.2 Servicescapes – their effect on the customer experience

Having defined the customer experience statement that captures the experience and emotions to be created, service operations managers can then start to consider how the physical environment of the service process affects the customer experience. The term 'servicescape' is used to describe the physical surroundings of the service.¹⁷ We use it here to include both the physical and informational environment in which a service is created and provided; it is the environment for both staff and customers. The servicescape of a hospital, for example, comprises the car parks, the buildings, the décor and the arrangement of seats in a waiting room or staff canteen. An internet-based servicescape may include the appearance, user-friendliness and accessibility of an organisation's website. It is an important part of the customer experience because of the accumulating research evidence that the aesthetics of an operation can evoke positive or negative emotional response in people and therefore affect their behaviour and well-being.

The general idea is that ambient conditions, space factors and signs and symbols in a service operation will create an 'environmental experience' both for employees and customers; and this environmental experience should support the service concept. For example, hard chairs set out in clinical rows in a waiting room provide one type of experience, whereas clusters of armchairs with coffee tables and magazines provide quite a different one. That is not to say that all chairs, for example, should be comfortable. Those in fast-food restaurants may be designed to provide adequate support and comfort for leaning forward and eating but are less comfortable for leaning back and relaxing at the end of a meal, thus 'encouraging' customers to leave when they have finished eating.

Features, such as the comfort of a chair, are known as 'clues' (or sometimes 'cues'), which create 'messages' for the customer during their experience of the organisation and its service. Clues are indicators, stimuli and signals – indeed anything a customer can hear, taste, touch, see or smell¹⁸ – which have been built (purposely or inadvertently) into the service to provide particular messages. Messages are what customers will infer about the organisation: its services, management or staff. The resultant emotions are how the customer feels, consciously or subconsciously, about the service, the clues it contains and the messages it provides. In designing services and experiences,

managers need to be concerned to ensure that all messages emanating from all the clues designed into the service are consistent with the service concept and the desired emotions. In particular, there is a need to eliminate those clues that result in messages, or rather mis-messages, inadvertently or mistakenly designed into the service, that convey the wrong idea about the service and the organisation.

These clues can be designed into the environment (the servicescape), the people or the service process/experience (sometimes referred to as mechanic, humanic and functional clues respectively).¹⁹ Clues in the servicescape might include the location of a building (a prestigious location in the business district or a decaying out-of-town site) or its size (large and imposing or small and run-down). The décor or the type of office furniture will all provide particular messages about the nature of the service, the likely experience and also its cost. These clues and messages designed into the experience will then lead to feelings such as security, pride, eagerness or amazement. The classic styles of Caesar's Palace or Bellagio in Las Vegas, the memorabilia of Hard Rock Cafés, all seek to create particular experiences, messages and emotions for the customer and, in many cases, differentiate the service from its competition.

'People' clues might include the uniforms, dress and demeanour of the employees, which will provide particular messages about their approach, trustworthiness or success. For example, the distinctive uniforms of Singapore Airlines flight attendants, the sober suits worn by consultants or the casual appearance of a university professor all provide particular messages for, and create particular emotions within, their respective customers.

Influencing customer behaviour

It is important to recognise that these clues and messages not only signal the nature of the experience and create the experience for the customer, but they can also influence their behaviour and that of the staff.

Customers' behaviour, and thereby their experience, can be, to some extent, determined by the servicescape – its ambience, lighting, décor or indeed the music. A warm bar may encourage customers to drink more, while the tempo of background music in a shop can influence the pace of shopping and the amount spent by customers. A number of studies have addressed the issue of environmental design effects (sometimes referred to as aesthetic atmospherics) upon psychological and behavioural responses of consumers in shopping centres, retail outlets and other service encounters.²⁰ Clean, clear and well-lit food cabinets, for example, lead customers to perceive that the products are fresh. The servicescape also influences the nature of the interaction between customers, and between customers and employees. Seating arrangements or the amount of background noise, for example, may encourage or discourage conversation and/or interaction.

The existence of queues, whether a physical queue or a queue on a telephone, for example, provide physical or informational evidence that influences customers' behaviour. The simple existence of a queue, in some countries, encourages customers to modify their behaviour. They will wait in turn, physically position themselves relative to others waiting and, up to a point, be prepared to accommodate a delay in service. A queue, like other environmental clues such as temperature and lighting, for example, may also generate 'approach' or 'avoidance' behaviour. It has been suggested that individuals react to environments with two general and opposite forms of behaviour: they are either attracted to it or repulsed by it.²¹ For some people, a queue to enter a restaurant, for example, may signal 'a place to be seen' or a 'popular destination worth trying'; to others it may represent 'crowded and trendy' and may act as a deselection device.

The design of equipment or information interfaces will also have an effect on customers' behaviour, in particular their ability to interact with and obtain service from remote service providers such as organisations using the internet, remote cash machines or ticketing machines. Fast, easy and user-friendly interfaces will lead to approach behaviour, whereas slow and difficult may well lead to avoidance.

Case example

Is there an appropriate servicescape for prisons?

It may not seem to be a 'service' as such, and prisons are certainly not conventional services, but they process people (prisoners) and they have 'customers'. In fact, they have three sets of customers: the government who pay (from taxes) for the service; the prisoners themselves, who should expect to be treated humanely and rehabilitated; and society at large who need to be protected from the potential danger posed by offenders. Therefore, it is reasonable to ask whether the idea of a servicescape has any relevance to a prison service. The answer, according to some architects, designers and prison reformers, is very much yes, it has. The right prison design, they say, can make a difference to inmates' mental health and their likelihood of recidivism (reoffending).²² Environment has a big influence on behaviour in most service operations, and prisons are no different.

The servicescape elements that seem to have an effect on prisoner behaviour include the following:

- Residential density – single rather than double cells give inmates a greater sense of privacy and control over their environment, which, in turn, improves communication with staff.
- Corridor length – long corridors and repetitive architectural features produce an 'echo-heavy' aural environment that can exacerbate psychosis in vulnerable inmates.
- Natural light from windows – these reduce depression, improve sleep and lessen agitation.
- Natural imagery (for example, plants) – apparently reduces pulse rate and blood pressure, and improves cognitive functioning.



Bigflick/Shutterstock

- Art – some studies show that inmates consume less medication for anxiety and agitation when exposed to landscape art (as opposed to abstract art). Inmates are said to prefer natural images, positive facial expressions and depictions of caring relationships.
- Residential features – features such as access to laundry equipment, kitchens, private bathrooms and showers can reduce stress.

However, there can be a conflict between what is best for the well-being of inmates and how the community views the design. Notwithstanding evidence that such features can improve outcomes, some in society react negatively to the idea of inmates 'enjoying too much comfort', as they see it. Nevertheless some prisons have been designed with these servicescape principles in mind. Even in the USA, a country with one of the highest incarceration rates in the world, there are examples. The 1,500-bed Van Cise-Simonet Detention Center in

Denver, Colorado is one. With its limestone facade, some see the Detention Center as looking more like a museum or a university library than a prison. Its interior has open spaces and natural light from bar-less windows. No long intimidating corridors with clanging security door-faced cells, inmates are accommodated in smaller units holding up to 64 people, plus an officer. This reduces the chance of violence because officers can get to know prisoners and forecast problems before they arise. Each pod has areas for meals, classes and recreation, and the prison has a full medical unit, a mental-health unit and two courtrooms to handle offences and preliminary hearings.²³

However, servicescape design has its limits, and the Denver authorities admit that the facility is not perfect. Constraints on the height and width of the building mean both staff and inmates suffer more cramped conditions than is ideal. Also, attracting and retaining staff who can manage psychiatric emergencies and behave more like social workers has proved difficult. So, like any other service operation,

the design of the servicescape is important but certainly not the total answer to designing an effective customer experience – a point reinforced by the authorities at another advanced prison, Norway's maximum-security Halden facility. Its architecture, which has won several design awards, has been designed to minimise the inmates' sense of incarceration and to ease their psychological stress. Each inmate has his own cell, which comes with its own toilet and shower room, a fridge, desk, TV screen and forest views. The communal common rooms have a well-equipped kitchenette. But this is only effective because of the culture and staffing policies at the prison. It takes prison officers two to three years to train in Norway; in the UK it takes just 12 weeks. And it seems to work. Recidivism in Norway has fallen to only 20 per cent after two years and about 25 per cent after five years (in the UK, the recidivism rate is almost 50 per cent after just one year). But it is not an inexpensive solution. Each Halden prison place costs about twice the average annual cost of a prison place in the UK.²⁴

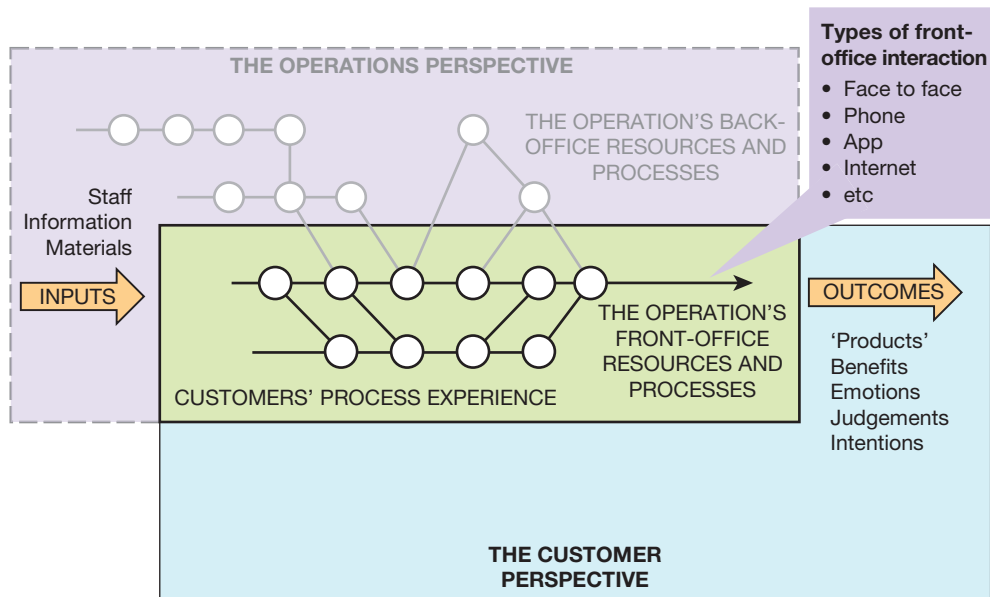
Influencing employees

The idea of a servicescape is not confined to the front office, where customers' reactions and perceptions are the main issue, but also to back-office operations, where it is the impact on staff that matters. It has been suggested that an appropriate environment results in approach rather than avoidance behaviour by employees, and as a result they are more committed to the organisation, stay longer and are more able to carry out their roles effectively.²⁵ We shall deal with the effect of workplace design on staff in the next chapter, when we look at process design from the operation's perspective.

7.3 Designing the customer journey

The customer's journey is the series of steps they take and the touchpoints they have as they experience the service process. The case example 'The acute patient's journey' illustrates a customer's journey that involves many interrelated services, some of which predominantly process customers, others information and others materials. Some tasks and activities may be located in the back office, remote from customers, while other tasks or activities take place in the presence of the customer. These front-office processes are those that the customers experience directly during their journey. The process steps may be performed in a number of locations, in the organisation's facilities or in the customer's home. Together, and in an appropriate sequence, these processes create the customer experience and deliver the service outcomes. Figure 7.4 shows a simplified diagrammatic representation of some operations processes.

Figure 7.4 Front-office service processes can involve various types of interactions involving different degrees of 'visibility'



Case example

The acute patient's journey

Paul Walley, The Open University

When an acutely ill patient needs to be treated urgently, the whole healthcare system has to respond in a coordinated manner. For example, if a patient attends a local doctor's (general practitioner's) clinic with abdominal pain and the doctor assesses this as a probable acute appendicitis, the patient needs to be admitted to hospital for surgery immediately. First, the local doctor might phone a house officer (doctor) at the local general hospital to agree the probable diagnosis, so that the patient can be 'surgically accepted' by the hospital. An ambulance will be immediately requested to take the patient to hospital. However, the target response times may be breached if the ambulances in the area are allocated to other emergencies.

When an ambulance arrives to take the patient to hospital, the local doctor usually gives the paramedic a letter of admission to take with the patient.

This contains any immediate patient information that the hospital staff may find useful, including drugs that have recently been prescribed for pain relief. Ideally, ambulance paramedics should be given the same information so that they know what treatment has already been given, to avoid duplication. This does not always happen, especially if the doctor is unable to meet the ambulance crew themselves.

When the ambulance arrives at the hospital, it is normal for the patient to be taken to either the accident and emergency (A&E) department or to a specialist 'surgical assessment unit'. First, the patient will have to be booked into the system by a receptionist and the ambulance staff will not be allowed to leave before this is done. This is to ensure that accurate information about the patient's condition is given to the hospital staff receiving the patient. The

booking procedure needs to establish the patient's identity accurately, so that the correct patient's notes can be retrieved from the hospital's archives. Other details, such as the patient's next of kin, are also required so that relatives can be informed, particularly if the patient is extremely ill. The patient's arrival will be cross-referenced with the call to surgically accept the patient.

Once the patient has been booked in, they will be assessed for the urgency of their condition. This 'triage' will usually be performed by a senior nurse. A house officer (doctor), supervised by a senior house officer, will then hopefully provide an accurate diagnosis. The first steps in the diagnosis will usually involve basic blood tests and X-rays. Most hospitals have their own emergency X-ray units attached to A&E, staffed by radiographers. These often become very busy with patients, especially where specialist fracture clinics share the resource. Each X-ray needs to be assessed by a radiologist and a report typed up by a medical secretary. When blood is taken, the most common tests might be analysed using small testing machines located near the A&E department. Most samples are sent to central pathology labs, where they are processed alongside the hundreds of routine tests that each lab has to perform each day. Skilled pathology technicians operate the equipment and ensure that the results are accurately obtained. Pathologists assess the results, which are usually reported on a computer printout. Urgent results are sometimes telephoned through.

Often one of the biggest hurdles for the patient is to be found a bed within the hospital. This is the responsibility of a specialist team of bed managers. Wards are divided into medical and surgical units with male- and female-only wards. Given that most hospitals in the UK work with 90 per cent or more occupancy of beds, finding a space for up to 50 acute admissions per day can be a real challenge. Acute admissions typically comprise 30 per cent of all admissions, and so emergencies compete with elective cases for bed space. The space available depends partially upon the surgical lists that drive the elective admissions. Commonly, Mondays and Wednesdays see most elective surgery and so these are frequently the most difficult days for unplanned admissions. In many hospitals, medical wards overflow at times. This can result in patient 'medical outliers' being

placed on surgical wards, further restricting space. One bed manager highlighted other problems:

Requests for beds should come through us. This does not always happen, as patients can be admitted via the 'back door' by consultants, etc., without telling us. It can be confusing when we think we have free beds but we haven't. We continually monitor where beds are available on the computer and by doing a ward round. We conduct a census on wards to find free beds not recorded on the computer.

When a patient needs urgent surgery, a theatre slot needs to be found. This can be complicated as the theatres usually have particular elective clinical specialisms booked for each half-day session, with just a few slots reserved for emergencies. Theatres are not all equipped in the same way: theatres specialising in orthopaedics, for example, need specialist pieces of equipment. There are also issues to address when assembling the most appropriate surgical team of surgeons, anaesthetists, nurses and support staff, since not all staff are multiskilled or available. Staff time taken by emergency surgery inhibits other activities such as ward rounds. The theatres also have to ensure that there is a readily available stock of sterilised equipment, and it usually takes 24 hours for used equipment to be cleaned and re-sterilised.

Patient welfare is also enhanced by the array of support services. The catering services need to provide patients with three meals a day. Cleaning services need to ensure that all areas are kept as clean as possible. This is a difficult task because they must not interfere too much with the daily workload. The traffic of thousands of staff, patients and visitors brings in dirt and waste incessantly. The threat of cross-infection caused by poor hygiene requires a massive coordinated, preventive programme.

Hospitals also need efficient discharge procedures. If patients are discharged later in the day, they may occupy the bed unnecessarily. Delays can be caused by poor coordination with pharmacy, as patients wait for take-home drug prescriptions to be prepared for them. If these are not ready by 5.00 pm, pharmacies often close for the day, forcing patients to stay an extra night on the ward. Other delays can be caused by waits for porters or transport. Relatives can often only pick patients up in the evening, once they have come home from work, causing a bed blockage.

Front-office processes

Examples of front-office processes include:

- a management consultant working with a client to develop a diagnosis of the problem to be solved;
- a nurse administering prescribed drugs to a patient;
- a contact-centre agent answering a customer's query about the progress of a mail-order shipment;
- a prospective customer navigating the website of a computer retailer in order to select and order a new computer.

These examples demonstrate that there is a wide range of possible front-office processes; some have well-defined routines, as in the contact-centre enquiry process, whereas others depend almost entirely on the skill, knowledge and expertise of the service provider. In the case of the management consultant, there may be a preferred approach to problem diagnosis, but this process is likely to be extremely flexible.

Front-office processes interact directly with customers. They will be visible to them and create the customer's experience. However, the degree to which they are 'visible' can vary. Some may involve face-to-face personal contact with service employees, others may involve more remote but synchronous (at the same time) contact, such as by telephone through a contact centre. They may be even more 'remote', using technology such as mobile apps and websites, or even less personal, such as an ATM. Each presents both opportunities for an enhanced experience, or the potential to damage the perceived experience:

- *Face-to-face contact.* Here, a customer interacts directly with a service employee, as in a restaurant or in the branch of a retailer in a shopping mall. These encounters may be an essential element of the experience and contribute directly to customer satisfaction. Well-trained and empathetic staff at (say) a restaurant can produce positive interactions with customers, making a major contribution to their enjoyment of the meal. Conversely, badly trained or uncaring staff can destroy the experience.
- *Telephone contact.* Telephones are typically employed by contact centres to provide advice, complaint handling or order-taking activities. The advantage of these processes/experiences over face-to-face processes/experiences is that they may be provided by a central resource and may therefore be provided at lower cost. Sometimes such activities are relocated to low-labour-cost economies, providing still further efficiency improvements. As customers become more remote, however, there is a much greater possibility of misunderstandings occurring, and service employees missing clues that would be obvious if the customer were physically present.
- *Automated telephone menus.* Another attempt to reduce the cost of phone contact is to use an automated menu that requires customers to navigate through a series of options. They may then either be put through to the (hopefully) appropriate human member of staff, or to some pre-recorded message. Anyone who has used this type of system understands the frustration of going through the monotony of a phone menu. With too many menu options customers forget which number they need, waiting times can be long in badly designed or under-resourced systems, and repeated music on loop every 60 seconds can be infuriating. To avoid these frustrations, menu systems should be kept as simple as possible, allow customers to speak to a live operator at some (early) point and recognise who's calling so they can separate, for example, existing customers and unknown callers into different and appropriate call menus.
- *Website contact.* Internet-based services offer the potential for still further efficiency savings to be made. Websites can provide access for customers at all times and enable them to request information or to order products and services as and when they wish. Once very much a specialised skill, the availability of standardised 'website builder' systems and the development of website design services have made the use of website contact with customers relatively easy, even for small businesses.
- *Mobile phone apps.* The increase in the use of powerful mobile phones and the speed of communication networks has resulted in the use of apps overtaking the use of websites on mobile devices.

And, as with all customer contact mechanisms, the difference between a good and a bad app is usually the quality of the user experience it delivers. Such characteristics as fast loading times and ease of use are important. Simple, uncluttered design, minimised cognitive load, not asking for information twice, avoiding complexity by dividing tasks into smaller subtasks and so on, all contribute to a smooth customer experience.

- *Automated physical contact.* In many ways, the least-personal type of customer contact is the automated physical service process. At one time, the most common example of these was automated teller machines (ATMs), but the use of mobile apps by financial services and cashless transactions severely reduced their usage. Other examples include the many different types of vending machines that provide products such as sandwiches, drinks and snacks to consumers in exchange for a cash or card payment.

Whatever the mode of interaction, it is important that its impact on the customer experience is recognised. It is all too easy for the process to be designed for the benefit of the service provider and to ignore the customer's experience. Certainly, it is important for service experience designers to regularly analyse customer behaviour and adjust the nature of the contact accordingly. This may be by examining a search engine's analytics function to help improve the effectiveness of a website, or it may mean looking at how customers use a menu-driven phone system to help understand which menu options callers chose most frequently. For example, in a menu phone system, if the majority of callers press option three to check on their order status, maybe that should be made the first option.

Depending on the degree and intensity of the contact, customers play a significant role in front-office processes and should be considered an operational resource. Customers fulfil many roles, providing themselves and others with service, collecting materials and providing information to staff, for example. The 'selection' and 'training' of these 'customer employees' will be critical for the operation's success. The presence of the customer may have benefits in terms of providing an additional resource and better communication, but also disadvantages because the presence of the customer may inject unpredicted variations into the service process.

All front-office processes have a common problem: the unpredictability of the customer. For a management consultant, the competence and willingness of the client to understand and communicate the true nature of the problem to be studied and solved will have a major impact on the effectiveness of the consultancy process and the customer's experience of it. This variability is also present to some degree in high-volume business-to-consumer services such as fast-food chains. However much the customer is 'trained' to ask for a standard product in a standard manner, there is likely to be a significant percentage of customers who want something different or who disrupt the carefully designed service process by asking for advice or help beyond the expected level.

Back-office processes

Back-office processes (which we will deal with in more detail in a later chapter) operate at a distance from customers and are largely invisible to them. These processes do not have the complication of the customer's presence and are frequently more efficient as a result. Examples of back-office processes include:

- payment-clearing processes for a retail bank;
- computer repair processes;
- preparation of food in a restaurant;
- laboratory testing in a hospital.

Back-office processes serving a variety of front-office, customer-facing processes can provide cost and consistency benefits if kept away from customers. An example would be the company managing a portfolio of restaurant brands, each with a different style, but using food menus with a considerable degree of overlap. Consolidation of common processes such as recipe development, purchasing and inventory management yields major benefit for the company, leaving the individual brand managers to concentrate on the service differentiation issues.

Moving activities between front and back offices

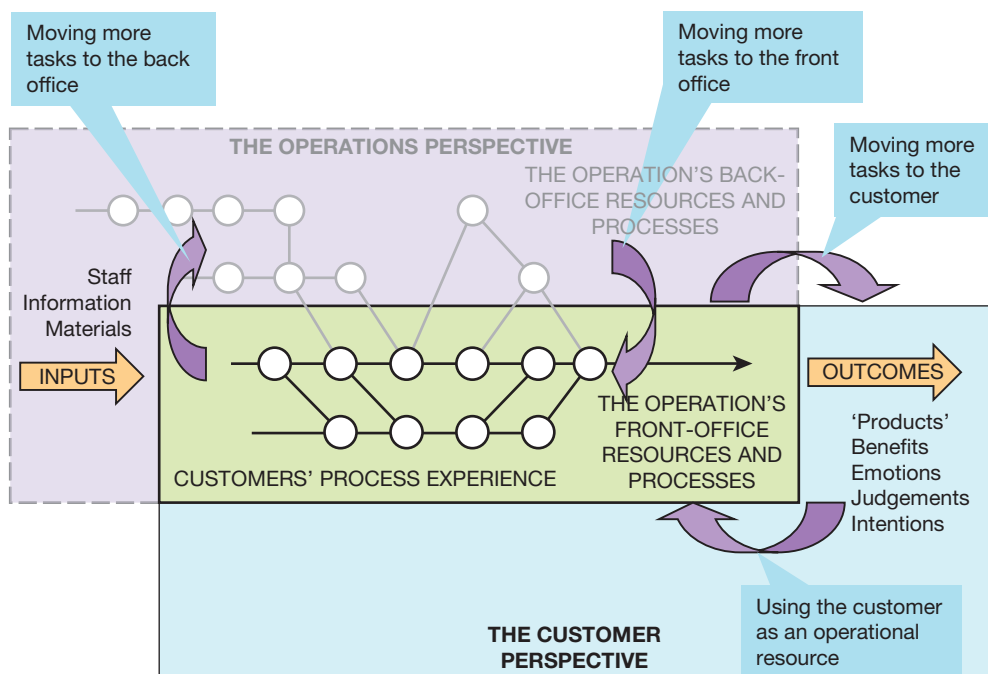
Although we have followed the common practice of distinguishing between front- and back-office processes, two points are worth making. First, it is not just the front-office processes that contribute to the customer experience. No matter how well front-office staff deal with face-to-face customer issues, if they cannot rely on support from their back-office colleagues, they will not be able to provide a smooth customer experience. Second, because an activity is currently located in either the front or back office does not mean that it has to stay there. Organisations can shift activities if they believe that either efficiency or customer experience could be improved (see Figure 7.5).

Often, moving activities from the front to the back office is done for cost reasons. For example, in retail banking there was a significant shift in activities from the front office to the back office. Banks removed many routine administration processes from their branches (front offices) and combined them in high-volume, technology-heavy and efficient centralised (back-office) processing centres. Also, moving processes from front office to back office reduces the need for immediate response to customer requests. Providing capacity in the front office to respond to the variations in customer demand (both content and timing) is enormously expensive. Generally, the trade-off in this case is that the customer expects more restricted service and slower response in return for lower prices.

Conversely, some organisations may choose to move some tasks from the back to the front office. They may figure that customers need access to technical experts who may, traditionally, be back-office employees, rather than deal through an intermediary such as an account manager or front-line consultant. A potential problem here is that some technical experts have little interest or aptitude in customer service and are best employed at a suitable distance from customer contact. In other situations, technology has enabled what were back-office processes to be moved to the front office. For instance, phone-based banking apps have enabled tasks that once were the responsibility of front-office bank branches to be controlled directly by customers.

In fact, there is a growing trend for the service designer to shift the activity from provider to customer, in effect by using customers as an operational resource. As customers, we are encouraged to use the internet to buy tickets or find out information about holidays and train or plane times, thereby reducing costs for the organisation (and sometimes the costs to ourselves) but usually at

Figure 7.5 Changing front-office and back-office activities



the cost of much greater time and effort on the part of the customer. In these cases, the service designer needs to design a clear customer journey (or route map) to guide the customer through the company's internet site. This demands greater investment in process design and technology, but yields benefits for the provider in lower transaction costs and for the customers in greater access to information and freedom to shop at their own convenience.

Risk and the customer experience

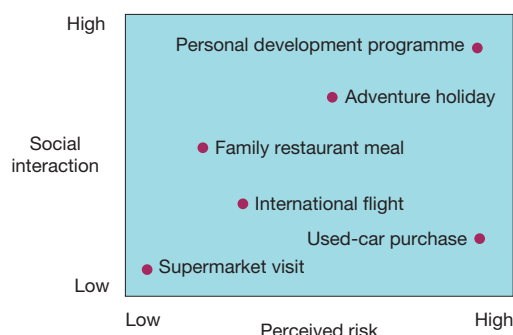
Clearly, some experiences/front-office processes are generally more intense in nature for provider and customer alike, as Figure 7.6 illustrates. An aspect of variability in the service encounter is the extent to which the customer perceives some degree of risk or uncertainty.

This risk may take a number of forms:

- *Financial risk.* In some situations, it may be difficult for the customer to assess the extent of the risk. The purchaser of a used car does not know how reliable the vehicle will prove to be. In the same way, purchasing a pension plan may feel like an extremely risky activity, particularly for someone who is unfamiliar with financial matters.
- *Physical risk.* Going on an adventure holiday or flying in an aeroplane clearly entails some physical risk. In the former, it could be reasonably expected that customers choosing such a holiday have made some assessment of the risks involved and will see them as part of the expected experience. With an airline flight, although the risk to life and limb is small, it does create a degree of discomfort for many people.
- *Psychological risk.* This type of risk may arise from a number of sources. It may come from the customer's lack of confidence or competence. Anxious customers are likely to prove difficult in the service, not because they are intentionally obstructive, but rather because they channel energies into distracting their thoughts from their concerns. Furthermore, nobody likes to feel inferior or incompetent. It is possible that service organisations may make assumptions as to the competence of their customers. If this is combined with a very public display of ignorance, the customer may become either very quiet or very noisy. Finally, a significant number of people find the presence of large numbers of people in close proximity a trial in itself. For some of these 'private' people, any form of social experience can be painful. This may be in stark contrast to the customer-facing employee, who may have chosen this role in large part because of its high degree of customer contact.

Figure 7.6 illustrates the extent of social interaction in a routine service experience for a range of service situations. Each of these situations has implications for the extent of desired and possible customer relationships, as discussed in Chapter 5. For example, in the supermarket visit there are limited opportunities for anything more than superficial conversations, whereas a meal in a restaurant where customers and staff know each other reasonably well might lead to interaction that goes beyond the baseline of ordering food.

Figure 7.6 Customer-perceived risk and social interaction



It should be noted that social interaction is often linked in some way to a mechanism for managing risk. In evaluating the riskiness of the used-car purchase, the customer is frequently judging the trustworthiness of the salesperson. The busyness of the cabin crew on a long-distance flight provides a distraction for those who might be tempted to dwell on the risk of flying, and allows the crew to keep an eye on those who might be suffering from extra anxiety.

There is also a wide range of customer variables that will complicate the customer experience. Some of these are listed below:

- *Customer mindset.* The nature of the service may be reflected in the state of mind of the customer. A customer complaint process will probably not have the customer in the most helpful mindset! On the other hand, customers who are going to a theme park or to a family celebration in a restaurant are more likely to be predisposed to having a good time.
- *Customer mood.* This is somewhat linked to customer mindset, in that people who complain might be expected to be angry, while people going to a celebration might be expected to be in a happier frame of mind. The message here is that it is extremely dangerous to make assumptions about individual customers. Customers who were in a bad mood because they were under pressure or rushed on a previous occasion may turn out to be model customers the next time.
- *Personality clashes.* Some people simply do not get on. They seem to take an instant dislike to each other, or there is something about the other person that reminds them of another difficult or disliked character. Psychologists call this ‘transference’, which describes the situation when attributes of a previous relationship are transferred to a current relationship. A common example relates to authority figures. If some aspect of the service provider reminds the customer of a hated figure from the past, it is unlikely that this transaction will be successful.

All these factors must be taken into account, both in designing the customer experience and in its day-to-day management.

7.4 Managing the total chain of processes

As we emphasised earlier in this chapter, customer experience is the totality of all customer–operation encounters, from end to end of a customer’s contact with an operation. So, service operations managers need to be able to manage the total chain of processes, which link together to deliver the service to customers, or end users. Most of us have experienced poor service that results from a lack of coordination between activities – a simple example being the person serving you in the restaurant promising you that your meal will arrive in a few minutes without understanding that the kitchen is overwhelmed and the wait will be considerably longer. Failure to manage end-to-end (e2e) processes leads to inefficiencies across the organisation or chain of organisations that comprise the service supply chain, leading to lack of consistency, poor reliability in terms of quality and lead-times, and increased cost. It is not uncommon, even for major technology providers, to operate processes in functional ‘silos’, with little or no coordination between them.

Managers, including operations managers, have a tendency to draw a boundary around their processes that coincides with the physical or geographic boundary of their responsibility. The problems faced by many customers are at the interfaces between the many back-office and front-office processes that together create the total chain of processes. A hospital, for example, comprises many departments: some back-office departments such as cleaning, administration, finance and personnel; and front-office processes such as reception, patient wards, nursing and treatment. While each one may appear to be efficient in its own right, the problems caused by a lack of coordination will be felt by customers (not managers or staff) when they attempt to use and experience the service. For example, problems can include:

- There is a desire for prompt treatment, but the doctor’s notes have been delayed or are unavailable.
- A request for medicines or equipment is held up because of the paperwork.
- A request is made to turn up on time for an appointment, but there are insufficient car parking spaces outside.

By assessing and designing service processes from the point of view of the ‘thing’ being processed, whether it is the customers themselves, something belonging to them such as a file, or information such as a loan application, we can expose the interface problems. The objective of good service design is to achieve an efficient process from an operations perspective and a seamless experience for the customer. Here are a few ‘tests’ for a seamless experience:²⁶

Customers (or their files, requests, etc.) should:

- flow smoothly through the service;
- experience no discontinuity.

Staff should:

- take ownership of processes;
- take ownership of individual customers (or their files, requests, etc.).

Managers should:

- take a process, not a functional, perspective;
- understand whole processes;
- understand how they fit into the processes;
- work in cross-functional teams to assess and improve the design.

Designing the customer experience

Few service organisations, unlike their manufacturing counterparts, employ specialist ‘service engineers’ or use ‘service laboratories’ to help them design, test and evaluate their service and customer experiences. Service design is often an ad hoc or trial-and-error activity. Most faults and problems are effectively ‘designed in’, albeit inadvertently, and as a result customers experience poor service and the processes are inefficient.

The keys to good service design are about taking an outside-in customer perspective and understanding the whole service process. This may seem obvious, yet in many organisations managers and their staff simply get used to seeing – and therefore ignoring – poor processes, or see them from an internal, inside-out perspective, thus missing the experience from the customer’s perspective.

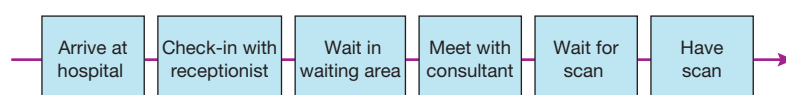
Several tools and techniques have been developed to help ‘engineer’ (design and improve) the customer’s journey and influence the experience they have, including:

- customer journey mapping;
- walk-through audits;
- emotion mapping;
- customer experience analysis.

Customer journey mapping

This is a simple, basic, but important tool in customer experience design. Journey mapping is the process of capturing the series of touchpoints that customers encounter during a service or set of services. (This is also sometimes called route mapping for the design of websites, and patient or clinical pathways, care pathways or maps in hospitals, for example.) It can be set out in a simple set of steps. Figure 7.7 provides the first few steps of the customer journey through a hospital. The important point is that it forces staff and managers to look at their processes from the customer perspective, outside-in, and see what the customers have to go through, rather than what they see from their inside-out perspective.

Figure 7.7 Customer journey mapping



Walk-through audits

A walk-through audit undertaken by staff, managers or independent advisors, acting as surrogate customers, can help evaluate and improve the service and the customer's experience. The audit should be based on a checklist of questions that guide the 'customer's' assessment of their experience of the service (see, for example, Figure 7.8).

The key requirement for this approach lies in the choice of attributes to assess, and the scales on which the assessment will lie. As the name of the technique implies, it should be developed to identify the critical elements of the customer experience from first contact with the service process through to exit. It is crucial that this audit is not developed solely by people who know the service well, since they are prone to miss detail that they think is irrelevant but which customers are affected by. The advantage of this type of approach is that it allows the manager to carry out regular service checks on key aspects of the customer's experience of the service, perhaps comparing performance at different times of day between service units.

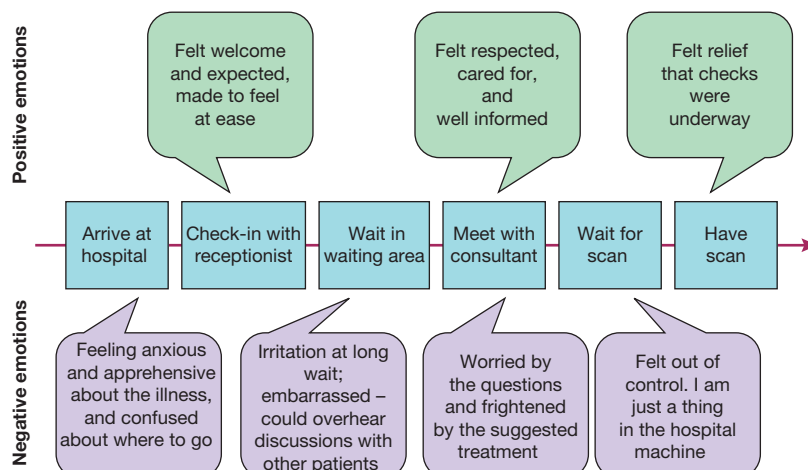
Emotion mapping

Emotion mapping is a simple but powerful extension of journey mapping and it captures the emotions felt by customers (or managers and staff acting as customers) as they move through the journey. Both negative and positive emotions can be captured (see Figure 7.9), discussed by managers and staff or the customer experience design team, changes made and then rechecked to see the impact of the changes.

Figure 7.8 Part of a walk-through audit of an electrical store

How easy was it to park the car?	No spaces Plenty of spaces				
	1	2	3	4	5
How did the store look?	Disgraceful Very clean/tidy				
	1	2	3	4	5
How attractive were the displays?	Uninviting Very attractive				
	1	2	3	4	5
How soon were you assisted?	15 mins+ 10–15 mins 0–5 mins				
	1	2	3	4	5

Figure 7.9 Emotion map of a hospital visit



Customer experience analysis

Customer experience analysis (CEA, sometimes referred to as service transaction analysis – STA) is a development of the walk-through audit and emotion mapping. It incorporates the service concept, the customer experience, the various touchpoints in the customer's journey and an assessment of each. It also captures the messages and the emotions felt by the customer. This is another simple but powerful tool to assess the customer's experience of a service and help staff and managers improve it. Figure 7.10 provides an example of a CEA applied to a customer of a real estate agent.

CEA comprises six key stages:

- The service concept needs to be agreed and specified. This alone is often a useful exercise to gain agreement between the employees on the nature of their service and the experience and emotions they want to provide (see Chapter 4).
- Mystery shoppers, independent advisors or preferably managers and their staff walk through the actual customer's journey to assess how customers (might) assess each touchpoint. Each touchpoint is briefly described in the left-hand column and an assessment of it in terms of delighting (+), satisfactory (0) or unsatisfactory (–) is noted in the middle columns. (A more detailed 1 to 5, or 1 to 7 scale can be substituted.)
- The interpretation as to why the customer or surrogate customer arrives at this evaluation is entered into the messages column, which describes the deliberate or inadvertent messages provided by the service. For example, an open door may provide an 'inviting' message, while a telephone operator unwilling to deviate from a set script may provide an 'unhelpful and unnecessarily bureaucratic' message to the customer.
- The final column records the emotions felt by the customer during the experience. The top of the column can also be used to record the emotions that customers may feel even before contact is made with the organisation.
- The assessments of +, 0 and – are joined to give a very visible profile of the transaction outcomes and an overall evaluation is entered at the foot of the table.
- Working from this sheet, service designers, managers and staff can begin to understand how customers might interpret the service process and then to discuss the improvements that can be made. The exercise can be repeated with a revised process and the profiles readily compared.

Figure 7.10 Example of CEA for a real estate agent

Organisation:	Real estate agent			Service concept:	
Process:	Buy a house			Prestige properties with excellent service for the discerning purchaser	
Customer:	Purchaser				
Customer journey	Score			Messages	Emotions
	+	0	–		
Pre-contact					Concerned
Good location	x			They are accessible/available	Relieved
Good facilities	x			Expensive but competent	Cared for
Ignored			x	I am not worth the trouble	Irritated
Introduction		x		They want to help me	Pleased
Fill in forms			x	I am just another punter	Annoyed
No pen			x	They don't really care	Confused
Nothing available			x	What business are they in?	Frustrated
Go on mailing list			x	Try somewhere else	Exasperated
Overall evaluation	Poor service design. Little thought for purchasers. Company is not customer oriented. Poor service.				

Counterpoint

The importance of customer experience is relatively self-evident. All services create experiences for their customers, and their satisfaction with the experience is a reasonable (although not uncontested) indicator of the value they place on the service (and revenue in for-profit services). For this reason, the topic has attracted considerable research and practitioner attention, especially over the last few years. However, the vast majority of this attention has been focused on B2C interactions. In these B2C interactions customer experience can be complex, ever-changing and ambiguous. It is affected by all of the (possibly many) interactions customers have with all aspects of a service over a period of time, and involves a customer's many emotional, social and physical responses to the service. But if customer experience is a complex issue for B2C services, it is an even greater challenge for B2B companies. Interpersonal interactions are just as important in B2B services, and the motive for considering and deliberately shaping the customer experience is the same as in B2C services. Both want to build and maintain long-term relationships.

But there are important differences between B2C and B2B, and although these do not invalidate the concept, they must be taken into account when considering customer experience in a B2B context. The first, and most obvious, difference is that the idea of a single customer journey is highly simplistic

in a B2B setting, where there are usually multiple 'customers', including those making the purchase decision, those paying for the service, those using the service and those who could be held accountable for how the service is perceived. There could also be several groups selling and providing the service, including sales people, contractors, service staff and so on. An approach to analysing the customer experience based on the (relatively) simple journey of an individual consumer will neglect the additional complexities of the multi-actor B2B experience(s). Using the same approach as a B2C service can easily miss important interactions across this wider network of customers and providers. The implication of these differences is that B2B interactions need mapping and analysing in a more comprehensive, holistic and multi-level manner than in B2C services. It has also been suggested²⁷ that the B2B service experience needs to be assessed in a different way. Rather than looking at simple input-output measures such as on-time delivery of a service, or completion-to-budget, broader and more strategic, output-based measures are needed – preferably ones that will prompt questions about the ultimate purpose of the service. Moving from input-output measures to outcomes-based measures shifts the question from 'Did they like it?' to a more strategic consideration of 'What difference did it make?'.

CEA attempts to bring a systematic evaluation of a customer's experience of a service. It does not rely upon individual complaints or initiatives, but analyses and evaluates the experience, step by step, from the customer's point of view. The main advantages of using CEA are that:

- It requires managers and employees to think about, and express in words, their service concept (including the experience and emotions). This in itself creates an opportunity for healthy debate, and even disagreement, about what the intentions of the organisation actually are.
- It forces managers and employees to see the process from the point of view of the customer (outside-in), thus increasing their level of customer orientation.
- It asks directly and explicitly what each touchpoint means to the customer and, importantly, what gives them this impression.
- It assesses the clues designed into the environment (the servicescape), the people and the service process/experience, and captures the messages and resulting emotions.

Crowd behaviour

In some operations, it is misleading to think about 'customer' behaviour as being about individuals, each acting independently. En masse, individual customers become a crowd, and there are many types of service operations that have to deal with crowds rather than individual customers.

Crowding happens when an excessively large number of people gather within a specified area. Operations where this can occur include mass tourist sites, concerts and festivals, sporting events, public transport hubs such as railway stations, public spaces at busy times, even political and social demonstrations that require organising and policing. And before these operations can be designed, it is important to have a robust understanding of crowd behaviour in specific circumstances.

It is a particularly important issue for these types of operations because not only can overcrowding impede the flow of people, but also because there is the potential for minor or major injury occurring through the nature of how crowds can behave. A particularly tragic example occurred at Hillsborough in the UK, the football team Sheffield Wednesday's football ground, on 15 April 1989, when 96 Liverpool football fans died from crush injuries during an FA Cup semi-final match between Liverpool and Nottingham Forest. A later judicial enquiry concluded that a failure of police control was largely responsible for the disaster.²⁸ So, although operations managers should be aware of how overcrowding can affect their customers' routine experience, even more important is its potential impact on safety.

Of course, most occasions where crowds occur do not present problems: the organisers succeed in managing the assembly and then dispersal of large numbers of people peacefully without injury to individuals. However, because a crowd does have the potential for disruption, and sometimes disorder, operations need to devote some thought to the nature of the crowd that they have to deal with. One distinction is that between what are sometimes called passive and active crowds. A passive crowd is one that is willing to be manipulated, because they broadly accept that such manipulation meets their own needs and personal objectives. A commonly cited example is how Japanese commuters are deliberately pushed into overcrowded trains during the Tokyo rush hour.

'Active' crowds could be one of four types, two of which are of concern to service operations managers:

- expressive crowds; and
- escapist crowds.

And two of which are generally of concern only to policing services. These are:

- acquisitive crowds; and
- aggressive crowds.

An 'expressive' crowd is mainly concerned with the expression of passions or emotions. These emotions may be in support of political, religious, sporting or cultural events where the crowd expresses their feelings. An 'escapist' crowd may have started out as a passive crowd but then a shared danger or fear (for example, hearing a fire alarm) causes the feeling that there is an urgent need to flee the immediate area. An 'acquisitive' crowd is one that senses an opportunity for looting amidst the social disorder brought about by others. An 'aggressive' crowd is one where the objective is violence, destruction or both, to achieve a common purpose.

Ideas about how the behaviour of people in crowds differs from people as individuals have been debated for over a century. Among the first writings on crowd behaviour was the assumption that simply by being part of the crowd, individuals lose their sense of self and sense of responsibility. This leads to crowd members becoming unable to resist any passing idea or emotion. It could even result in individuals irrationally sacrificing their own personal interests.²⁹ However, later theories of crowd behaviour strongly disputed this idea. Some criticised any idea that a crowd had a distinct group mind separate from those of the individuals that composed it, while others believed that crowds should not be thought of as homogeneous. Instead, crowds are mixed, with some individuals expressing what they are feeling while others do not. More recent theories stress the complexity of the relationships between crowd members – particularly the interplay between individuals' unique characteristics and how they see their social grouping.

As yet, although there are many theories of how crowds behave, it is fair to say that there is no consensus on a theory that fully describes, let alone predicts, this behaviour. However, from the perspective of the service operations manager, the main issue is to design processes that can deal with crowds in such a way as to maintain the welfare of individuals within the crowd, while at the same time preserving the efficiency of the process, often under severe capacity constraint. (We will deal with how crowd processes can be designed in Chapter 11.)

Case example

Left or right? The dynamics of crowd movement³⁰

Of all the ways of getting around, walking offers the most freedom compared, say, to crowded commuter trains or buses. Yes? Well, only kind of. In fact, whether avoiding collisions with other pedestrians or navigating crowded streets, pedestrians are both autonomous and mobile, yet at the same time relatively predictable. But national culture also plays a part. For example, if you are British, walking along a busy pavement and another pedestrian is approaching from the opposite direction, you will collide unless you each move out of the other's way. Which way do you move? If two opposing people guess each other's intentions correctly, each moving to one side and allowing the other past, then they are likely to choose to move the same way the next time they need to avoid a collision. The probability of a successful

to move to the left. There is no real agreement on why this should be. There is no obvious link with the side of the road on which people drive. Brits funnel to the right on pavements but drive on the left.

All this may seem interesting but not very useful, yet understanding pedestrian flows can make crowd events safer. For example, knowing the likelihood of different nationalities to step in different directions could be helpful to service operations managers organising an international sporting event, where sports fans from different countries associate. This explains the efforts by modellers to understand and predict the cultural biases that can influence crowd flows. For example, one experiment tested the walking speeds of people from Germany and India. Volunteers



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manoeuvre increases as more and more people adopt a bias in one direction, until the tendency sticks. Whether it's right or left does not matter; what does matter is that it is the unspoken will of the majority.

Most times, British people will move to the right. But in many other countries, particularly in many parts of Asia, pedestrians are more likely

in each country were asked to walk in single file around an elliptical circuit made from ropes and chairs. When crowd densities were low the speeds of each nationality were alike; but when crowd density was increased, Indians walked faster than Germans. Apparently Indians are culturally less bothered about occasionally bumping into other people.

7.5 What is the role of technology in shaping the customer experience?

There are now few front-office activities and virtually no back-office activities that do not involve some element of technological support. This was not always the case, but as with almost all industries, services have adopted technology at an increasing rate. Technology now plays a key role in many service innovations, resulting in often significant changes to the customer experience. In this chapter, we will take a customer-based perspective and look (relatively briefly) at how the customer experience is affected by technology. (We will take a more operations-based perspective and look at how technology can be part of the design of service processes in Chapter 11.)

Customer reaction to technology

Innovation in technology has rarely been so rapid, and in consequence so difficult to predict. Yet, even when specific technologies, or how they may be used, are unpredictable, there are some questions that all service operations managers should be asking themselves. Here, we look not at specific technologies, but rather at the more general impact that these technologies have. Also, as befits a chapter that deals with the customers' perspective, we will focus on the characteristics of service technologies that relate to how advances could change customer behaviour. Although not an exhaustive list, here are some of them.

Unshackled from location

Many of the most significant technological developments in service sectors are capable of being channelled through mobile devices, and this has had a very significant effect on customer behaviour and expectations. Customers expect to be able to use phones or other mobile devices, both to access services and to get in touch with service providers. Websites, once designed for computers, need to be mobile friendly.

Changed expectations

To a large extent, particularly in B2C industries, customers expect 'always-on' availability of service. At one time, an operation could define the times that it was open for business, with customers having to conform or do without the service. But mobile devices, the integration of e-commerce channels and network coverage mean that customers can access services almost any time. For example, retailers are expected to cope with the seamless integration of online, physical shops, delivery, 'click and collect', returns, repeat purchases and all other variants of their service without requiring their customers to work through separate channels.

Easier switching

Technology-enabled ease of access to services also means that customers find it easier to take their business elsewhere. They can switch between services until they find an experience that matches their expectations. Customers have more choices, and therefore they can come to expect an immediate, responsive service from the start of any interaction. Customer loyalty, and customer defections, are increasingly determined by every service experience.

Direct 'personal' contact

Increasingly, customers have become tolerant of automated 'direct' contact with services, such as those provided by chatbots. Even relatively simple chatbots can provide a quick, convenient and inexpensive method of communication between a service and its customers. There is an

increased opportunity for services to interact on a personalised basis with customers – for example, using algorithms to deliver informed customer care. However, as with automated telephone services, if poorly designed, or poorly supported by artificial intelligence (AI), they can prove frustrating for customers. In other words, chatbots will only enhance the customer experience if they are programmed well. Similarly, using AI to sell additional services or products can be annoying.

Potential to understand customer behaviour

Almost all new technologies have a far greater ability to collect data on how customers behave than those they replace. Whether it is image and speech data being collected by the auto industry to develop autonomous and semi-autonomous vehicles, or ‘click history’ indicating how customers use a website, the ‘voice of the customer’ (VOC) becomes potentially more evident. This is important because if a service can effectively predict how customers are likely to behave, then more appropriate customer experiences can be designed.

Content overload

The volume of available information from internet comparison sites, customer reviews and blog posts (even when they are not totally reliable) is unlikely to decrease. With such access to information, there is so much content for people to consume that content overload is an increasing danger, resulting in reduced customer attention to what may be important information. In addition, many service technologies have resulted in customers having so many choices in navigating the technology that customer expectations can increase while satisfaction reduces simultaneously.

Shifting activities to the customer

Many of the newer service technologies have had the net effect of shifting the balance of responsibility for carrying out activities from the operation’s resources and processes to the customer. As one would expect, this shift is most obvious in customer-facing services where there are multiple uses for self-service-type technologies. For example, supermarkets and other retailers have adopted self-service technologies that allow customers to walk through a store, scanning barcodes on items before putting them into their basket. This avoids customers having to queue at the checkout, and also means that fewer service staff are required. Newer technologies, such as face recognition and radio frequency identification (RFID), can, in some cases, automate the detection process, to do away with any active customer involvement.

Security is an increasingly important factor

The digitisation of service technology and the interconnection of systems has increased customers’ concerns about cybersecurity. And concerns about cybersecurity can impact both customer experience and, ultimately, customer loyalty. Fraud is an important customer concern for any form of e-commerce, banking or other online activities. A high proportion of users of these services has fallen victim to some form of fraud, sometimes minor, sometimes not. Moreover, well-publicised leaks of customer data by well-used sites cause customer anxiety, even when, as individuals, customers are not directly harmed. But, as ever with this type of issue, there is a balance to be struck between security and customer convenience. For example, being frequently contacted by a bank’s security team after an unusual transaction may be beneficial to customers in the long term, but can be irritating in the short term.

Case example

Would you bet your life on technology?³¹

The answer, of course, is that you already do. Every time you take public transport, you rely on the brakes working. Admittedly, for most public transport technology, there is also a human (at least partially) controlling the technology. But what about an elevator (lift)? Here, we trust the technology alone to raise us sometimes hundreds of metres above the ground with only technology-based safety mechanisms. Interestingly, in the early days of elevators being installed in shops and hotels, they were always controlled by an elevator attendant, and it was assumed that their safe operation required an operator called a 'liftboy'. When these human 'controllers' were replaced with customer-operated elevators, many customers refused to use them. Without the human attendant, they just seemed too risky. Over time, and in the absence of multiple elevator disasters, most of us have learned to trust elevator technology.

But would we be equally happy to trust in a pilotless aircraft? Possibly not, yet modern aircraft fly on automatic pilot for most of the time, certainly more than most passengers realise. Most people are blissfully unaware that when an aircraft lands in mist or fog, it is a computer that is landing it. When autopilots can do something better than a human pilot, it is obviously sensible to use the technology. This means using technology to do two jobs. First, autopilots can take control of the plane during the long and (for the pilot) monotonous part of the flight between take-off and landing. Automatic pilots are not prone to the tedium or weariness that can affect humans, and which can cause pilot error. The second job is to make landings, especially when visibility is poor because of fog or bad light conditions. The autopilot communicates with automatic equipment on the ground, which allows the aircraft to be landed, if necessary, under conditions of zero visibility. One of the few reasons not to use the autopilot is if the pilot is training or

needs to log the required number of landings to stay licensed.

As yet, commercial flights do not take off automatically. This is partly because it would require airports and airlines to invest in extra guidance equipment, which would be expensive to develop and install. And it is partly because take-off is technically more complex than landing. More things could go wrong and some situations (for example, an engine failure during take-off) require split-second decision making from the pilot. However, although expensive, it would be technically feasible to develop automatic take-off technology that met required safety standards (military drones do it regularly). So, if autopilots control 95 per cent of flying time, why not put development effort into making the remaining 5 per cent automated? After all, it is argued, computers can fly accurate, repeatable paths, do not get tired or inebriated, do not get distracted and may be safer than human pilots in the future. It would certainly be cheaper. A very large part of airlines' cost is the wages of its staff, and of all staff, pilots are by far the costliest.

How acceptable pilotless aircraft would be to passengers is a very different matter. Many people are already nervous about flying. Remove the two professional-looking pilots from the front of the aircraft and the perceived risk is likely to be a step too far for most customers. And rightly so: if a train or a car loses its autopilot, it will not necessarily crash. But when a plane stops, it falls out of the sky. So, conventional passenger aircraft are likely to keep their human crew for some time. But that may not be true of cargo planes. With freight flights there would be no customer resistance. Maybe, over time, if pilotless freight aircraft proved to be safe, especially in a world in which autonomous vehicles were commonplace, passengers' attitudes might change.

7.6 Summary

What is a customer experience? – A customer experience is the customer's direct and personal interpretation of their interaction and participation in the service process, involving their journey through a series of touchpoints. It is how customers perceive the whole of a service as they have contact with its operation's resources and processes. Because the experience is the customer's personal interpretation of a service, we can't actually design an experience, only the mechanisms for creating it. A customer experience statement is a description of the customer's experience and the outcomes from the point of view of the customer, written in an outside-in way. A critical part of the experience statement is the identification of the emotions the organisation wants their customers to feel or, more correctly, the emotions that their customers will want to feel as a result of the service.

What is the effect of servicescapes on customer experience? – The servicescape describes the physical and informational surroundings in which a service is both created and provided. It provides service clues that are indicators, stimuli and signals that have been built (purposely or inadvertently) into the service to provide particular messages. Messages are what customers will infer about the organisation: its services, management or staff. The emotions resulting from messages are how the customer feels, consciously or subconsciously, about those clues and messages. But clues and messages not only signal the nature of the experience and create the experience for the customer, they can also influence their behaviour and that of the staff. So, in designing services and experiences, managers need to be concerned to ensure that all messages emanating from all the clues designed into the service are consistent with the service concept and the desired emotions.

How can managers design the customer journey? – The customer's journey is the series of steps they take and the touchpoints they have as they experience the service process. Front-office processes interact directly with customers and will be visible to them, creating the customer's experience. Such processes may involve personal contact with service employees (face to face or by telephone), or interaction through technology such as the organisation's website or mobile apps. Some experiences/front-office processes are more intense in nature for provider and customer alike. An aspect of variability in the service encounter is the extent to which the customer perceives some degree of risk or uncertainty.

How can the total chain of processes be managed? – Service operations managers need to be able to manage the total chain of processes (back office, front office and external), which link together to deliver the service to customers. Several tools and techniques have been developed to help 'engineer' the customer's journey and influence the experience they have, including customer journey mapping, walk-through audits, emotion mapping and customer experience analysis. However, in some operations, it is misleading to think about 'customer' behaviour as being about individuals, each acting independently. Crowding happens when an excessively large number of people gather within a specified area.

What is the role of technology in shaping the customer experience? – Very few front-office activities and virtually no back-office activities involve no technological support. In particular, information technology plays a key role in many service innovations, resulting in often significant changes to the customer experience. Technological innovation has rarely been so rapid, and while the impact of specific technologies is difficult to predict, some impacts of service technology are emerging:

- Many of the most significant technological developments in service sectors are capable of being channelled through mobile devices.
- Customers increasingly expect to access integrated services at almost any time.
- Technology-enabled ease of access to services means that customers find it easier to switch between services.

- Customers have become more tolerant of automated ‘direct’ contact with services, such as those provided by chatbots.
- Almost all new technologies have a far greater ability to collect data on how customers behave, and to exploit the potential to understand customer behaviour.
- The volume of available information from internet comparison sites, customer reviews and blog posts (even when they are not totally reliable) can lead to ‘content overload’.
- Many of the newer service technologies have had the net effect of shifting the balance of responsibility for carrying out activities from the operation’s resources and processes to the customer.
- The digitisation of service technology and the interconnection of systems has increased customers’ concerns about cybersecurity.

Discussion questions and exercises



1. The movie cinema has remained virtually unchanged since it was first introduced over a century ago. And, until recently, cinemas were the only way to watch a film. The basic idea of a movie cinema and how it provided its services have remained largely the same. There is a dark room with an illuminated screen, rowed seating, surround sound, food and drink concessions and a group of people collectively absorbed in a story. However, the growth of online streaming, with its quality and availability, has caused changes in most people’s viewing habits, with many people using technology to consume film content. The implication of this is that films available at the cinema are no longer a key point of differentiation. There are alternatives to view content. For example, video-on-demand (VOD) platforms, such as Netflix or Amazon Prime are real competitors. How could cinema chains design their customer experience to compete against VOD services?
2. For years there has been something of a question mark over the future of retail banks. Many banks have reduced the number of their branches. However, banks are keen to make sure that those that do remain have a warm and friendly feeling, which is why they pay so much attention to the décor and design of their branches. How could the principles of servicescape design help banks to promote excellence in perceived customer experience in their branches?
3. The pedestrian-crossing lights in New York City, like most other cities, required pedestrians to press a button if they wanted the lights to change. Then, over the course of many years, and without giving it any publicity, the city authorities disabled most of the control buttons that once operated the lights. They had decided that computerised timers almost always worked better. However, the city government did not take the disabled buttons away. Initially, the buttons survived because of the cost of removing them. But it turned out that even inoperative buttons serve a purpose. Apparently, pedestrians who press a button are less likely to cross before the green man appears. (a) Why do you think this is? (b) Does this mean that so-called ‘placebo buttons’ should be used everywhere?
4. A hospital in a large city (where there are several hospitals) is considering posting current waiting times outside its ‘Accident and Emergency’ (emergency room) department. According to the operations officer at the hospital, ‘if a patient has a problem that is not life threatening, such as a sprained ankle, the patient can trade off the discomfort of a longer drive with a possibly longer wait’. What do you see as the pros and cons of posting emergency room waiting times?
5. Apple opened its ‘Apple Stores’ in smart high streets all over the world. Then it was reported that Apple would be opening a store-within-a-store in one of the world’s most famous department stores – Harrods, in London. What are the advantages to both Apple and Harrods of such a ‘store-within-a-store’?
6. LAX airport in Los Angeles is the fourth-busiest airport on earth. It has also been judged the worst airport in the world.³² What do you think are the factors that determine the customer experience of an airport?

Case exercise

Elena's customer experience³³

OK, so she had left it until the last minute, she knew that. But it didn't make it any the less frustrating. The deadline for handing in her assignment was 17.00 that day and she hadn't started it yet. She was pretty sure that she could do a good assignment, in fact a great assignment, because it was one of her favourite topics, but she did need to incorporate some key quotes and some of the examples that her tutor had posted on the university's virtual learning environment, 'Canvas'. But Canvas would not let her in to the module's posted materials.

Were others having the same problem? She messaged her friend – could she access the module

in Canvas? Yes, apparently no problem. So why couldn't Elena get into that part of the system? If she was in the library, she could use one of their terminals to see if that would let her in, or even seek help from one of their staff – but she was at her apartment across town. Getting across to the university would consume valuable time. But what about the IT service's helpdesk? She thought that she had their number somewhere . . .

Here is a description of the service encounter between Elena and the university's IT helpdesk.

Time	Elena's actions	IT helpdesk's response	IT back-office activities	Elena's reaction
09.15	Search through university website to find helpdesk (HD) phone number. Call it.	Get voice-recorded options.		<i>Stressed! Will I get the assignment done in time? I should know the HD number, but I haven't used it before.</i>
09.17	Choose options that get through to HD agent. Hang up after five minutes.	Recording says position in queue is 9th.		<i>9th in the queue! Is everyone having problems?</i>
09.30	Call HD once more. This time leave message outlining problem and asking for HD agent to return call.		Recorded messages prioritised by IT assistant.	<i>So annoying! I want to speak to a real person.</i>
09.53– 9.59	Receives call from HD agent.	HD agent calls Elena and takes details of the issue. Issues 'task number'. Says will investigate and get back to her.	System automatically sends Elena an email confirming task number and explaining procedure.	<i>What a friendly person. Reassuring and took my problem seriously. Hope he gets back soon.</i>
10.20	Still heard nothing from HD agent. Should I call again?	Trying to find out why Elena can't access this module. No obvious reason.		<i>Getting increasingly worried now. Half an hour to them is a small part of their day, but it's serious for me if I screw up this assignment.</i>

Time	Elena's actions	IT helpdesk's response	IT back-office activities	Elena's reaction
10.55	Elena decides to try contacting the HD by emailing them (replying to the automatic email sent an hour ago).		Replies to automated emails are not monitored.	<i>Was that the right thing to do? The email didn't say 'no reply', but maybe it isn't monitored. I don't want to wait any longer.</i>
11.15		HD agent gets back to Elena to say the problem isn't resolved, but they are working on it.	In fact, two HD agents and an IT assistant are all trying to find out why this problem is affecting this one student.	<i>He was sympathetic and friendly, but how long will this go on?</i>
12.00	Elena calls her friend and gets her to access the module notes and send her some of the quotes that she needs.			<i>This isn't as good as getting direct access myself, but it's better than missing the deadline.</i>
15.50		HD agent calls to say that the problem has been partially resolved. She can log into the system with a temporary username and password until they can permanently fix the issue.		<i>It's too late to be much help. Could they not have suggested this temporary fix earlier?</i>

Postscript

Elena received an email two days later informing her that she could now log on as normal and she once again had access to all the posted notes for all her modules.

I still don't know why this happened. There has been no explanation. I know that it's too late to affect my assignment, but it would have been good to get some kind of acknowledgement that the IT people understood how serious the issue was and reassurance that the problem would not be allowed to affect other students. I don't have a problem with the HD agent that I spoke with. He was always

sympathetic, polite and reassuring, but I still didn't have access to what I needed at an important time.

Post-postscript

Stressful though the experience was for Elena, she still received a first-class grade for the assignment.

Questions

1. Working from Elena's reactions, chart her 'emotional journey' during her customer experience.
2. How could the university's IT services have improved Elena's customer experience?

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Chapter 8

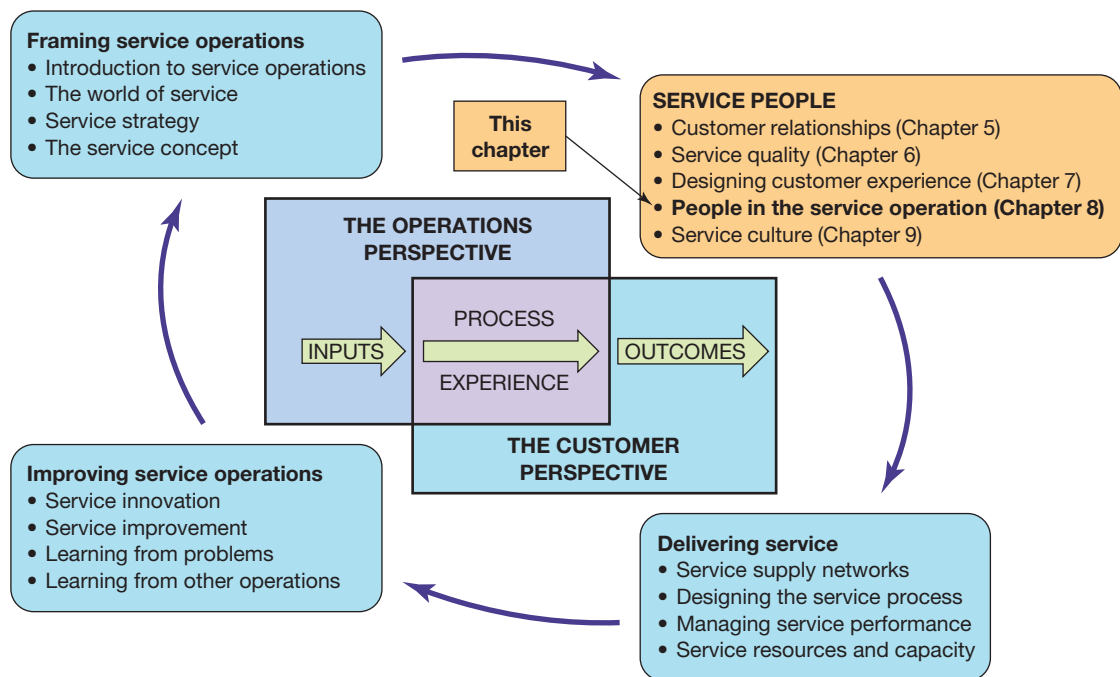
People in the service operation



This chapter is about how to motivate people – staff and customers, but particularly staff – to facilitate the delivery of service. Rather than addressing routine human resource aspects of terms and conditions of employment contracts, the chapter deals primarily with the pressures that front-line service staff come under, and how such issues as leadership, teamwork, discretion and motivation can reduce stress and improve service. Figure 8.1 shows where this topic fits in our model of service operations management.

Learning objectives

- To understand why service delivery can be such a pressurised task
- To be able to explain some of the issues in managing service staff
- To appreciate the difference in discretion between compliant and adaptive organisations
- To be able to describe some customer roles and their importance

Figure 8.1 This chapter looks at people in the service operation

Introduction

Ask any operations manager, especially those managing high-customer-contact services, and they will probably tell you that they spend most of their time and effort managing people. That is, solving the problems of their staff and their customers. Most service organisations employ large numbers of staff, both customer-facing (front-line) employees and back-office employees who support (and thus provide service to) the customer-facing staff. From a customer's perspective, the difference between a mediocre and an excellent experience lies more often than not with the person who serves them – their immediate point of contact. It is this person who represents the organisation and embodies the service. The customer's perception of the service can be very much influenced by the way they view their interaction with staff.

The link between service staff satisfaction and customer satisfaction was demonstrated by a report from Glassdoor, one of the world's largest job and recruiting sites, which is owned by the Japanese firm, Recruit Holdings. Its website allows current and former employees to review companies anonymously. In 2018, Glassdoor published the report of its analysis of the records of 293 companies across 13 industries between 2008 and 2018. It had studied the link between employee satisfaction, based on its own ratings, and the American Customer Satisfaction Index – a benchmark gauge of how customers viewed the companies' services. Glassdoor found that there was a statistically significant relationship between employee satisfaction and customers' satisfaction.¹ Just as significant, it found that the link was strongest in those service sectors where employees have a high degree of direct contact with customers (for example, retail, restaurants and tourism). In these sectors, a one-point gain in employee satisfaction rating raised that of customers by 3.2 points. The link was less strong in manufacturing firms.

The implication of this is that a service organisation may invest in meticulous process design and expensive technology, but unless it also invests in its people it will not deliver an excellent customer experience and the expected levels of customer satisfaction. In fact, this may only be the tip

of the iceberg because, in such situations, staff will not be motivated to own and improve service processes to deliver required levels of operational quality and productivity. So, understanding the issues involved in managing service providers (front-line staff or customer-facing employees/staff – we use these terms interchangeably) is a hugely important task for service operations.

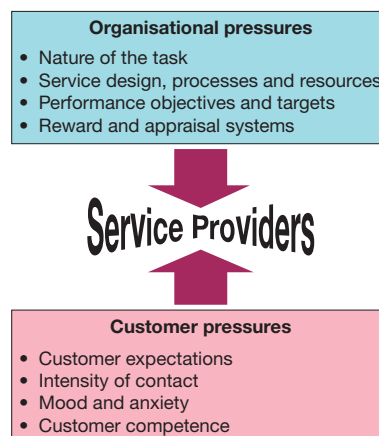
There are many reasons for this. First, service staff, individually and collectively, are responsible for delivering service to their customers (whether internal or external). Second, in most services, they form a significant element in the customer experience. Third, front-line service staff project the organisation's brand values to its customers. In fact, for professional services in particular, it is the skill, capability and knowledge of the service providers that 'are the service'. It is their blend of expertise, authority and personal empathy with the client that customers are buying. Fourth, a service's employees are a significant resource for most organisations, and frequently represent the largest cost to the organisation.

But, as ever with any service operation, the role and impact of customers must be included in any analysis. One cannot consider the nature of service staff and their activities without also examining the role and behaviour of customers. As we have pointed out previously, customers are, in effect, also a 'service provider'. Their 'co-production' role means that they play an important and active part in the process of service delivery. So, just like employees, they are an operational resource that needs to be 'managed': selected, trained and controlled, to do their 'job'. Which is why we include customers as 'service people'. But first we need to understand why delivering service tends to be a pressurised task.

8.1 Why is service delivery a pressurised task?

There can be something unremitting about front-line service delivery. Delivering service minute after minute, day after day, year after year is not easy. Although, for many people, it may be a rewarding, fulfilling and enjoyable task, for others it is, at best, a daily struggle and, at worst, a nightmare. All front-line service staff face two distinct but often equally difficult pressures: pressure from their managers (organisational pressures) and pressure from their customers (customer pressures) – see Figure 8.2.

Figure 8.2 Service staff can be caught between pressures from the organisation and from customers



Organisational pressures

Some service tasks are inherently more stressful than others: the surgeon who performs life-saving surgery may feel more anxiety than a supermarket checkout employee, since the consequences of mistakes are far more serious. It has to be noted, though, that reaction to pressure is very much an individual response, which results in some fairly relaxed surgeons and some extremely tense checkout operators. This might seem a trivial point, but organisations that are often under pressure will try to recruit individuals who are better equipped to deal with stress and also try to manage the stressful situations better (see the discussion of the coping zone in Chapter 13).

The service design, the design of processes and the use of operational resources can have a significant impact on staff. For example, service engineers who work from home may well find that their journey times to customers are reduced, but that they miss out on the support of colleagues they might receive if working from a central location. Many organisations have a reception area for visitors staffed by an employee who also operates the telephone switchboard. This creates an inevitable conflict, as the employee must make a decision as to who to deal with next – the customer on the telephone or the visitor in front of them.

Almost all organisations set increasingly demanding performance targets. Because these targets are aimed at performance improvement, they frequently conflict. For example, the call centre agent may have to meet a productivity target of average call-handling time (ACHT), while maintaining operational service quality targets of accuracy and courtesy. This may not be always possible, particularly when demand outstrips capacity and the service organisation enters the coping zone, as discussed in Chapter 13. Finally, reward and appraisal systems may be the source of pressure as staff struggle to maintain performance standards that ensure maximum remuneration.

Service stress

Most of us, at some time or other, have felt stressed at work. Yet there is no specific or agreed medical definition of stress. However, a useful working definition is that stress is a feeling that you cannot cope, that you cannot meet the demands placed upon you and cannot see an obvious way of solving your (perceived or real) problems. It is the adverse reaction that people have to demands placed on them; not the ‘buzz’ of an exciting and motivating job, but the problems faced when the pressure becomes excessive. And it can be dangerous. Too much stress, especially when experienced over a prolonged period, can significantly increase the risk of strokes and heart attacks. It can also be the source of reduced work performance, low productivity, human error, increases in sickness absence, accidents and high staff turnover.

Work-related stress is likely to occur in any type of occupation; however, service occupations are particularly vulnerable. One survey² cited the most stressful jobs as:

- teaching and education professionals;
- welfare professionals;
- housing association professionals;
- legal professionals;
- customer service workers.

Note that all these jobs are service jobs, and most of them are in (or partly in) the public sector. Out of interest, the same survey showed the least stressful jobs as being:

- managers, directors and senior officials;
- admin and secretarial occupations;
- cleaners and labourers (elementary);
- process, plant and machine operatives;
- skilled tradesmen.

Of course, all such surveys should be treated with caution. However, a common feature of such surveys is that the demands of a high-stress job are too great, either because of unreasonable expectations from customers or inadequate resources, or both. Nor can one assume that everybody in the same organisation has similar levels of stress. For example, in healthcare, nursing staff often show as being among the most stressed, while the people who perform ultrasound scans show as the least stressed (presumably because they have the pleasure of showing prospective parents the vague shape of their future offspring).

What causes work-related stress?

There are six key areas of work design that, if not properly managed, are associated with poor health and well-being, lower productivity and increased sickness absence. These cover the primary sources of stress at work:³

- *Demands of the job.* Includes issues such as workload, work patterns and the work environment.
- *Control over the job.* How much say do the people have over the way they work?
- *Support that is provided.* Includes encouragement, sponsorship and resources provided by the organisation, line management and colleagues.
- *Relationships with others.* Includes promoting positive working to avoid conflict, and dealing with unacceptable behaviour.
- *Role involved.* Do people understand their role within the organisation and does the organisation ensure roles are not conflicting?
- *Changes to the job.* How is organisational change (large and small) managed and communicated?

Customer pressures

Customers bring another set of pressures. Some of the significant issues for service providers resulting from customer expectations include:

- The constant presence of customers in high-contact services. Serving staff in restaurants are constantly 'on show' and cannot relax.
- Customers like to think that the service transaction they receive is special for them. For the service employee it is likely to be just one of many.
- Customers may have expectations of the service beyond the design specification, based on experiences from other service providers.
- Some customers may have totally unrealistic expectations of service delivery.

The intensity of the service encounter may contribute to the pressure on service providers. For example, it is likely that the average customer at the supermarket checkout is less demanding than a participant on a management training programme – for two reasons. First, the transaction at the supermarket is completed in a few minutes, whereas the training programme might take place over several days. The extended contact time brings a degree of pressure, but probably more significant is the meaning of this event for the customer. The management training programme may represent a promotion opportunity for the participant/customer and the resulting anxiety may be easily transferred from customer to provider.

The mood of the customer is another major factor in the equation. Many leisure services may have a built-in advantage here, because customers are generally in a positive mood that inclines them to be more cooperative with service providers. On the other hand, diners at a special celebration meal in a restaurant may be more demanding, as they want this occasion to go without any problems. At the other end of the scale, 'customers' of the prison service (inmates) may be less friendly and less cooperative.

Finally, the competence of the customer may have a significant impact on the service provider. Regular airline passengers know the various steps of the check-in process and know where to find flight information. Infrequent fliers slow up the process because they do not know what to do, and they ask more questions for clarification or reassurance. There is also a category of customer that

poses yet more challenges for the service provider. This is the customer who thinks they know what to do but in reality they do not and may cause significant disruption as a result.

This section has given a very brief introduction to the issues relating to the diversity of customers and their expectations of service providers. Clearly, these pressures are felt most immediately by service staff in customer-facing roles, but are soon transmitted through the system to those in back-office activities, and further on to suppliers and partners in the supply network (see Chapter 10).

Case example

It's not part of the job – Co-op's 'Safer Colleagues, Safer Communities' campaign

Dealing with 'the public' can mean interacting with tens, or even hundreds, of customers every day. Most are polite, but not all. Rude, aggressive or even violent behaviour can be a common occurrence for front-line retail staff. Most progressive retail employers regard the issue of helping to protect their employees as their responsibility. For example, Co-op is one of the world's largest consumer cooperatives and the UK's fifth-biggest food retailer, with more than 2,500 local, convenience and medium-sized stores. It formalised its efforts through its 'Safer Colleagues, Safer Communities' campaign, which placed safety and security as its chief priorities. Underlying the campaign was the understanding that abuse, violence and crime was about much more than statistics, it was also about the impact on people's lives and the communities in which they lived and worked. In the Co-op's words, 'it is not part of the job to be verbally abused, threatened or attacked and we're determined to make sure it isn't.'⁴

Research, in conjunction with City, University of London, identified four main causes for the violence and abuse shown towards shop workers:⁵

- Encountering and trying to deal with shoplifters.
- Enforcing legislation relating to the sale of age-restricted goods and other prohibited sales.
- Hate-motivated incidents aimed at shop workers.
- Robberies, both armed and unarmed.

Three of these four causes of abuse are initiated by 'customers', but the second one on the list is the responsibility of the retail workers themselves. For example, UK law decrees that front-line retail workers must take reasonable precautions and



Suwin/Shutterstock

exercise due diligence to test the age of individuals seeking to purchase age-restricted goods and services, such as tobacco, alcohol, knives and solvents. This can be a significant source of abuse and threats.

In order to combat these potential threats to its staff, the Co-op invested millions of pounds towards innovative technology to keep them safe, including: the installation of remote-monitored CCTV; communication headset devices for front-line staff; and the targeted deployment of SmartWater Fog Cannons to combat robbery. When activated, the fog obscures the robber's vision and covers the criminal in a spray containing SmartWater's 'forensic signature'. Although invisible to the naked eye, a tiny amount of SmartWater spray, equivalent to a speck of dust, can help police authorities identify anyone who has been in contact with the spray.

Resultant issues for service providers

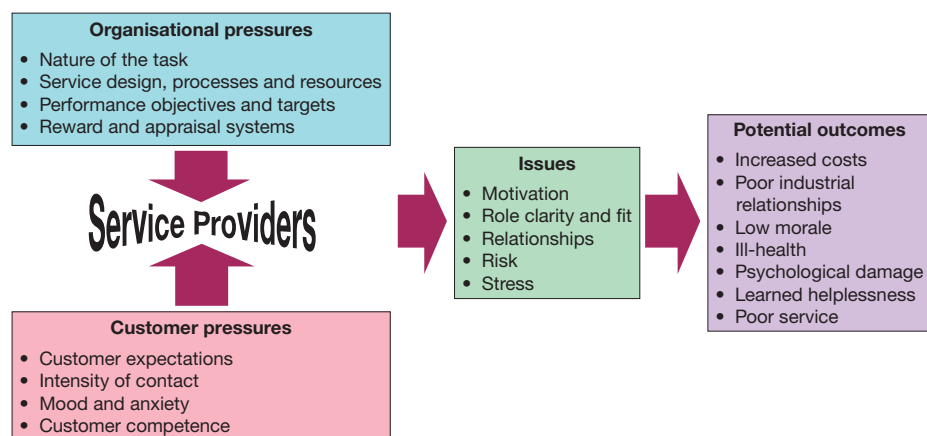
If not managed well, these frequently conflicting forces of organisational and customer pressures result in problems of motivation and stress, causing increased costs, damaged staff and poor service (see Figure 8.3):

- *Motivation.* Many of us have experienced the pressure of continually trying to satisfy groups of people with conflicting demands. For a relatively short period this may give you an ‘adrenaline rush’ as you work at superhuman rates, balancing all the various needs. After a while, though, enthusiasm may be replaced by apathy, particularly if you feel that you are working harder than others and that the management does not seem to worry that you are overstretched. In some situations, the very nature of the task itself may represent a challenge for employee motivation. Some tasks are rather repetitive, frequently constrained by information systems or other technology requirements to improve productivity and consistency. This relative powerlessness may be a significant factor in poor employee morale.
- *Role clarity and fit.* This issue applies particularly to customer-facing roles and often relates to the situation where the service provider is torn between providing the service that the customer requires or adhering to the level of service laid down, even when there seems to be no logic in so doing. Service organisations frequently report the problem of customer-facing staff becoming more aligned to customer needs than organisational requirements. Although it might seem that it is a good thing for staff to put the customer first, this is not the case when providing extraordinary service effectively costs money!

Role fit is a particular problem for high-volume services with many employees. The organisation may have the correct headcount but the personalities do not always match the roles. For example, in the call centre on a shift that is difficult to staff, it may be that there are insufficient experienced agents to deal with complex enquiries. Less-experienced people must often just do their best, attempting to satisfy the customer without the necessary skills or training. Needless to say, customers may not be happy, and the employee may be demotivated as a result – and may not be as willing to help in future.

- *Relationships.* A continuing question for many service organisations is ‘do customers have a relationship with the organisation, or are customers more influenced by a particular employee?’. The answer, as ever, is ‘it depends’. For many professional service firms, the customer is loyal to an individual provider first and to the firm second. In consumer services, however, rapid staff turnover and shift patterns mean that customers rarely encounter the same employee twice. In this case, any ‘relationship’ between employee and customer is somewhat limited. Despite this, many customers seem to expect a degree of personalisation that they would not experience in their everyday relationships.

Figure 8.3 Some effects of organisational and customer pressures



- *Risk*. Most activities contain a degree of risk. Some service roles contain obvious elements of risk, such as the risk of violence encountered by police officers or health professionals. For others, it may be more subtle, such as the gradual build-up of abuse experienced by some school-teachers. Risk can be taken to mean that which is encountered directly by the employee, or some aspect of consequence for customers in the event of service failure. Again, some aspects of risk will be obvious, such as the physical risk of a train or plane crash, while others are more hidden, such as the potential damage to a student's future career if not well taught.⁶
- *Stress*. As we discussed previously, stress can be experienced because of a number of issues including excessive workload, demanding work patterns, a poorly designed work environment, a lack of control over the job, inadequate support from management and colleagues, conflict and unacceptable behaviour, role conflict and how changes to the job are managed. The results of stress include robot-like service delivery, becoming overly focused on unimportant details and ill-health.

Potential outcomes

Feelings of frustration, demotivation, lack of control and stress can have serious consequences for the organisation, the service provider and the customer. For the organisation it can mean increased costs of cover for absent staff, high attrition rates and poor industrial relations. For the service provider it can mean low morale, ill-health, psychological damage and, of course, poor service delivery. Indeed, one common manifestation of stress is organisation-induced and/or customer-induced 'learned helplessness'. A poor working environment induces employees to display passive, maladaptive behaviours – for example, to act immaturely, uncreatively and passively, and to be unhelpful to customers and managers. This learned helplessness can be so deeply ingrained that even when changes are made, this passive maladaptive behaviour may continue. The outcome from the customer's point of view is poor service and uninterested and unhelpful staff.

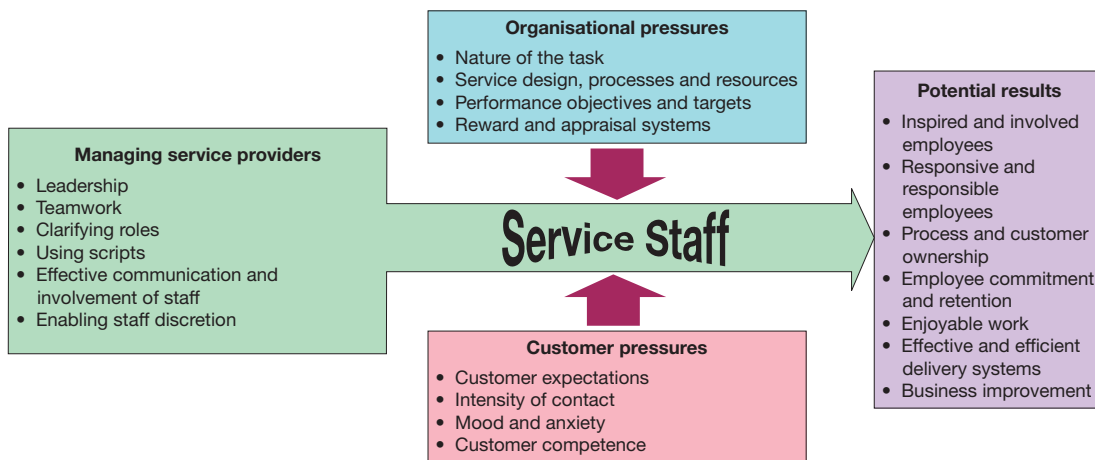
Service trauma

All high-contact service jobs can be stressful, but some are more stressful than others. Of particular concern are those jobs that involve regular contact with distressing situations, incidents or episodes. These jobs may include: emergency workers who face dealing with severe accidents; health and social care staff who have to try to solve sometimes impossible medical, social or criminal problems; crisis call handlers who listen to a series of distressed and distressing callers; and social media staff who view graphic detail and imagery. Although not always in immediate direct danger themselves, such jobs can induce what is known as vicarious or secondary trauma. These are staff who are continually exposed to other people's distress and trauma, and so develop a range of negative reactions.

A complicating factor is that not everyone is affected by the same distressing incidents in the same way or at the same time. Complex personality and psychological factors determine who is affected by what. Nevertheless, whatever the cause, and whoever is exposed to it, this stress reaction is a normal reaction to an abnormal event. It cannot be taken as a sign of weakness or vulnerability. Which is why many organisations provide counselling and mental health support to those staff who might be affected. For example, staff at abuse charities who field calls from victims are regularly interviewed and counselled, even if they do not themselves report any symptoms of distress.

8.2 How can organisations manage service staff?

Given the particular set of pressures on service staff, particularly front-line service staff, service operations managers must employ a range of approaches to help service providers mitigate the negative aspects of the opposing pressures of organisation and customer (see Figure 8.4).

Figure 8.4 Protecting providers from the conflicting organisational and customer pressures

Some of the more important approaches to managing and motivating service staff include the following:

- Effective leadership.
- Using teams and teamwork across the organisation.
- Clarifying the roles of service staff.
- Using scripts appropriately.
- Establishing effective communication and involvement of staff.

All of these approaches can be effective in reducing the pressure on staff. In addition, enabling the use of appropriate levels of staff discretion is particularly important, which is why we devote a separate section to it later in the chapter.

We shall discuss the use of these approaches next. But, as we do, it is useful to consider the potential benefits of their successful application. These include:

- inspired and involved employees;
- responsive and responsible employees;
- process and customer ownership;
- employee commitment and retention;
- enjoyable work;
- effective and efficient delivery systems;
- business improvement.

Leadership

Leadership is a vast (and obviously important) subject, the detailed study of which is beyond the scope of this text. Yet, almost all authorities hold that leadership style has a significant impact on subordinate job performance, job satisfaction and organisational success. However, the type of inspirational leadership, as advocated for service organisations, is not a solo act performed by some charismatic CEO. A senior leader of a medical association pointed out that it was not a fancy title or a position high up in the hierarchy that makes one a great leader. Rather, it was the obstacles that leaders have to overcome, including those that have to be overcome every day, that make great leaders. In medical services, some of the most inspiring, motivating leaders are nurses who are not high in the status hierarchy, but who have great influence on the people around them because of the way they lead by example, handling tough situations with grace every day.

Discussions about ‘leadership’ among managers and executives usually focus on the top of the organisation. However, all managers, at varying levels of authority, have a leadership role and need to develop and display leadership qualities. It is the first-level managers, supervisors or team leaders that have the prime responsibility for providing the day-to-day leadership of a service unit, which may make the essential difference between a robot-like service delivery and one that has life to it. Most staff prefer to hear about change from their immediate supervisor, particularly if senior management is felt to be remote and prone to changing approaches with alarming frequency.⁷ There is little doubt that these front-line ‘role models’ have a major influence on shaping the attitudes and behaviours of those who work with them.

Transactional and transformational leadership

Leadership has been categorised as either transactional or transformational.⁸ The essential difference between the two is that transformational leaders develop and project a vision of the future, having energy and influence to encourage others to contribute to this new direction. The differences between the two leadership styles are summarised in Table 8.1.

Transactional leadership is sometimes described as the ability to deal professionally and appropriately with the day-to-day management of operations. It is equally important, if less glamorous, than transformational leadership in the effective running of a service organisation. It focuses on how an organisation is actually performing, rather than any ‘idealised’ version of what it could be. Such leaders tend to conform to existing structures and hierarchies of an organisation and rate their success according to existing objectives. It is a largely formal approach to leadership that uses traditional rewards and sanctions to motivate staff. They would typically use formal performance reviews to judge staff performance. It is a style of leadership that goes back to early writers on bureaucracy.⁹ It is often quoted as a leadership style that is appropriate for times of stability and/or a lack of external challenge.

By contrast, transformational leadership, as is implied by its name, is seen as the type of leadership required at times of significant change. Many of the organisations with a reputation for increasing the quality of service delivery and customer care have done so with the support and leadership of a chief executive who actively demonstrated their personal commitment. For example, Jan Carlzon, the renowned ex-chief executive of the airline SAS, was credited with transforming the airline at a very difficult time during its history. He popularised the notion of service encounters as ‘moments of truth’ for the service organisation. He believed that there were 50,000 ‘moments of truth’ for SAS each day: points of contact between customers and the airline, which will either enhance or detract from the service experience.¹⁰ His ‘recipe for success’ has been emulated many times since by CEOs across the globe. What is interesting about such leaders is that they are able

Table 8.1 Some differences between transactional and transformational leadership

Transactional leadership	Transformational leadership
Leaders are responsive to the performance of the operation	Leaders are more proactive, seeking improvement even when performance is seen as acceptable
Leaders work within the prevailing culture and norms of the organisation	Leaders attempt to change the organisational culture to be more accepting of new ideas
Management is ‘by exception’, with control exerted when performance deviates from the plan	Control is more individualised to the needs and circumstances of each individual in order to promote creativity and innovation
Leaders motivate staff to achieve organisational objectives by using rewards and sanctions	Leaders motivate staff by giving them the skills and discretion to achieve organisational objectives, and by engaging with their desire to achieve higher ideals and values
Leaders motivate staff by appealing to their own self-interest	Leaders motivate staff by encouraging them to look beyond narrow self-interest and focus on the interests of the whole group

to communicate a vision in a way that motivates the people in their organisations to performance levels significantly greater than might have been expected.

The foundations of transformational leadership are sometimes summarised under what have been called the four 'I's':

Inspirational motivation. Transformational leaders guide all their staff by providing a coherent sense of meaning and challenge. They promote a compelling and consistent vision, mission statement and, above all, a set of values to everyone in the organisation. The force of this vision is so persuasive that everyone understands what is required from every interaction. They are optimistic and enthusiastic to promote teamwork and commitment.

Intellectual stimulation. Transformational leaders prize and encourage staff to be innovative and creative. They learn the mistakes committed by staff and shun any public criticism of them. They promote novel ideas from staff, focusing on originality in problem solving. But they are not wedded to any idea that proves ineffective and will discard them if necessary.

Idealised influence. Transformational leaders strongly believe that a leader can influence staff only when they practise what they preach. In other words, leaders must act as role models for staff to copy. In doing so, they hope to gain the admiration, trust and respect of others in the organisation and demonstrate consistently ethical conduct, even if this means putting the needs of staff above their own. The objective of transformational leaders is to attempt to achieve a set of common goals of the organisation.

Individualised consideration. Transformational leaders treat their staff as individuals. Each is treated differently according to their needs, skills and personality. Such leaders act as mentors to staff and with their long-term development in mind. Staff are supported by appropriate training and education according to their individual needs and are empowered to make and implement decisions.

Counterpoint

The idea of transformational leadership has its obvious attractions, particularly to leaders who see themselves as ambitious 'movers and shakers'. It is fashionable, but can lend itself to management cliché. It is often seen as stressing enthusiasm and passion – both potentially positive attributes for a leader. Yet without some exercise in caution it can result in 'reality blindness': the reluctance to face up to inconvenient facts. This, in turn, can transmit to other staff. Developing a strong culture of positive thinking can compromise subordinates' ability to criticise a leader's ideas. Combine this with a charismatic leadership style, and staff may spend their efforts attempting to achieve goals that are not realistic or obtainable. And what exactly do we mean by 'transformation'? At its simplest, it just means 'change'. But change can be good or bad. So, presumably, 'transformation' should be seen as making changes to an organisation that are seen as positive *in the long term*. This point is important. Organisations can be changed in such a way as to

improve short-term performance at the expense of longer-term success. The obvious example are those services that cut costs to boost short-term performance, but in such a way as to erode service levels, the consequences of which show up only later.

Nor are the personal leadership characteristics easy to adopt. They are both rare and difficult to acquire. The combination of technical knowledge, emotional intelligence and personal skills may only come through experience in different industries. Transformational leadership does not always act as a force for good. An over-confident transformational leader can make things worse, destroying value and causing insecurity and distress within the organisations they were hoping to change. The idea may even be open to the manipulation of followers by unscrupulous leaders. There are plenty of examples of such leaders in politics, business and even religion, who have inflicted negative consequences on their trusting and unsuspecting followers.

Leadership in a service context

Both transactional and transformative leadership can be appropriate in service operations, depending on their circumstances. Certainly, not all service organisations are undergoing radical change at all times. It is here that transactional leadership is relevant. Some commentators downplay the importance of this style of leadership, equating it with a mundane form of management that is little more than routine administration. However, this is particularly dangerous in the context of service delivery, which depends to a large degree on the example of front-line leaders. It can also be argued that the intangibility and immediacy of many service operations place more stress on what have been noted as four important leadership competencies:¹¹

- *The management of attention.* The ability of a leader to capture the hearts and minds of people through communicating a focus on the centrality of a customer-service focus as a compelling vision.
- *The management of meaning.* This relates to the importance of bringing substance to the vision in such a way as to make it clear to those following. It is particularly important to those services that contain a high degree of intangibility. It is understandable that the employees in a fast-food restaurant may become overly focused on making and serving burgers or pizzas, but creating the customer experience requires a rather different focus, which can be provided by clear leadership.
- *The management of trust.* One of the key attributes of leaders is reliability. In the same way that customers value reliability of service delivery, employees look to leaders to provide the same degree of security. They do not want messages and programmes that change on what seems like a whim, but rather to understand what has to be done well.
- *The management of self.* Effective leaders know their strengths and weaknesses. More specifically, the best leaders do not seem to be easily defeated by mistakes or problems, nor do they start blaming their staff. In a service organisation this is particularly important – enabling staff to listen to customer complaints and institute non-defensive recovery routines.

One study that compared manager and employee perceptions of service leader interactions generated definitions of positive and negative leader behaviours.¹² The most significant positive behaviours in this study were:

- Formal recognition of service performance through rewards or other recognition programmes.
- Spontaneous informal recognition, positive praise and comments to superiors about the employee.
- Lifting the employee's spirits when under severe work pressure.
- Helping employees with scheduling requests, such as a shift change to deal with a personal issue.
- Consulting and involvement in change.
- Problem solving and service recovery effort.
- Coaching and employee back-up were thought to be important by managers, but less so by employees.

The research further indicated that although there was reasonable consistency between employees and managers regarding the positive attributes, there was less consistency with respect to negative leadership interactions. Employees reported rather more categories of negative behaviours, suggesting a worrying lack of awareness on the part of managers. The most significant negative behaviours were:

- Poor styles of criticism or feedback.
- Poor judgement with people, including failure to support employees, or blaming employees for managerial mistakes.
- Insensitivity and rudeness.

Case example

Caring for your players¹³

Back in Chapter 1, we described the service operations management activities of Sara Davies at Scarlets Rugby Club. Sara's role included a significant amount of planning, scheduling and controlling of the club's resources. But, like most service operations managers, Sara also has a role in caring for her service people. She has an important responsibility for player welfare. This encompasses a broad range of practical and pastoral care issues.

I have to ensure that players have nothing to worry about apart from what is happening on the pitch, making sure that there are no stresses in their world. I'm a bit of an 'agony aunt' I guess, helping players with their family issues, housing, in fact anything outside of rugby. I try to either help with issues directly, or signpost where players can get help if that is more appropriate.

Sara works with the Rugby Players Association to support players in continuing education and learning outside of rugby. This work is not just in relation to younger players. Rugby is a physical game and an on-field career can end with just one incident, so players have to prepare exit strategies, and learning and education can help prepare the way. One particular aspect of this career support is in helping with pathways into punditry and commentary in the sports media. Historically, older players went to established media organisations such as the BBC, who have processes to develop former players to become commentators. Increasingly, though, audiences hunger for commentary from younger and active players. Fortunately (although not necessarily for the players involved), with rugby being such a physical sport there is always a supply of players nursing injuries who can spare time for game commentary. Many of the newer sports media organisations proactively look for players who can contribute, and will reach out to Sara in the pre-season period to ask whether any players might be interested in contributing to in-game discussion. A large part of the



Riley Sports Photography

demand for commentary is in relation to the Welsh language. There is a limited supply of players who can commentate in Welsh, and while the Scarlets squad is international, many are recruited from the region. For example, many players come from the Scarlets Academy. (About 25 per cent of the overall population speak Welsh, but this percentage rises to 75 per cent in Carmarthenshire.)

Everybody wants to hear from current players now. I think the days of players who have played for a long time commentating is tough because the game is changing all the time. We work in a sport, probably the only sport in the world, where the rules change every year. If a player has a long-term injury such as a knee ligament injury, which could take 9 to 11 months to repair, then we can put something in place for that player in the media.'

In working with players, Sara has to deal with a broad mix of characters and personalities.

Some players want to be told what to do, some are the opposite. Some players like a comforting arm around them, others don't. Some are 'carrot' types who respond to incentives, and some are 'stick' types who need consequences explaining to them. Much of this role is about learning how

individual players tick. This is especially true when you have new players, possibly from a different culture, joining the team. WhatsApp is our main communication tool. Younger players will struggle to pick up the phone, but with WhatsApp it is easy.

But even pastoral care cannot ignore the physical nature of a player's job. The primary responsibility for ensuring that players minimise injuries is the responsibility of the strength and conditioning and coaching teams, but Sara has to be involved because she has to oversee the medical budget, as well as deal with the emotional impact on players of training and medical regimes. If, for example, players complain about having to train particularly hard in a

week when there is no obvious game looming, then Sara needs the rationale from the strength and conditioning team to explain the reasons. She also has to explain the playing decisions that are based on the continual monitoring that comes from the wearable GPS technology that all players wear. This can predict when a player might be getting overloaded or tired to the point of possibly making a mistake or getting injured.

The work of making the Scarlets' support processes work efficiently is a huge job by itself. However, Sara also needs, and has, the people skills, character and empathy to address the softer but extremely important aspects of service operations management, without which Scarlets would not be the successful team they are today.

Teams and teamwork

A critical design decision is the extent to which opportunities for teamwork may be built into the service delivery process. Many of the total quality management (TQM) programmes of the 1980s and 1990s evolved into teamwork programmes, as processes were redesigned to reflect the need to become more customer responsive. Several financial services organisations, for example, restructured their customer-facing activities in such a way that a team handled all transactions, from sales to service. This frequently led to increases in operational and customer-perceived quality and productivity, as team members developed a greater ownership of customers and delivery processes.

However, teams are not appropriate in all situations. For a group of individuals to become a team there must be a real requirement for them to work together because their roles interrelate in some way. In other words, if there is no obvious benefit for the individuals to work together, they remain a group rather than a team. It is important to distinguish here between working in a group and working as a team. Many organisations may claim to be doing the latter, but unless there are real synergies created from the individuals working together, we would suggest that they are, in fact, simply working as a group of individuals.

Nevertheless, the formation of social groups within service operations can be important. The benefit of the mutual support of co-workers, particularly in stressful customer-facing roles, can be valuable. Most people recognise the impact of excessive demands on their time and energy. Despite one's best intentions, the level of energy devoted to each additional request can diminish. There has been a considerable amount of research as to the impact of what is sometimes called 'burnout' on the motivation of service employees. In some circumstances, employees may be unable to cope with burnout, leading to unhelpful behaviours with co-workers and with customers.¹⁴ As we've indicated, the impact of burnout can be anticipated and reduced by developing the mutual support mechanisms of a group, providing training to help employees deal with difficult customers and building-in periods away from stressful roles.

The benefits of teams in service operations

Various authorities have outlined the benefits of organising service around teams. Often these include the advantages of bringing together several (sometimes disparate) sources of skill, knowledge or perspective. And many services can benefit from complementary skills and experience

when they exceed those of any one individual. For example, in many professional services, such as consultancy, this facilitates a more effective response to demands for innovation and customer service. Teams can also be effective at developing, sharing and communicating clear goals, and that can improve the processes in which they are involved. For example, a customer service team that visits customers who have a problem with a utility, such as broadband provision, could discuss their experiences of solving customers' problems. They could also overcome barriers to responding more flexibly to changing customer needs. There can also be interpersonal benefits. For example, a firefighting team who have worked together and overcome significant challenges, (hopefully) will have built trust in each other and developed an understanding of each team member's capabilities. Again, this builds towards a more effective service delivery system. Finally, close and collaborative teamwork is usually judged as being more enjoyable.

Again, an important point to note is the co-production role of the customer. The customer can be an integral member of the team. This is particularly relevant for professional services, where the customer's presence and input are essential for service development and delivery. A firm of management consultants must often work alongside their clients in order to carry out their work. Part of the service might be for the consultants to provide mentoring and development for the client's employees.

Teams, while valuable and effective in many situations, are not an automatic panacea. Some team initiatives fail because not enough attention is paid to team design and team processes. In other

Worked example

Astell Mortgage Society (AMC)

Ruth McMurphy was worried about the performance of the call centre of which she had recently been appointed manager after moving from one of Europe's largest retail banks.

Compared with the professionalism of my previous operation, the AMC centre is, frankly, poor. There is no consistency or coordination across teams. In other words, there is no teamwork at team-leader level. Each team seems to operate independently, creating 'mini-call centres' within the unit. The result is poor performance, duplication of work and a distinct resistance to implementing any improvements that originate from other teams.

What Ruth did

Ruth's first task was to formalise the set of objectives that she believed should be the team leaders' core priorities. These were:

- to organise and co-ordinate their team;
- to update appropriate training plans;
- to produce weekly team performance reports;
- to monitor and record holidays;
- to deal with queries;
- to review sickness.

Ruth's next move was to clarify the broader vision of the call centre for her team leaders. Her objective was to get them to see their role as contributing to the success of the call centre as a whole, rather than simply leading their team. She involved her 'team of team leaders' in putting the detail to the vision. This was achieved through brainstorming sessions, benchmarking visits, using advice from the National Society for Quality through Teamwork (NSQT) and focus groups made up of call-centre staff.

A number of audits were carried out. A skills audit revealed that there were training and development needs for team leaders to take on more people-focused roles. A task audit showed that team leaders were concentrating on clerical activities to the detriment of less-quantifiable tasks, such as coaching team members. As a result of this analysis, the team leader role was redefined so that it was expected that 60 per cent of time should be spent in coaching, and only 10 per cent in call handling.

Also, the call centre was reorganised, with an operational support unit dealing with many of the clerical activities previously handled by team leaders. This enabled team leaders to concentrate on performance improvement in line with the vision. Some of the benefits realised by this initiative included:

- more effective team management, despite an increase in the average team size;
- a significant increase in productivity;
- improved customer service;
- increased innovation and proactivity;
- fewer ineffective meetings;
- a saving in team-leader time of more than a day per team leader per week.

Most importantly, Ruth believed that the creation of a culture of encouragement and the facilitation of learning provided a solid platform for future changes.

words, just saying ‘let’s be a team’ is not sufficient to create one. There must be a genuine requirement for a team to operate together if it is to be a success. The worked example, ‘Astell Mortgage Society’, provides an illustration of how teamwork could improve performance.

The role of team leaders

Research into the role of team leaders has shown that they play a critical role in the success of teams.¹⁵ And just like all service providers, they, too, feel squeezed between the pressure of the organisation pushing for business results and the team members looking for support and care. This feeling is exacerbated in some organisations, where the team members see the leaders as managers but managers often see them as part of the team. The same research also identified six key attributes of a team leader:

- approachable;
- empathetic;
- supportive;
- organised;
- knowledgeable about the role of the team members;
- knowledgeable about the business.

An interesting finding from this research was the importance of building the team of team leaders (as in the worked example) as well as the teams themselves. However, building a strong team can have one disadvantage, which is that the relationships within the team can be so strong that the team is reluctant to accept new members or to transfer members to other teams. This will reduce the flexibility to respond to fluctuations in workloads. A way of counteracting this effect is to ensure that the team of team leaders has the understanding to manage resources across the organisation, rather than be solely focused on their individual teams.

Case example

Teamwork at Alain Ducasse’s restaurant at the Plaza Athénée

Alain Ducasse is one of the very top chefs in the world, and the Plaza Athénée Hotel in Paris is among the best hotels in a city where superb hotels are not uncommon. So, Alain Ducasse’s restaurant at the Plaza Athénée has a lot to live up to. And it does. It has three Michelin stars, which means it has exceptional cuisine. Ducasse’s cuisine at the Plaza Athénée is largely based around a trilogy of fish,

vegetables and cereal. It is a trilogy that has a specific meaning: to eat more healthily while respecting the planet. But these modest products are not seen as a constraint to the best gastronomy – rather as providing a world of new flavours. The décor and fittings of the restaurant are also spectacular. The entrance is a space defined by the convex part of three polished stainless steel shells offering a

smooth transition to customers as they enter the restaurant's world. But, like all restaurants, it is the service provided by front-of-house staff that can enhance or destroy the experience for the customer. And at the Plaza Athénée, as with other *haute cuisine* restaurants, one of the most important attributes that front-of-house staff can have is the ability to work as a team.

Commenting on the service at the Ducasse restaurant, two expert observers made clear the importance of teamwork.¹⁶ They made the point that, even though the average age of the service staff was about 25, all front-of-house staff demonstrated spontaneity and empathy. It was not formal, which was a contrast with the ambience and atmosphere in some fine-dining restaurants. Yet, the staff were careful not to disturb the customers while providing guest comfort. The service supported the chef and cuisine, while being as spontaneous and natural as possible. The staff at the Ducasse restaurant were well trained, very efficient in terms of the pace of service and synchronisation of their actions, and demonstrated a very high level of rigour, but without the formality. Although they demonstrated technical rigour, they also had the necessary soft social skills. Communication and teamwork were critical. Service



FRED DUFOUR/AFP/Getty Images

staff paid attention to what their colleagues were doing at any time, communicated with each other (often using non-verbal signals) and respected each other's responsibilities, whether they were an order taker, *sommelier*, head waiter, or supervisor. There were few words, some eye contact but everyone pulled together as a team. The two experts, both staff at École hôtelière de Lausanne (EHL), which many regard as the world's top hospitality and leisure management university, commented that their observations were in line with the findings of a survey of hoteliers carried out recently by EHL, which stressed the importance of teamwork, communication, presentation and flexibility.

Clarifying the roles of service staff

Most jobs require staff to fill more than one role; service staff are no exception. This is especially true for the front-line staff, who often have to meet a wide variety of demands from customers – sometimes unpredictable and sometimes unreasonable. They are frequently expected to deal with everything from angry customers to events beyond their control, such as bad weather.

Front-line staff roles

Some roles played by front-line service staff may form part of their formal job description, while others are perhaps unexpected, yet must be dealt with. Frequently encountered roles include:

- *Order taker.* The front-line staff form the interface between customer and organisation.
- *Advice giver.* The customer is often looking for 'inside' knowledge as to what is particularly good or what is not worth purchasing.
- *Image maker.* The brand is delivered by service providers.
- *Service deliverer.* The front-line staff may be the final point of contact for customers.

- *Complaint handler.* The most effective point of service recovery is at the point of delivery. Many informal complaints are dealt with here.
- *Therapist.* For some customers, any human contact is an opportunity to offload problems and to seek support and advice.
- *Trainer.* Front-line staff must be able to deal with both competent and incompetent (possibly new) customers.
- *Coach.* Many customers need confidence building and coaching to ensure a good service experience.

Role conflict and ambiguity

Most people work more effectively when they have a clear understanding of their role, what is expected of them and how they will be assessed. Research into the effectiveness of service encounters suggests that role conflict and role ambiguity should be minimised if customer-facing employees are to be motivated to provide good service. Role conflict is when there is a clash between two or more of the roles played by an individual. Role ambiguity is when individuals are uncertain or unclear about what is expected of them within a role.

Role conflict can occur when service staff have a number of responsibilities, yet it may be impossible to carry out each role simultaneously – such as a call-centre employee who is charged with reducing queue lengths but also with trying to persuade customers to purchase more services (a task that requires more time to be spent on each transaction). Often, role conflict occurs when the service has been poorly designed, or when the demands of the job are in conflict with the individual's personal view of the role – for example, a salesperson who is encouraged to recommend a course of action to a customer, knowing that an alternative might be better for that customer.

Role ambiguity can occur when the person is unsure of the requirements of the role. Role ambiguity frequently occurs when service employees perceive that there is a lack of clarity about the guiding philosophy or strategy of the organisation, or when the demarcation between different people's responsibilities is vague or ill-defined, or where a clear organisational structure is lacking. It can occur when individuals who are new to a job have not yet understood how they fit within the organisation. Unclear roles may also be a result of unclear expectations of appropriate behaviour or performance, or of poor leadership both from senior management and from first-line supervisors.

The negative effect of both role conflict and role ambiguity may increase over time as tasks become more routine or habitual. What was carried out by committed individuals in the early stages of the organisation's existence may be taken over by more recent recruits, who have less understanding of, and sympathy for, the original roles. Service operations managers need to take into account these issues in order to manage all aspects of service delivery, paying particular attention to potential role stress of customer-facing employees, where such issues are more evident to customers.

Case example

The many roles of a tour leader¹⁷

The tour guide/leader is a vital part of a sightseeing holiday (as opposed to a 'lying-on-the-beach' holiday). Tony Harpur is a tour leader with Ramblers Walking Holidays (RWH; for further information on Ramblers Walking Holidays, see the case example in Chapter 4). His is a vital role in the success of any

holiday. Even when RWH also employ a local guide, it is company policy to always provide tour groups with one of its own tour leaders.

There is a difference between being a tour leader acting solo and being a leader with a local guide,

says Tony.

With a local guide, the tour leader's role is different. In many ways, it is less difficult. The local guide can brief the clients on local history, geography, and so on. After all, they are experts. This gives me more time to focus on getting things organised, checking on restaurant reservations, getting clients' feedback, giving them information about the next day, and generally devoting more time to making sure that everyone is happy. However, the relationship between a tour leader and a local guide is particularly important. One has to be sensitive. Remember that the local guide will probably spend 90 per cent of their time working solo with their own clients. They may not always be used to having someone else share the role. You certainly don't want to give the impression that you are looking over their shoulder.

Tour leaders are, in many ways, the most crucial point of contact with a tour company's clients. They have to deal with the expectations, interests, demands and foibles of a diverse group of individuals while leading, informing and motivating them throughout the tour.

Most of the time, things will go smoothly if you remember a few important things,

says Tony.

It is important to do your homework, particularly if you do not have a local guide. It is our responsibility to answer as many of our clients' questions as we can. These can range from the history of the region through geology to local politics. The management of client expectations is particularly important. The brochure is very good at giving all types of information, but you will always find that some clients have not read the brochure thoroughly, so they need to be informed about such things as the difficulty of the terrain over which we are going to walk, etc. Receiving and passing on information to clients is particularly important. I like to have a meeting before dinner every night to make sure that everyone knows what is happening the next day.

But occasionally there will be mishaps, and tour leaders sometimes need to be resourceful.

Of course there are occasional minor emergencies but hopefully these are relatively infrequent. Small personal injuries are the most common, so for example, if a client suffers a sprained ankle it is the tour leader's responsibility to reassure them, get them to the hospital or doctor, ensure they get appropriate treatment, deal with their insurance concerns and so on, having first seen to the needs of the rest of the group. There is a protocol for dealing with such events, and of course all group leaders have been trained in first aid. Lost baggage is another emergency that one occasionally has to cope with. Again there is a recognised process for dealing with this. One has to make sure that the airline is contacted, that all information is collected, and the clients know how much they can spend in emergency funding and so on. If there was a more serious emergency, the company's headquarters provides a very good backup service and I could get in touch with them using a 24-hour phone number. Obviously, I carry my mobile phone at all times, and on the first day of the tour I always give all the clients my mobile phone number.

Although tour leaders are largely volunteers, their selection and training is rigorous.

The training is demanding, but it's enjoyable, and it's important,

says Tony.

All prospective tour leaders go on a course that covers such things as dealing with emergencies, coping with difficult clients, organising excursions and so on. After you have graduated, the company are careful to choose your first appointment so as not to 'push you in the deep end'. For example, a new leader's first tour might be a relatively simple tour involving only one hotel, a relatively well understood route, etc. Also, the company take clients' feedback very seriously. At least once a year you get briefed on clients' feedback about how you have carried out your role. But it is a great role. You get to go to interesting places and with a lot of like-minded people, with the challenge of fulfilling their hopes and expectations.

Using scripts

A script is a precise specification of the words and actions to be used by service staff in particular situations. The idea is that scripts will create procedures, which help employees to know what to do, and in what sequence, in specific situations. Be careful, however, about what is meant by a 'script'. The word conjures up the idea of a precise set of words to be used in a service encounter. In the service management literature, it is used in a much broader way. Thus, as in the theatre, it may include directions about movement and positioning, mood and tone, the order in which to do things and the words to be used, which may range from tightly scripted to improvisational.

Many mass-service organisations use scripts as a technique for providing both consistency of service (because responses to customers are standardised) and efficiency (because an efficient use of words and behaviour have been carefully designed in advance). In addition, some organisations believe that scripting can also provide a sense of security for customers and employees alike. A familiar script may allow customers to relax because they understand the 'rules' by which the encounter will be played out.

Several other functions of scripts in service encounters have been suggested:¹⁸

- *To assist the service employee to find out what the customer wants or needs.* The script should be designed to encourage customers to describe their needs in such a way as to allow the employee to diagnose them accurately and offer the appropriate service.
- *To control the customer.* The script should help the employee guide the customer through the system with minimal disruption. This is particularly important where customisation is actively discouraged. 'Can I suggest our special two-course offer?' enables a rapid decision, although there may be a danger of closing-off opportunities for selling more profitable services in the cause of an efficient order-taking process.
- *To establish historical routines that may be relevant to the service encounter.* Frequent customers will often become pre-programmed to carry out the necessary actions in the service process without prompting. An example is provided by airline passengers who have packed their luggage in the most appropriate cases, who anticipate the check-in questions and who have their documents in order before approaching the check-in desk. Some service designers suggest providing the appropriate triggers to what has been termed 'memory organisation packets' (MOPs),¹⁹ which allow the customer to move into what may often be unconscious routines, which may lead to early involvement in the service delivery process. There may be a danger of changing scripts in order to make a differentiation between service providers: this may cause confusion rather than build service quality.
- *To facilitate control of staff.* Scripts may provide the means of increasing consistency across multiple sites and multiple servers. This has the particular benefit of ensuring that the appropriate customer script is activated, and that all the required questions and prompts are given. Scripts have particular value in the process of cross-selling, as, for example, in a call centre selling direct insurance that encourages the employee to use 'sub-scripts' such as 'Are you sure you have sufficient cover for your house contents?' or 'Can we help you with any other insurance worries?'.
- *To legitimise organisational actions.* Here the script informs the employee as to what behaviours and attitudes the management believes customers expect. The restaurant chain TGI Fridays encourages staff to display high energy levels in their interactions with customers, whereas 'fine-dining' restaurants might prefer staff to exercise a rather more sedate and relaxed form of delivery.
- *To serve as analogies.* Scripts learned by a worker in a previous employment may be used as the basis for developing new scripts in later, similar situations.

- *To facilitate organised behaviour.* Scripting may allow for the smooth running of a team engaged in interdependent activity. For example, a surgical team may choreograph and rehearse their actions before a surgical procedure. Developing routine medical procedures means that individual team members can change, provided that others can perform their roles. Scripting facilitates this interchangeability.
- *To provide a guide to behaviour.* Scripts set expectations as to what will happen next in a service encounter. Because customers have experienced this or similar service organisations before, there is no need to provide explanation as to why things are done this way or why certain information is requested before the service may be delivered. It is also suggested that scripts may be used to explain service ‘fairness’. Most patients in a casualty (A&E or ER) clinic will tolerate another patient being seen earlier than their turn if the condition is clearly more serious than their own.
- *To buffer or exacerbate role conflict.* A script may deflect difficult questions such as ‘Why do I have to give this information?’ by the use of phrases such as ‘I’m sorry but it’s company policy’, or ‘The financial services regulations require us to gain this information’. Scripts may help when the employee is faced with giving unwelcome or unpopular information to customers.
- *To provide a basis for evaluating behaviour.* Scripts can be used as a checklist for management to evaluate an employee’s behaviour. This is commonly used in telephone call centres, where supervisors may routinely monitor large numbers of calls. It is particularly relevant where supervisors may be looking for evidence of specific behaviours, such as the generation of sales as well as simple order taking. Scripts such as ‘Have you considered . . . ?’ may be useful here.
- *To conserve cognitive capacity.* Scripts allow the employee to work on a number of activities simultaneously because the script may be performed as if on ‘automatic pilot’.

Carefully designed scripts can provide opportunities for early involvement of the customer with the organisation and its employees. Scripts can also provide both conscious and unconscious means of support for customers and employees alike. They assist in the management of customer expectations, and may facilitate the smooth passage of the customer through the service process because there exists a good understanding of what will happen and what is required of the customer at each stage to enable this to occur.

Counterpoint

For some (customers and service organisations), scripting is an entirely negative development in customer service. Cheap platitudes and false friendliness, especially from call centres located on the other side of the world, are at best irritating and at worst can constitute the worst in ‘fake service’. Nor do all customers tolerate scripted encounters with equanimity. One experiment recorded a series of scripted conversations between hotel reception staff and customers checking into the hotel.²⁰ Some conversations were highly scripted, while others were far less so. Most customers could readily detect which conversations were scripted. Moreover, scripting affected their experience in a negative way. Social media is not slow to ridicule companies that slavishly use scripts. Problems with, and criticisms of, scripts often cite their lack of flexibility. Customers who do not make the appropriate responses to fit the script may provide inexperienced or poorly trained employees with too great a problem to deal

with. They can also lead to a customer perception of robot-like behaviour. The standard restaurant script that prompts the server to ask ‘Is everything all right for you?’ is frequently greeted with the expected response ‘Yes, it’s fine, thank you’, which is often not a comment about the food, but more a way of getting rid of an intrusion as quickly as possible. Because this script is used too often, without the perceived sincerity that would suggest that there is genuine interest in the response, the possible impression is of someone going through the motions of service with none of the personal attributes of warmth or customer responsiveness required. Moreover, scripts can lead to defensive behaviour. Standard scripts may become a two-edged sword: while they may have a useful role in providing employees with a clear form of words to deal with difficult situations, it may be rather too easy to use a scripted response when the situation requires something rather different.

Communication and involvement

Few of us appreciate being kept in the dark about the organisation we work for, its current activities and plans for the future; service staff are no exception. Indeed, many service staff not only appreciate being involved in the process of development, they often have important contributions to make. Organisations use a variety of mechanisms to communicate with and listen to their service providers. These include:

- briefings by managers;
- annual meetings;
- roundtable meetings;
- question-and-answer sessions;
- intranet-based information and updates;
- informal meetings and gatherings;
- company newsletters.

But effective communication, though it is important, is only part of staff feeling that they have a worthwhile stake in an organisation. Involving staff in performance improvement is also important. We will discuss this in more detail in Chapter 15, but it is important to emphasise here that actions that build the self-esteem of staff can provide an antidote to the pressure they experience. At the most basic level, it is common sense to involve the people who are closest to any task in its improvement, given that they probably know most about it. Service designers who are remote from routine service delivery may sometimes create processes that are not always ‘employee (or customer) friendly’. Involvement of service employees may have a positive impact on both staff and the organisation. This will inevitably mean that the organisation has some investment to make in terms of time, training and management support, but most organisations report benefits from these activities.

8.3 What is an appropriate level of employee discretion?

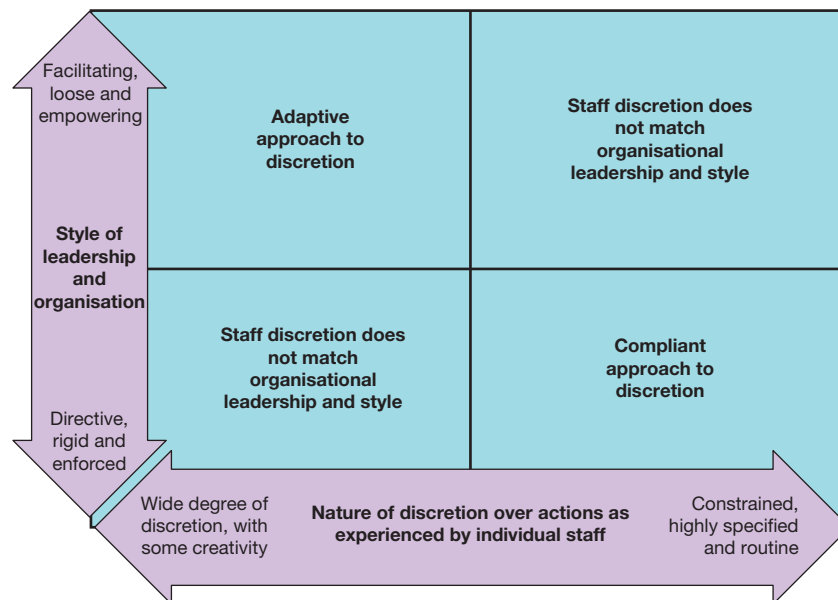
It is neither desirable nor possible to create a script for every service situation, so most service organisations give some degree of discretion to their service staff. This is compatible with a general trend in organisations to harness the experience, brainpower and creativity of all employees, and not exclusively senior managers. Moves towards self-directed or semi-autonomous teams, together with flatter organisational structures, also emphasise the need to give people more autonomy. Note that we refer to discretion rather than ‘empowerment’. As has been pointed out, most people’s jobs are empowered in the sense that they have some degree of authority; the critical question is how much discretion they have.

It is useful to distinguish between three types of discretion.²¹

- *Routine discretion* means that the employee has discretion regarding how the basic task is performed, rather than what task is undertaken. The range of routine discretion may be extended with the complexity of the task. The more complex the task, the less it is possible to describe each step in a rigorously controlled procedure document. For example, an investment advisor who draws on a wide range of information sources in order to make the appropriate recommendation to each client has a wide range of routine discretion. In fact, generally, customer-facing employees with a wide range of routine discretion will make changes in the way that they deal with each service encounter.
- *Creative discretion* is exercised by those who develop both what and how they do things. This may relate to people who do not have a tried-and-tested formula for doing things, but nonetheless have some training and experience that allows them to make informed judgements as to what to do. At the extreme end of this spectrum might be those creative people who are involved in the innovative activities of the organisation, as in new service design or in the development of strategies that represent a significant shift from what has been the accepted norm.

Figure 8.5 Adaptive and compliant approaches to employee discretion

Source: Based on Kelley, S.W. (1993) 'Discretion and the service employee', *Journal of Retailing*, 69 (1), 104–126.



- *Deviant discretion* differs from routine and creative discretion in that it is generally not approved by the organisation, whereas the other two types are recognised and approved by it. In the service context, a retail salesperson who gives a customer a refund contrary to company policy is exhibiting deviant discretion. This may gain increased customer satisfaction for this individual, but not be approved by senior management. Deviant discretion is potentially disruptive since it usually involves individuals acting on their own authority, rather than on behalf of the organisation. Such people may earn the reputation of being mavericks or for just being difficult. Indeed, an organisation made up of people who operate in this way would be interesting, but rather chaotic. However, an organisation without such people might easily become rather stagnant, without challenge to the status quo.

Figure 8.5 provides a framework for exploring some of the issues around developing or restricting employee discretion.²² The key dimensions are as follows:

- *Organisational style.* Fluid organisations are those that must change their structure relatively frequently. Project-based organisations, such as consultancies, may organise around expertise. The consultant who is the expert provides the lead, possibly providing direction for employees with greater seniority. As the clients' needs shift, so may the requirement for different skills/knowledge sets change, prompting further changes in organisational structure and processes. These organisations will need to adapt processes for each situation, so will lie at the 'fluid' end of the scale. Service operations that have clear operating procedures such as retailers or insurance companies will tend to operate at the rigid end of the scale. For financial services, this will enable them to operate efficiently but also to ensure that risk management/compliance procedures are observed.
- *Perceived individual employee discretion.* This will be discussed in more detail below, but it is important to recognise that the issue is frequently how much discretion employees 'feel' that they have, or feel that they are capable of. We will discuss this from the employees' point of view. Some employees may not 'grow into' the discretion they have been given; others may feel that their freedom to act has been curtailed. Clearly, this aspect might also be analysed from the manager's perspective, and it is worth considering the issues arising from differences of opinion between managers and employees.

The compliant organisation

The compliant organisation is frequently found in the high-volume/low-variety service operations. Compliant organisations frequently have the following characteristics:

- Their focus is on consistent service delivery, often across multiple locations and with many servers.
- Such operations have well-developed process documentation, with training for employees as to how they should behave in each situation.
- High volumes and consistent processes lend themselves to automation and/or the employment of relatively low-cost labour.
- The management style employed is frequently somewhat directive, often because employee turnover is such that employees are relatively inexperienced (and with low motivation).
- Performance measurement often relates to short-term indicators such as response times or orders taken.

Remember, though, that it is best not to assume that all roles in the compliant zone relate to low-paid, low-skilled employees. Airline pilots also fit in this zone. We would like our pilots to operate in a consistent manner and not to exercise too much discretion (at least under normal conditions). However, we will pay our pilots a good deal of money for their skill and responsibility to look after our safety. When things go wrong, we want pilots to follow the procedures they have trained for in the simulator. In effect, to avoid being ‘paralysed’ by the situation, they become possibly more compliant.

As Figure 8.5 suggests, the problem for these organisations is that the service process feels as if it is imposed by management. The process may have been designed by head-office staff, who then carry out periodic audits to ensure compliance to the predetermined design. Local innovations are not desired or encouraged, since this might create customer expectations that may not always be fulfilled in every location and will lead to potential increases in unit costs. So, the problem for the compliant organisation is that front-line staff may lack the motivation or ownership of either the service concept or the customer, and won’t bring life to a rather mechanistic style of service delivery. The challenge for service managers is to engender both ownership and a spark of creativity in a workforce that might otherwise appear like robots.

In so doing, the aim is to change the emphasis from compliant to process ownership. The objective here is for the employees to take ownership of service delivery, rather than to feel that it is imposed on them. How this may be achieved is covered more fully in the chapters on service culture and continuous improvement (9 and 15 respectively), but broadly the approaches utilised are as follows:

- *Communication.* Good communication from management as to how well the organisation is performing and the reason for future strategies. Also, it is useful to open lines of communication from customer-facing employees to senior management in order to facilitate the passage of invaluable customer feedback.
- *Involvement.* Inclusion in process improvement projects is encouraged as and when possible. The aim here is to foster a sense of ownership of both process and customer because employees have had a hand in process design. Many service organisations have found that continuous improvement activities such as *kaizen* or Six Sigma have been very beneficial in this area (see Chapter 15 on service improvement).
- *Celebration.* A major problem for the motivation of staff in customer-facing roles is that they are frequently on the receiving end of complaints and abuse and rarely receive praise from customers. Indeed, some customer service functions are set up with the explicit task of dealing exclusively with complaints. Some service organisations counteract both the potential boredom of routine transactions and the deadening effect of dealing with customer complaints by creating rituals of celebration of success.
- *Teamwork.* Organising customer-facing staff into teams may help engender a sense of purpose, and also provide opportunities for job rotation, support and motivation. A major benefit of teams in service delivery is that managers can give the team more ‘routine discretion’ to make decisions in a range of prescribed areas such as job rotation. This reduces the perception of the organisation as ‘big brother’, controlling every aspect of the employees’ work life.

All these approaches have one thing in common: they create a sense that the organisation values the contribution of even the most junior employees. Without this, it is unlikely that service encounters will be anything more than adequate, and will probably not build customer loyalty.

The adaptive organisation

The adaptive organisation is more often found at the high-variety/low-volume end of the spectrum. Many staff in professional services such as management consulting or legal advice might fit into this category. Adaptive organisations have a number of characteristics:

- There are high degrees of creative discretion in developing both product and process.
- There is frequent dependence on key individuals' skill and knowledge.
- There is a resistance to the generation of standard processes, leading to inconsistency in approach.
- There is an emphasis on innovation.
- Research and development activities are often focused on the professional development of the people in the organisation as opposed to the development of service brands and 'products' found in commodity organisations.
- The management style is likely to be 'facilitative', focusing on ensuring that the skilled individuals are able to work to their full potential.
- Performance measures are likely to be rather more long-term in nature than is the case for the compliant organisations. Marketing, for example, may have targets that include the development of a number of new services over a period of months, and an academic may be required to develop new material for teaching next year's course.

The challenge of these organisations is to ensure that a reasonably consistent approach is adopted for service delivery. In many professional service organisations, client relationships are managed by the individual provider, leading to potential inefficiencies. Another weakness here is that individuals are reluctant to share their knowledge with others because this might weaken their position in the organisation. This may cause major problems when key individuals leave, often taking their portfolio of clients with them. Management may need to focus its attention on the following:

- Motivating key individuals, by providing opportunities to extend their skills and knowledge.
- Emphasising situations that require individuals to collaborate in order to carry out their tasks.
- Developing multiple links with clients to ensure that these relationships are not severed when particular individuals leave the organisation.

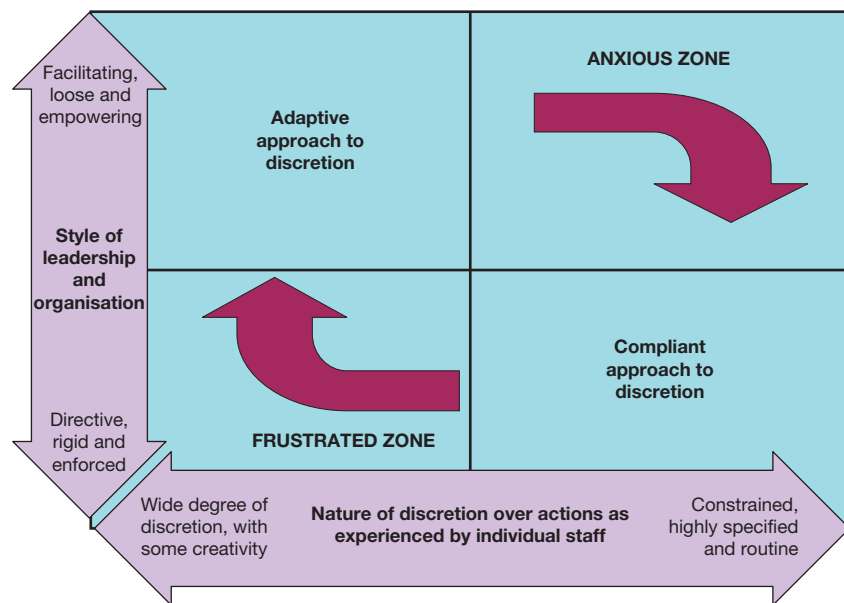
Managing transitions

Figure 8.6 illustrates two common conditions that describe what may happen when an organisation decides to increase or decrease the nature and amount of discretion given to individual employees:

- compliant to adaptive: the anxious zone;
- adaptive to compliant: the frustrated zone.

Compliant to adaptive: the anxious zone

Service organisations may wish to increase the amount of discretion given to customer-facing employees. This is particularly relevant if the strategy is to increase the range of service options available to customers. In this case, individual service providers may be asked to take more decisions and to carry out a greater proportion of the service process. In many cases, of course, the implementation of this change is well planned and executed. Typically, this will involve investment in training and information systems, but no matter how well this is managed, individuals change at different speeds, dictated by their individual personality and history. Thus, in this case, the individual employees are being moved from what might feel like a reasonably 'safe' environment where they are provided with a clear structure and process to follow, to one where individual decision making is required.

Figure 8.6 Transitions in managing employee discretion

This situation may be summed up as ‘being empowered but not feeling it’. The individuals involved want the challenge but are either unsure of their own ability or are uncertain as to how much real discretion the organisation is willing to give them. In this transition, individuals may well not perform immediately to the level of their capability and, indeed, may be written off by the management as not being up to the new task. In reality, with support and training, large numbers of staff may be able to deal with the added responsibility of increased discretion. There is often a rich vein of talent for continuous improvement activities and the opportunity to build ownership of the service delivery process. It is important to note, however, that customer-facing employees in the anxious zone will probably not always deliver service to the new (usually more demanding) design standards.

Adaptive to compliant: the frustrated zone

Organisations may want to restrict the degree of discretion of some or all of their employees. A common reason for this would be that as a consequence of actual or desired growth, systems and processes are standardised, reducing the opportunity for individuals to develop their own approach to service. This is particularly relevant to professional services seeking to provide consistent services to national or multinational business clients.

For these professional services, the implementation of management by process will result in a reduction in autonomy on the part of the individuals in the organisation. A good example is provided by the larger consultancy firms, which may seek to develop solutions that can be adapted for a wide range of clients. In this scenario, although consultants may have some discretion to adapt the solution to their individual client, the basic design work has been carried out by other people in the firm. This philosophy will clearly change from firm to firm, as will policies regarding brand management and standardisation of approaches to client relationships.

The characteristics of the frustrated zone are as follows:

- Individuals resist the implementation of standard processes (an imposed system), claiming that the system prevents them from operating in the most effective way in delivering solutions to their customers.
- These individuals are frequently extremely vocal about these perceived or real restrictions.
- As can be seen from Figure 8.6, employees in the frustrated zone often perceive that they still have high degrees of discretion, despite the standard processes being implemented. The result is that

these employees feel that they are ‘above’ the system, that it does not apply to them and that they can circumvent its requirements in order to ‘get the job done’ in the way that they think best.

The problem here is that individuals who have become used to high levels of perceived discretion find it particularly difficult to work in an environment where they feel that their freedom is restricted. They may ‘comply’ with the system if the alternative is that they lose pay or status in the organisation, but they find the system difficult to accept and are likely to become disaffected as a result. It is important to recognise the concerns of these individuals because they frequently possess skills that are essential to retain. This may be achieved in some cases by providing them with opportunities for personal development through involvement in activities that do not conflict with the objectives of the more standardised service processes being implemented.

Balancing empowerment and control

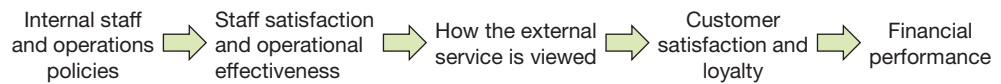
Organisations in the same service sector may have very different operating philosophies. Individuals who were happy in one organisational culture may struggle in another. It is important to note that when an organisation wishes to make significant changes, individuals must be treated as such, recognising that some will welcome more empowerment or discretion, some will be happiest in more prescribed roles, and others will take time and support to grow into a larger role. The dilemma is to know how, and by how much, individual employees can be ‘empowered’. Here, a key issue is the maturity of staff, in the extent to which they are both willing and able to take more responsibility.²³

The service–profit chain

It is an attractive notion that there is a direct link between employees’ satisfaction with their jobs and the overall financial performance of the organisation that employs them. It is not unreasonable to propose that the happier service staff are, the more they are likely to understand and support improvements in service operations practice, which in turn engenders customer satisfaction, customer loyalty and therefore better financial performance for the organisation. It is even easier to believe the opposite – that dissatisfied employees are unlikely to support improvement or treat customers with attention and courtesy. Probably the best-known formalisation of this idea is called the ‘service–profit chain’, which also is sometimes referred to as the ‘service value chain’ or ‘service performance network’.

The service–profit chain was first developed and modelled by Heskett et al.²⁴ It is based on the idea that profitability directly results from customer satisfaction and loyalty, which, in turn, are a direct result of customers’ view of service quality and their sense of the value they receive, and the employees’ capability, satisfaction and loyalty. The study on which the model was based collected empirical evidence from 20 large service organisations, and examined many of the relationships implied by the chain. The implication for management practice was not particularly new, but was nevertheless clear and intuitive – that the contribution and performance of service staff are critical to the provision of customer service and business performance. Heskett et al. describe the relationship between staff satisfaction and customer satisfaction as the ‘satisfaction mirror’, the idea being that business success derives from staff satisfaction being reflected in terms of customer satisfaction.

However one thinks about it, the chain helps service operations managers to understand the impact of changes they could make to their operation. In most organisations, the cause–effect relationships between service operations decisions and business performance are extremely complex, involving many factors with inherent lags and delays in their relationships. Although managers can usually calculate or estimate the costs associated with any particular change or initiative, they may be much less certain of their impact on the organisation’s wider business performance – for example, the likely impact on customer satisfaction, retention, revenues, market share and profit. The service–profit chain provides a logic (shown in Figure 8.7) to think through the impact. This complexity is enough to put off many managers, who may be tempted to revert to oversimplified solutions. They often think it is much better to work at understanding the links between their operational drivers and business results. For example, if an operations manager knows (and can demonstrate) that an additional spend of £X million on staff training, or on improving recovery systems, will yield a £Y million increase in profit, or reduce costs by £Z million, they have a better chance of getting wider management support.

Figure 8.7 The logic of the service–profit chain

Service–profit chain as a business model

To use the service–profit chain as a mechanism to understand the operational drivers and business results, the first step is to identify the key operational and business drivers, such as culture, resources or recovery systems, and the organisational results, such as customer satisfaction or profit. Drawing a service–profit chain (or service performance network) depicts the likely cause–effect relationships among these variables, such as good leadership influences the right culture, or customer satisfaction improves customer retention and customer retention influences financial performance. Figure 8.8 shows an example of this. It is unlikely that organisations will be able to capture all the variables in their business model, or indeed all the relationships among them. The main thing is to capture the key relationships. Over time, the network can be developed and expanded to provide a more complete model of how the business works. These models are equally suitable for not-for-profit organisations; for example, the results may be expressed in terms of adherence to budget and meeting objectives, rather than profit.

Identifying the measures

The next step is to identify the measures, existing or required, for each of the variables in the chain. For many larger organisations, the problem will not be creating the measures but finding the data within the organisation. What we often find is that the variables are measured but the data is kept in different departments. Marketing may have the data on customer satisfaction, HR the staff retention data and finance the revenue data. In order to start to understand the relationship and how the model works, that data needs to be drawn together. It is important that effort is put into the planning stages of this, because the longitudinal strength of the chain created can be undermined by frequently changing the collection instruments. An engineering consultancy company created its business model and found it had plenty of measures available for each of the variables in its model (see Figure 8.9).

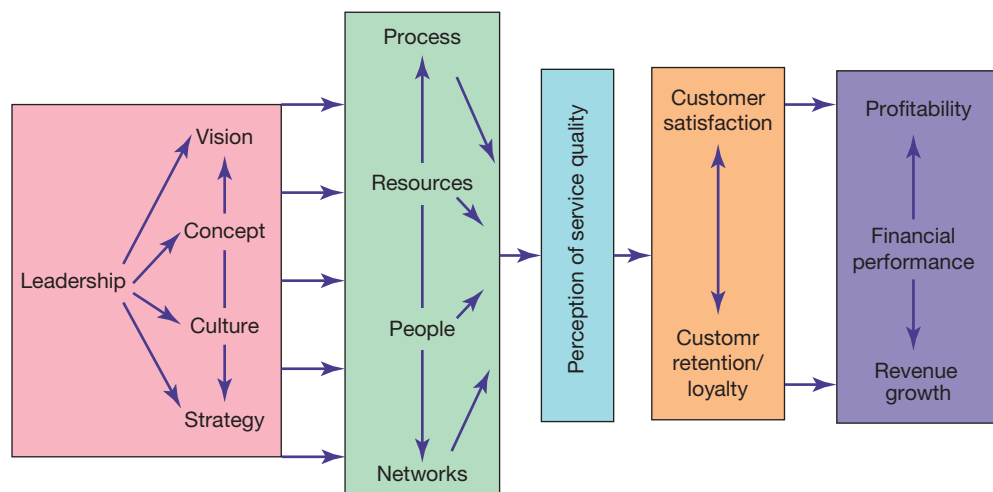
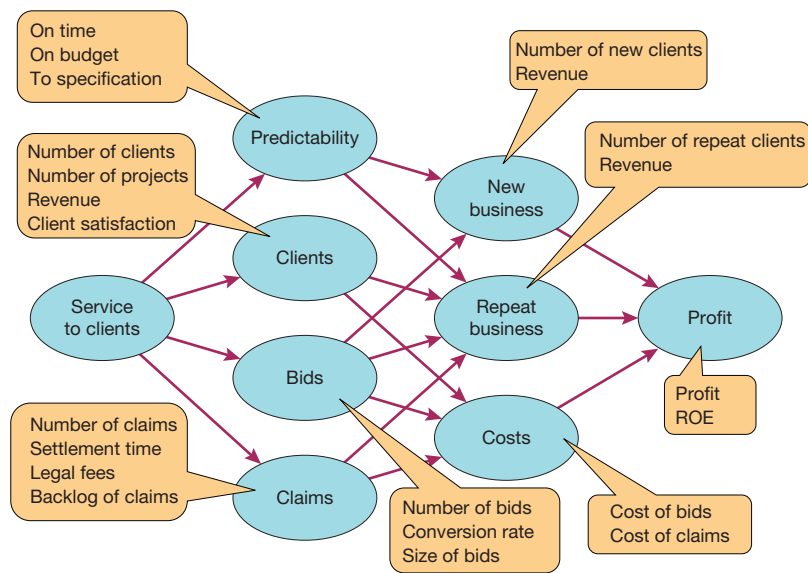
Figure 8.8 A service–profit chain/service performance network

Figure 8.9 A service–profit chain/service performance network with measures

Counterpoint

The service–profit chain is a sweeping hypothesis that supports an essentially simple (and old) message: ‘happy employees mean happy customers’. But it is not without its critics. These tend to fall into three (contradictory) categories: first, the service–profit chain is too much of a simplification; second, it is so complex that the individual relationships cannot all be demonstrated; and third, it is nothing new anyway.

First, it is too simplified. The service–profit chain is too simplistic a model to fully understand the drivers of business success, regardless of environmental and operational context. It does not allow for potentially important variables, such as competition, the nature of the service being provided, the scale of the operation and so on. All of which may significantly influence the relationship between various links in the chain. In other words, the conditions under which the model is applied need to be considered, and these could distort, even negate, the ‘mirror’ effect.²⁵ Second, it is too complex. The model

integrates many diverse issues, decisions, service practices and drivers of performance. Bringing these many disparate relationships and interdependencies together is both its strength and its potential weakness. Because of this complexity, many of its in-built assumptions are vulnerable to being disproved. And indeed, the studies that have attempted to prove (or disprove) its assumptions have provided mixed results, often with individual links in the chain being established rather than the model in its entirety. Third, it is nothing new. It has been pointed out that there is a strong resemblance between the service–profit chain and the messages promoted by management ‘gurus’ over the years, especially those promoting total quality management (TQM). Many of the TQM ‘gurus’ claimed that such practices as process ownership result in employee satisfaction, which in turn results in higher levels of quality, productivity and business performance.²⁶ Therefore, the service–profit chain is simply a repackaging of ‘old news’.

8.4 How can customers be 'managed'?

So far, we have focused on the role of service staff. But 'service people' also includes the customers that interact with the service process. Not only that, but the concept of co-production encourages the inclusion of customers as service providers in a similar way to the service organisation's employees. In that sense, customers are 'temporary employees', and we would argue that, just like employees, managers need to understand how these 'temporary employees' should be managed so that they fulfil their required roles and display the desired behaviours.

Customer roles

Customers perform a surprising variety of functions in the service process. Their precise role will depend on the nature of the activity and the approach determined by the service designer. For example, these roles could include the following:

- *Service provider.* In many organisations, the customer provides themselves – and sometimes other customers – with a service. An obvious example is the task we fulfil in supermarkets, taking items off the shelves, taking them to the cashier, bagging the items and taking them to the car. Less obvious are the roles we play in faith organisations, syndicates or work groups that rely on the involvement of all to create the service (and benefits) for each other. Another role that customers provide, to other customers, is that of providing the atmosphere in a restaurant or place of entertainment. By either being quiet or joining in the fun, customers help set the tone or mood for others to enjoy and/or follow.
- *Service specifier.* In most services, the customer must provide clear information about requirements before the appropriate service or product can be selected and delivered. This may be relatively straightforward in consumer services, where the service or product is well defined and customers may have wide experience of the scripts. It may not be as straightforward, however, in customised service, such as many of the professional services, where in many cases the customer has little relevant knowledge or experience.
- *Quality inspector.* Many service organisations will use the customer as a quality-control inspector. Organisations may provide formal feedback mechanisms such as focus groups or questionnaires, or may encourage a wide range of comments from customers. Some organisations appear to rely on the customers to bring errors to their attention, rather than ensuring zero defects.
- *Trainer/role model.* In some organisations, customers are used to help other customers know what to do and how to behave. By being seen to stand in an orderly queue or talk quietly in a restaurant, existing customers define the roles and behaviours for new customers. They may even take it upon themselves to admonish transgressors through a reproachful look or even active intervention.

The benefits of customer involvement

There are many benefits from encouraging customers to fulfil some enhanced roles in the service interaction. Three in particular are worth noting. First, customers who become actively involved in the service process often develop an increased sense of loyalty. Having become involved, these customers are less likely to stop and find another provider in the short term. Second, they are a source of resource productivity. If the customer is carrying out some of the tasks, the service operation requires fewer resources of its own to run. Self-service restaurants and supermarkets provide simple examples. Third, customers who become part of the service process can feel that they have more personal control over their interaction with the service. For example, mobile apps allow customers to access services at times to suit themselves.

Case example

You're on camera, smile!

All the world is a stage – and the audience is part of the play. But they do not always act responsibly, apparently. Which is why two theatre industry groups in London joined forces with the security company Calla to equip their front-of-house staff with miniature recording devices (known as body-worn video cameras, or BWV) to deter audience members from becoming aggressive. Most theatre audiences are, of course, well behaved, but there are exceptions. And some shows are prone to audience problems. These most often occur at theatre events that are positioned somewhere between a conventional theatre play and a music

concert: the so-called 'juke box musical'. Problems occur when customers with differing attitudes and standards of behaviour argue among themselves. The two sets of audience members have different expectations of how to behave. More traditional theatre-goers expect quiet behaviour and a certain level of decorum. Others treat the show as a concert and feel that no one else should tell them how to have a good time. Theatre staff, such as the ushers who show customers to their seats, can get caught in the middle of arguments. It can be a difficult job to manage an aggressive situation without causing added disruption to other audience members.

Other front-line service workers to be issued with BWV cameras include healthcare workers, airport and airline security staff, search and rescue officers and local government staff. Even teachers in some schools were reported as using them to stop pupil disruption. However, recent research raises concerns about such a scheme and its



YUI MOK/AFP/Getty Images

potential impact on both teachers and pupils. It depends on how BWV cameras are used. Where they have been used, the cameras are not recording constantly. Teachers activate them whenever they want to record something. However, this can be interpreted as deliberately escalating a situation that could be diffused in other ways. The same effect has been reported by police forces that have adopted BWV, which is one of the most rapidly diffusing technologies in law enforcement. Nevertheless, the technology has been associated with a reduction in formal complaints against the police, and officers seem generally supportive of BWV, particularly as a device for their protection against false or exaggerated accusations of inappropriate behaviour. There is some argument, however, as to whether this reflects improvements in citizens' reporting behaviour or police officers' behaviour.²⁷

Customer management issues

Since customers are significant components of service delivery, both as recipients and as co-producers of the service experience, it would seem sensible to 'manage' customers as if they were 'employees'. However, it can be harder to manage and control customers than employees because, first, they are customers who may feel exploited, and second, the organisation may be able to exert only limited control over them. Whereas business-to-business organisations may draw up

service-level agreements between them to set standards, and use them to monitor and control the service delivered and received, other service organisations may have to rely on social mores or ‘rewards’ and ‘punishments’.

Managing customers can entail some or all of the following issues:

- defining customer competence;
- customer selection;
- customer motivation;
- customer training;
- customer removal.

Defining customer competence

One of the changes in the service concept that may redefine the way things are done relates to the extent to which the service organisation assumes it is dealing with competent or incompetent customers. For example, telecommunications equipment suppliers formerly dealt exclusively with competent customers – national network operators. The advent of mobile networks and increased competition means that they may now be dealing with entrepreneurs rather than engineers. This opens up possibilities for the development of new services, as well as presenting challenges to accepted ways of working.

Customer selection

It is helpful if organisations have customers who are willing and capable of fulfilling their roles inside the operation. Just as they recruit and select staff to perform particular roles, many service organisations also recruit and select their customers too. Organisations, often through their marketing departments, provide information about what services are available – thus helping to ensure that the customers with the appropriate (and achievable) needs are attracted to that service. A lack of information can create confusion and lead to unnecessary resources being used. For example, if you are at home and feel slightly unwell, there are many courses of action open to you. Booking an appointment with the doctor or seeking advice via phone or internet may be sensible options. However, some customers turn up at accident and emergency units or phone for emergency ambulances when the situation is not serious, thus absorbing expensive resources that could be better deployed. Organisations need to ensure they provide customers and potential customers with good information to help them make the right choices, not only for themselves but also for the organisation.

Some organisations use high prices or dress codes, for example, to try to ensure that they attract the ‘right’ type of customer. Others, such as insurance companies or schools/universities, will screen the potential customers to ensure that they are not too high a risk, or are academically and socially suitable. Center Parcs, the holiday company, will not take bookings from large, single-sex groups, because it does not want its reputation as a family-focused holiday to be damaged by ‘inappropriate’ behaviour. Lengthy queues to get into a nightclub will not only put off those people who may be less appropriate customers (people such as the authors of this text, who would get in and complain about the noise level, for example) but, at the same time, will encourage those who really want to be there, as the queue gives the impression of it being a popular and desirable destination.

Whatever the type of service, organisations need to be able to identify the types of customers they want and set up methods of selection (or deselection) to try to ensure that those people are attracted to the organisations and others are not. Even for organisations that have no freedom in their choice of customers, such as the Inland Revenue or social services, it is helpful if their customers know what services are available, the best way to access them and how to behave when so doing. Such information, which helps customers select the right services, locations and access times, etc., is also an example of ‘customer training’.

Customer motivation

Unlike the employee, the customer is unlikely to receive any direct financial reward for performing well inside the organisation since they are usually paying, directly or indirectly, for that service. Peer pressure and social mores are usually sufficient to make sure the customer behaves and acts as required. Some organisations provide some small financial incentives, such as slightly cheaper petrol if you pump it yourself, cheaper furniture if you are prepared to assemble it yourself, or 'money-off' vouchers for providing information about yourself or the service received. Other organisations use systems of punishments to try to 'motivate' the customer to comply, such as fines for the late return of library books, expulsion of students or members of particular societies whose behaviour is unacceptable, fines or prison for citizens who break laws and termination of contracts for businesses that fail to do what was required of them.

Customer training

As we discussed in Chapter 5 on customer relationships, customers, like employees, require training. In some organisations this can be provided by other customers.

Customer removal

Again as we discussed in Chapter 5, and as a last resort, service organisations will remove customers.

8.5 Summary

Why is service delivery a pressurised task? – Front-line service staff face two sets of difficult pressures: organisational pressures and customer pressures. Staff often feel squeezed between these two, causing stress. Stress is a feeling that you cannot cope, or meet the demands placed upon you, and cannot see an obvious way of solving your (perceived or real) problems. However, some service tasks are more stressful than others – for example, because the consequences of mistakes in some jobs are more serious than in others. Six key areas of work design are associated with stress at work: excessive demands of the job; little control over the job; insufficient support provided; poor relationships with others; conflicting or ambiguous roles; and how changes to the job are managed. Some of the significant issues for service providers resulting from customer expectations include the constant presence of customers in high-contact services, customers thinking that the service transaction they receive is special for them and excessive or unrealistic customer expectations. All these pressures may lead to issues of lack of motivation, poor customer relationships, anxiety and stress.

How can organisations manage service staff? – Effective leadership is essential for counteracting the pressures on service employees. Leadership can be categorised as either transactional or transformational, both of which can be appropriate in service operations. Teams and teamworking can provide a powerful mechanism for support and also for building ownership of service processes. However, teams are not appropriate in all situations. But irrespective of how teams are used, good service is facilitated by reducing role conflict and ambiguity, and increasing role clarity. Similarly, well-designed service scripts serve a number of purposes in service design, enabling consistency and providing useful prompts for employees. Internal and external communication are powerful elements in building commitment, both from customers and employees.

What is an appropriate level of employee discretion? – Most service organisations give some degree of discretion to their service staff. It is useful to distinguish between three types of discretion: routine discretion where the employee has discretion regarding how the basic task is performed; creative discretion where staff have discretion over both what and how they do things; and deviant

discretion that is generally not approved by the organisation. Defining the degree and type of discretion required for each role is essential, and provides insights for the manager in dealing with operational transitions. Using the key dimensions of organisational style and perceived individual employee discretion, organisations can be classified as ‘compliant’ or ‘adaptive’.

How can customers be ‘managed’? – Like employees, customers are often service providers. They can perform a surprising variety of functions in the service process, such as service provider, service specifier, quality inspector and trainer/role model. There are many benefits from encouraging the customers to fulfil some enhanced roles in the service interaction, including developing an increased sense of loyalty, becoming a source of resource productivity and developing a feeling that they have more personal control over their interaction with the service. The key issues in managing customers include defining customer competence, customer selection, training, motivation and removal.

Discussion questions and exercises



1. Bentown Housing Association is a social landlord charity that owns and manages around 6,000 properties in the south of the UK. Employing around 650 people, it is a quasi-government body that provides housing services in areas of social deprivation. A high percentage of its customers are from ethnic minority groups and over 20 per cent have English as a second language. Almost 90 per cent are in receipt of some form of government benefit and local unemployment is twice the national average. Many of its customers have little or no choice over their housing. The alternatives are relatively expensive private rented accommodation, short-term hostel accommodation or living rough on the streets. Although most customers are well behaved, a minority are difficult and can be abusive and threatening.

Most of our customers are good. However, some customers are very difficult to manage. This is sometimes due to their expectation of service levels being higher than we are required to, or indeed can, provide for them. Often this is because they don't understand what we can or can't do, although there are clear service standards expressed in our tenancy agreements with our customers. This can make our dealings with customers difficult. They can be frustrated, anxious, demanding and occasionally aggressive to customer-facing staff, who generally do a fantastic job. The staff are professional and dedicated and often choose to work in

the not-for-profit sector through a sense of social purpose.

(John Boot, Bentown Housing Association
Service Manager)

What could Bentown Housing Association do to minimise work-related stress in its front-line staff?

2. Reread the case example, 'It's not part of the job – Co-op's "Safer Colleagues, Safer Communities" campaign'. In addition to technological solutions such as SmartWater, what else could such retailers do to protect their front-line staff from abuse?
3. When services talk about 'customer training', what do you think that they see as the main advantages?
4. Reread the case example 'Caring for your players'. What do you think are the main pressures on professional sportspeople that someone in a sports-related service, such as Sara at Scarlets, has to deal with?
5. 'Happy employees mean happy customers' is at the core of the service-profit chain. How do you think that idea applies to (a) a performance of an opera at a grand opera house, and (b) heart surgery?
6. Many services require their front-line staff to adopt very prescriptive dress standards. What factors should be taken into account when deciding on what is considered appropriate clothing and appearance for the following services: (a) airline cabin crew; (b) consultants; (c) receptionists at the headquarters of a large manufacturing company?

Case exercise

Superstore plc

Rhian Silvestro, Warwick Business School, and Stuart Cross, Morgan Cross Consulting

Over the last two decades, the UK supermarket industry has been characterised by increasing concentration, with a few firms, in effect, forming an oligopoly. The pace of concentration in the industry accelerated until around 2012; after that time, the emergence of two low-cost retailers had an impact on the growth of what had previously been called 'the big four' dominant players. However, the sector was still dominated by four leading chains, with all others competing in the second tier. These four main players had all diversified into the non-food sector, and, while there was price-based competition between the key players, the emphasis had shifted towards competition based on customer loyalty and quality.

Superstore was one of the big four supermarket chains in the UK and operated a chain of hundreds of stores, which retail in excess of 40,000 product lines, including food products and non-food items such as personal care products, clothing and pharmaceutical products. It had positioned itself as a family store offering good value, and, like all its competition, the company had introduced loyalty card technology and a self-scanning service with a view to improving customer loyalty.

In a recent annual report, the company's chief executive stated that customer satisfaction and loyalty were the real drivers of the company's profit and growth, and that these were influenced by how its people felt about their work, their rewards and their manager. This was also a central theme in the company's management training programme.

To test out this contention, Julie Carroll, a senior officer in the personnel department, collected

together some existing performance data. The data was a mixture of internal measures, based on the performance of 15 stores, and a survey of customer and employee perceptions based on six stores. Table 8.2 shows the main areas measured, the measures used and, where appropriate, an explanation as to what they mean.

Julie added:

One particular measure calls for some explanation; our store operating ratio is the ratio of actual to planned working hours. This is considered to be a good indicator of the quality of working life at a store because, as the ratio of actual to planned working hours increases, the workplace becomes more stressful and therefore the quality of working life, what we refer to as internal service quality, diminishes.'

Julie calculated the correlation coefficients between the various data sets and her results are shown in Table 8.3. The correlations entered in bold denote significance at the 95 per cent level or higher. (The minimum value of the correlation coefficient necessary for 95 per cent confidence was 0.51 when the sample size was 15 stores and 0.81 when the sample size was six stores.)

Julie was not sure what to do next.

Questions

1. What conclusions could Julie draw from the data?
2. What are the issues and implications for the chain?

Table 8.2 Performance measures

Area	Performance measures	Explanation
Financial performance	Profit margin	Store profit margin
Productivity	Sales per square metre	
Customer loyalty	<i>Share of grocery budget</i>	Customers' estimate of the percentage of grocery budget spent at the store
	Basket size	Average customer spend per visit per store
	<i>Customer referral</i>	Customers' willingness to recommend the store as a place to shop
Customer satisfaction	<i>Customer satisfaction</i>	Overall level of customer satisfaction with the store
Service value	<i>Service value</i>	Customer perceptions of value of the service delivered by the store
Output quality	Mystery shopper	Aggregate service quality score assigned to the store by mystery shopper
Employee loyalty	<i>Employee referral</i>	Employees' willingness to recommend the store as a place of work
	Employee turnover	
	Employee absence	
Employee satisfaction	<i>Employee satisfaction</i>	Overall level of staff satisfaction
Service capability	<i>Ability to affect the customer experience</i>	Employees' perceptions of their ability to impact on the customer experience
Internal service quality	Operating ratio	Ratio of actual to planned working hours
	<i>Style of supervision</i>	Employee satisfaction with the style of supervision
<i>Note:</i> Italics indicate measures based on customer and employee surveys		

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- 27 Lum, C., Stoltz, M., Koper, C.S. and Scherer, J.A. (2019) 'Research on body-worn cameras: what we know, what we need to know', *Criminology and Public Policy*, 18 (1), 93–118

Chapter 9

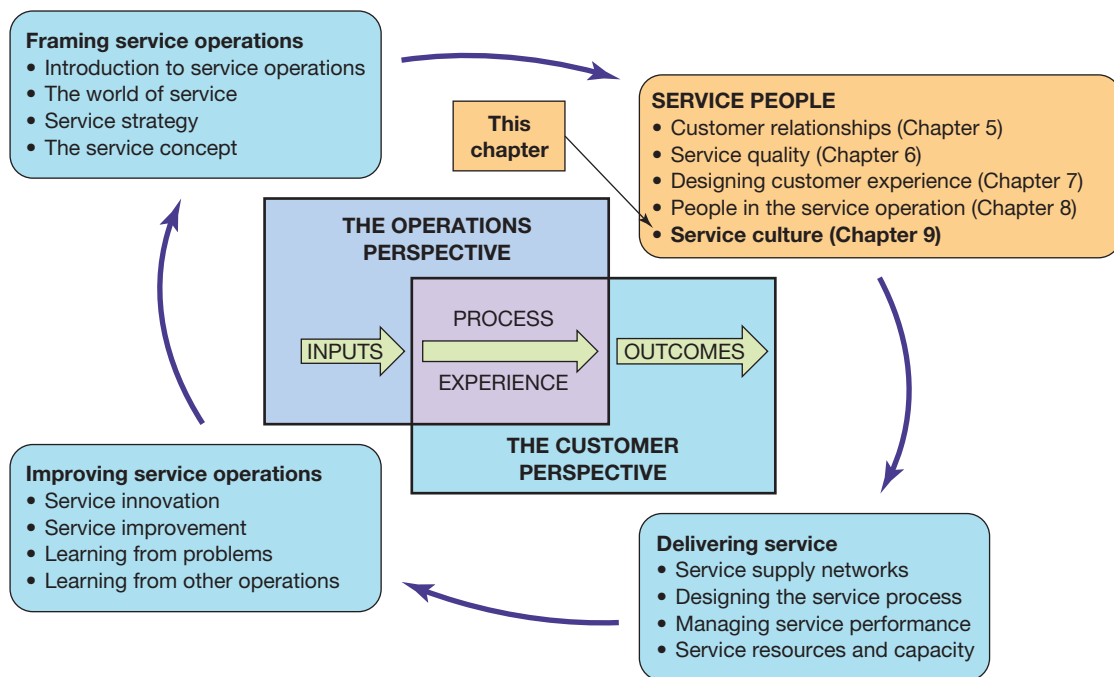
Service culture



This chapter is about the way in which factors such as rules, procedures, ways of behaving and relating, unwritten standards and assumptions, and attitudes (to name just a few) influence the behaviours of service operations managers, service staff and customers. The chapter will first explore what culture and service culture is, and then will look at ways in which service culture can be managed. Figure 9.1 shows where the topics covered in this chapter fit into the overall model of service operations management.

Learning objectives

- To be able to define what is meant by 'organisational culture' and specifically 'service culture', and why both are important
- To be familiar with some of the better-known frameworks that attempt to identify different types of culture
- To identify the steps in attempting to manage service culture
- To understand some of the elements of national cultures

Figure 9.1 This chapter looks at service culture

Introduction

Frequently in this text we explore examples of exemplary service operations practice, relate them to theories of service and apply them in various contexts. Yet there is an important caveat to be invoked when doing this. When one moves between different contexts (or between theory and practice), one needs to modify or adjust any prescriptions to suit the context. In other words, an approach that works well in one context may not work well in another. Context is important. In the study of social phenomena, it is often difficult to be as precise and absolute as one can be in (say) mathematics or physics. And one of the most influential factors that differs between contexts is the prevailing culture of an organisation.

For example, in Chapter 3, we described the service strategy of Singapore Airlines. In fact, Singapore Airlines is often cited as an example of excellent service management and service performance. But the question is, can other service organisations replicate the practices of Singapore Airlines and export them to other airlines, and other service operations more generally? In other words, can we take principles of good service management and move them from the context of a small city-state in Southeast Asia to Moscow, Riyadh, Cardiff or Buenos Aires?

Probably not. It is unlikely that one could export the Singapore Airlines approach ‘wholesale’ and expect anywhere near the success that the airline has with its approach. Yet, there are several processual or ‘mechanistic’ aspects to Singapore Airlines’ operations that are observable and that could easily, and profitably, be adopted by other service organisations. However, at Singapore Airlines the ‘whole’ is greater than the sum of the parts. It could be argued that the ‘glue’ that makes the Singapore Airlines ‘whole’ so effective is, in fact, its service culture.

Culture can be conceptualised as the ‘less than obvious’ and perhaps sometimes invisible aspects of the service organisation that hold it together and make it work so effectively. Singapore Airlines works not just because of piecemeal activities, interventions and initiatives in terms of systems, staff and service design. The separate elements need to be in place, for sure, but service culture,

and possibly a unique service culture, binds it all together. Conversely, we can find examples of organisations (see the case example on Yahoo, later in the chapter) where, on the face of things, everything is in place to make for effective service delivery and business success. However, while optimal conditions prevail, effectiveness and success are elusive. It may be that ‘something’ is diminishing the organisation’s potential that is subtle, unwritten and possibly difficult to repair or change by ‘mechanistic’ approaches.

9.1 What is organisational culture?

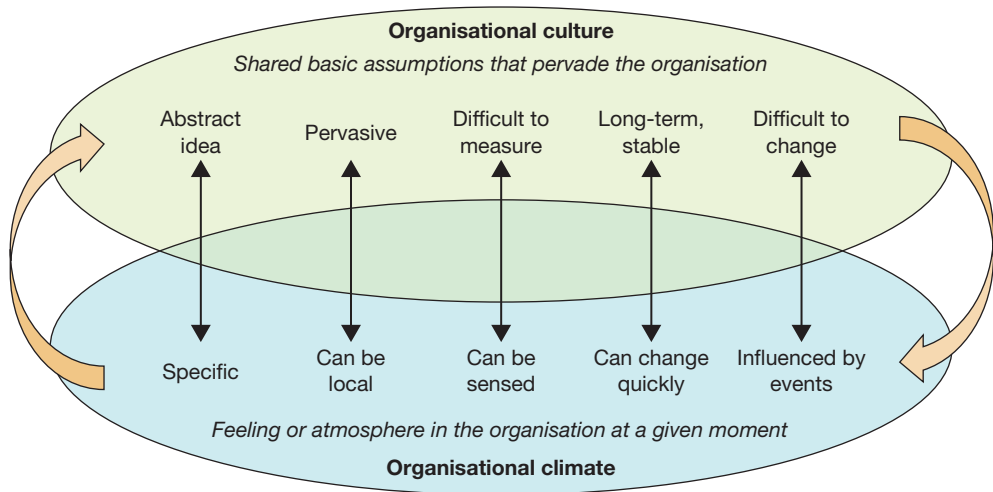
Before embarking on an examination of service culture, it is necessary to look at the idea of ‘culture’ in organisations generally. There is certainly no shortage of either academic or popular material that treats the concept of organisational culture. There are many frameworks for studying the issue, some of which we will look at later in this chapter, yet no single authoritative definition has emerged. Nevertheless, we all kind of know what we mean by it. It is what it feels like to be part of an organisation. It is what you assume about how things get done, rather than what is necessarily formally articulated. It is what you know really happens rather than what is supposed to happen. It is your organisation’s shared values, ideology, pattern of thinking and day-to-day rituals. It is, in a well-known phrase ‘the way we do things around here’. Culture is about style. It is less about what you do than how you do it. And it is a notoriously slippery concept to pin down. It responds to many signals given out (intentionally or not) by leaders – by reward systems, by reporting responsibilities and especially by how decisions are made. That is what makes culture such a subtle, elusive but tantalising thing. It is also something that is built slowly, but can be destroyed quickly.

Another prevalent idea behind the meaning of culture is that of it encompassing the practices, attitudes, behaviours, beliefs and values that are shared between organisational members.¹ Or the slightly more sinister idea of the collective programming of the mind, which distinguishes the members of one organisation from another.² Yet, while there is not complete consensus, one common aspect to different authorities’ ideas of ‘culture’ is that it is bounded by an organisation’s boundaries. One authority refers to it as ‘the system of such publicly and collectively accepted meanings operating for a given group at a given time’.³ In several earlier chapters, we have stressed the overlap between the operation’s and the customer’s perspectives of service, and the importance of the idea of co-production, so this broader view is perhaps more relevant to service operations. Similarly, there is now arguably an increased ownership of many aspects of service delivery by customers. Think, for example, of the podcasts and podcast networks such as No Agenda, TWitTV or RelayFM. TwitTV and RelayFM are nothing without their army of contributors working via live chat, social media and sometimes in the studio during recording. And No Agenda explicitly defines its ‘listeners’ as producers. In these cases, both the networks and their cultures are defined as much by their customers (and staff) as by their founders’ vision.

What is ‘climate’, and how does it relate to ‘culture’?

Two terms that are often, but mistakenly, used interchangeably are ‘organisational culture’ and ‘organisational climate’. The same goes for ‘service culture’ and ‘service climate’. Most people’s understanding of culture, and service culture, tends to be ‘high-level’, abstract and more focused upon overarching shared values. The related concepts of ‘organisational climate’ and the ‘service climate’ address the parts or aspects of culture that are more immediately evident to employees. For example, service managers might try to engender an innovation climate, a kindness climate or a safety climate. In fact, many different climates can and do exist within service organisations.

As was the case for service culture, it is not as if the service climate is any different from the general climate of the organisation, but rather focuses upon a limited subset of attention areas that support customer service, customer value, service quality and so on. Figure 9.2 summarises the overlapping nature of organisational culture and climate. The culture of a service is essentially

Figure 9.2 Organisational culture and organisational climate

an abstract, although pervasive, idea that may be difficult to measure as such, but is relatively stable over time and therefore difficult to change. The climate (or more accurately climates) within a service are more specific, can apply to one local or single aspect of organisational life, can be sensed relatively immediately and can change quickly depending on events. Climate is somewhat easier to operationalise than culture, but they are not completely different phenomena.

An organisation's culture can affect how it reacts to events that can change its climate. But its culture, over time, may be changed by the accumulation of changes in climate. For example, a hotel may have, over many years, developed a service culture that genuinely places intelligent and caring customer service at the centre of all it does. All employees have embraced this priority and have developed practices that reinforce it. However, currently the reception staff are struggling with a new IT system for recording and retrieving customer preferences. This is causing frustration, not only for reception staff, but also for housekeeping staff who service guests' rooms. The hotel's service culture may be one of dedicated customer care, but the current service climate in much of the hotel is one of extreme annoyance at the faulty technology. However, the overwhelming culture of customer care minimises the effects of the technology failure on customers.

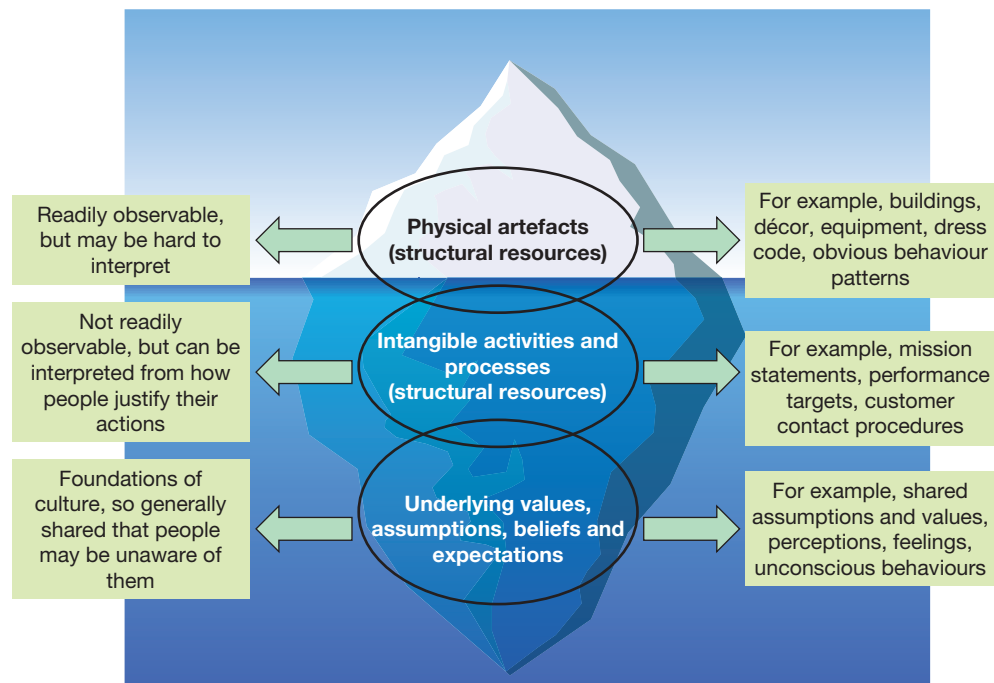
The iceberg metaphor

One way of thinking about organisational culture is by using the metaphor of an iceberg. Edgar Schein, the organisational development academic, first used this idea to explain the nature of culture.⁴ The majority of an iceberg's mass, and its ability to cause trouble, is under the surface of the ocean. So it is, Schein argues, with culture. In the 'culture iceberg', the physical artefacts are the outward or surface manifestation of culture. These are things such as premises, the physical elements of a service environment (think servicescapes from Chapters 7 and 11), office chairs, computer equipment, staff uniforms and so on. The physical artefacts are relatively 'dumb' but do express aspects of culture, both to customers and service workers. If you think about Chapter 7 and the discussion on service experience design, the choice of physical artefacts can be designed or engineered to convey a particular message to customers.

The middle layer of the iceberg represents the intangible beliefs and values of the service organisation. Schein argued that the intangibles often cascade from the beliefs and values of the organisation's founder or leader and are passed on to managers and workers through formal instruments such as mission statements or strategy documents, but also by, for example, performance management systems – particularly reward systems. One way of thinking about the top two layers of

Figure 9.3 Schein's iceberg metaphor of culture

Source: Based on Schein, E.H. (1985) *Organisational Culture and Leadership*, Jossey-Bass, San Francisco, CA.



Schein's iceberg is to think about physical artefacts as what operations management theory calls 'structure', while the intangible activities and routines are the operation's 'infrastructure'. Structural issues primarily influence the physical arrangement and configuration of the operation's resources. Infrastructural issues influence the activities that take place within the operation's structure. This distinction in operations strategy has been compared to that between 'hardware' and 'software' in a computer system.

The lowest levels of the iceberg, in the depths of the ocean, are the underlying values, assumptions, beliefs and expectations of the organisation and these often correspond with the values of the founder or leader. Schein argues that the deepest level of his iceberg is where one finds the most fervently held values and assumptions and that these are 'the essence of culture'. Changing these underlying values, assumptions, beliefs and expectations is particularly difficult. Moreover, even if they can be changed, one risks anxiety and defensive behaviours on the part of those being required to change. Schein argues also that the physical artefacts of the service, as well as the intangible activities and routines, cannot be adequately explained unless one delves down into the basic assumptions at the base of the iceberg. Organisations are not conscious identities, but it is relevant to talk about an unconscious domain at the base of the iceberg and, as such, the underlying unconscious values and beliefs of the organisation must be surfaced and exposed before they can be changed. The iceberg metaphor is illustrated in Figure 9.3.

9.2 What is service culture?

First, it is legitimate to ask whether the idea of 'organisational' culture can apply to a single function, such as the operations function. And the answer is yes, it can. If not, there would not be such interest in overcoming those cultural differences between different functions that can lead to what is sometimes called 'cultural fragmentation'. And while there may well be elements of an

organisation's culture that are shared across all parts of the enterprise, different functions are very likely to have their own subcultures. The question here is what is different about service culture? Service culture addresses a *subset* of the generic issues discussed in both literature and practice on organisational culture. Service culture addresses the basic assumptions and values that govern an organisation but is focused on the assumptions and values related to customer *service*.

An organisation with a high level of service culture is one in which customers (both external and internal) are central to the way the organisation does its business: an attention to customers and their needs infuses the whole organisation. Moreover, all staff, both front- and back-office, are aware of the critical importance of customer service. In fact, service culture is one that prioritises customer service in all goals, decisions and actions, and in all its operations processes. Service culture addresses shared perceptions in the service organisation. Service culture also addresses shared values about what is acceptable and about what works, as well as shared beliefs about the rationale and roots of particular value sets, and all in relation to customer service, as opposed to the organisation more generally. Service culture is also concerned with shared styles of working and relating to others.⁵

Why is service culture important?

In some ways, the answer to the question 'why is service culture important?' is obvious. If culture is pervasive, as we defined it earlier, then it can affect everything that an organisation does. The importance of culture has been recognised for many years, although the popularity of culture as a topic of interest arguably received its biggest boost with the book *In Search of Excellence* by Peters and Waterman.⁶ The authors emphasised the importance of organisational culture as what they called an 'enabler', although this may, if anything, understate its importance.

A strong service culture, where an understanding of, and an appreciation for, good service exists, and where giving good service to internal as well as ultimate, external customers is considered important by everyone, is generally thought a positive attribute for an organisation. But, specifically, what benefits does it bring? Here we categorise the benefits of how service culture affects the way in which an organisation is seen, how it affects an operation's effectiveness, how it affects the way staff feel about their jobs and how an operation learns and adapts.

Service culture influences how an organisation is seen

Organisations may have put considerable effort into shaping their brand. Yet any brand is exposed to how customers are treated at each point in a customer's experience, from initial awareness to online website experience, to exploration of a service, to ordering, to delivery of the service, to after-sales support. A clear and strong service culture shares what is seen as important at each stage of a customer's experience. It helps to ensure consistency of message in customers' perception about what the service stands for. A consistent message helps to establish the brand.

Service culture influences an operation's effectiveness

A service culture is a reflection of an organisation's core values, including what resources it acquires and how it develops them, the way business is conducted and how people interact as a team and treat each other. All of these have an impact on how well an operation creates (and co-creates) its services. The degree to which a service culture is established will also affect an operation's vision and strategy. But if an operation's culture does not match its vision and strategy, it is likely to cause problems. A strong service culture keeps an organisation's core values at the forefront of all its day-to-day operational activities. Otherwise, inconsistencies between espoused culture and reality can grow. For example, the CEO of one financial service firm issued a statement saying, 'our entire culture is centred on doing what is right for our customers'. Yet, in reality, the same CEO had created a culture that focused on aggressive sales targets, not customers. (The CEO was ultimately forced to resign.)

Service culture influences the way staff feel about their jobs

A service culture can transform staff into advocates (or critics) of the organisation. Most people want more than a wage and reasonable working conditions, they want to feel that what they do matters. An obvious way to achieve this is to develop a service culture that recognises, and even celebrates, excellent work from individuals and teams – one that gives a sense of accomplishment because the cultural norms are well-articulated, consistent, achievable and ethical. Moreover, a strong service culture helps to retain the best people. Staff who feel like they're part of a team with a shared attractive vision, rather than just another cog in a wheel, are more likely to stay. Not only that, but a well-thought-through and appropriate service culture assists with attracting the best recruits.

Service culture influences how an operation learns and adapts

Organisations that learn and adapt to circumstances are more likely to survive and thrive in the long term. But learning requires the ability to compare what is happening inside and outside the organisation with what *should* be happening. In other words, it needs a clear idea of how a service should be being delivered, and that is at the core of a service culture. A service culture is not just 'being nice to customers', it involves thinking seriously about how service can be improved. Service culture provides the context within which improvement takes place.

Counterpoint

The difficulty of defining *exactly* what is meant by culture can be frustrating. This has led some critics to say that culture qualifies as a 'catch-all' categorisation for the unexplainable, that culture is a 'garbage concept'. That one can put anything into the 'trash can' of culture. This view of culture as a garbage concept is reasonably common but is possibly unmerited. Possibly, the difficulty occurs because many aspects of culture are very difficult to define. In fact, many of the contemporary frameworks for understanding culture

depend on metaphor (for example, the iceberg metaphor described earlier). In the scientific study of social phenomena, metaphor is problematic; however, much of business and social science discourse is critically dependent on metaphor. Additionally, a good portion of writing on the issue of culture is rooted in approaches that derive from the arts and humanities as opposed to the sciences. Yet, just because something doesn't fit within the scientific method, does not mean that it is invalid.

Case example

Why 'Googlifying' Yahoo was not enough

When Marissa Mayer moved from Google to become Chief Executive at Yahoo, she found in Yahoo an organisation very different from the one she had left at Google. Yahoo's offices were not always full, nor were the car parks. The reason? Many employees were working (legitimately) from home. Mayer was also confronted by several issues that were less obvious. Yahoo had suffered from a high turnover of chief executives (six in just five years), with each CEO importing his or her own vision for the

company, and sometimes leadership team. Not surprisingly, the constant change in direction had resulted in uncertainty for employees. Without a consistent vision and mission, some employees had become frustrated, with some observers also detecting low staff morale. Investors also pointed out that the company had failed to exploit the two biggest growth areas on the internet – social networking and mobile – which was why Yahoo's share price had fallen.

New service development became a particularly frustrating area for employees, as teams saw their projects being suspended (by the ever-changing leadership teams), sometimes midway through the development process. In response, Yahoo hired a tier of managers to oversee new service development, but the extra layers slowed down innovation. Mayer announced that she was abolishing Yahoo's work-from-home policy. She wanted to create a new culture of innovation and collaboration at the company, and to achieve this aim employees had to report to work. Some pundits



JHVEPhoto/Shutterstock

criticised Mayer's intervention as a general challenge to the concept of remote working, and therefore a challenge to diversity and inclusiveness. They argued that a male CEO would probably have come in for a great deal more criticism.

However, some employees welcomed Mayer's interventions, pointing out that previous attempts by CEOs to improve Yahoo were completely focused on markets, and had ignored internal problems. In contrast, Mayer wanted to pay attention to fixing internal problems and improving employee motivation and morale. Taking lessons from her time at Google, Mayer introduced free food in the cafeterias,

exchanged company BlackBerrys for iPhones and instigated a Friday 'town hall' meeting, where senior executives would address questions and speak openly. Yet, when it came to changing the work-at-home policy, Mayer's approach was perceived as draconian. Many employees were vexed because they felt their productivity was diminished by having to come in to work, with all the disruption, waste of time and noise of a daily commute.

Once the most popular website in the USA, Yahoo slowly declined in popularity and, five years after Marissa Mayer's arrival, most of its internet business was sold to Verizon Communications.⁷

9.3 Culture frameworks, typologies and taxonomies

In order to 'unpack' the meaning of culture, several typologies or frameworks have been developed. At one level, the typologies and frameworks are a taxonomy of the hidden aspects of service businesses. However, some frameworks and typologies go beyond a simple descriptive or 'categorisation' role and can also be used in the practical analysis of organisational culture. Of the many typologies and frameworks, here we explain three of them:

- The Deal and Kennedy model.
- The cultural web.
- The Competing Values Framework.

These three are selected because of their relevance to, and suitability for, diagnosing and ultimately changing *service* culture. We will explore these culture frameworks and, where possible, will show how they can be used to understand service culture and possibly diagnose those organisational problems in services that are rooted in culture. We will also show how the frameworks can be used to think about and effect culture change.

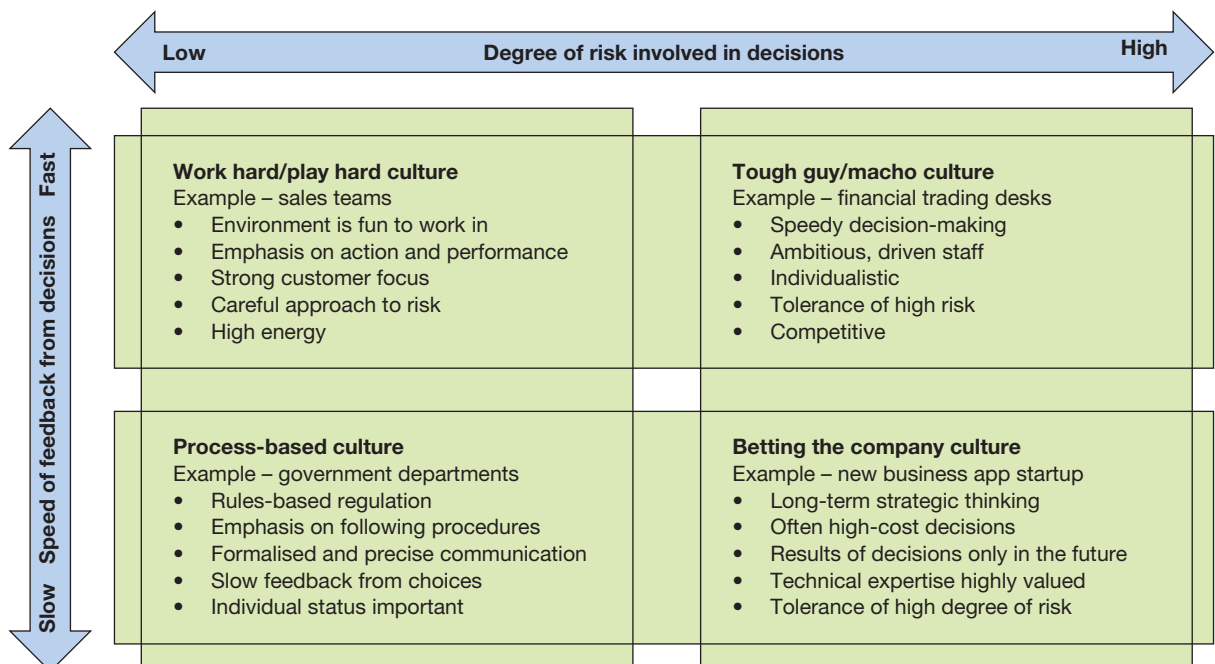
The Deal and Kennedy model

An early model that provides a quick, initial categorisation of culture was that developed by Deal and Kennedy in the 1980s.⁸ Here we summarise their model in a four-box framework, as shown in Figure 9.4. They argued that an organisation's culture is informed by its environment, in particular two aspects: the degree of risk in the work environment, and the speed of feedback from customers. This latter characteristic of the model makes it especially relevant in understanding services where feedback from customers, if not immediate, is far more rapid than it is in the world of goods manufacture. More to the point, feedback from customers is often received directly, and within the service process by service staff.

Deal and Kennedy further argued that it was particularly important to match an organisation's culture with its environment. These ideas are best illustrated by looking at mismatches. Consider, for example, the world of the day trader in financial services. A day trader works in a frenetic and stressful service environment, trading various financial instruments such as stocks, options, futures, derivatives and currencies. Success for the day trader is critically dependent upon quick decision making, risk taking and individual and aggressive competition. However, the day trader works in an environment that is critically underpinned by support services (operations managers and staff) who work in a relatively bureaucratic environment. For them, there are clear rules and, indeed, statutory requirements for transparency and compliance. Precision and conformance to process regulations are important success factors. The day traders and operations managers have different roles, but both groups work for the same service provider. However, they sit at opposite quadrants of the framework in Figure 9.4. The implication is that there is considerable potential for 'culture clashes', and both camps have to be managed very carefully.

Having two different cultures 'under one roof' is not unusual. Consider, for example, the military aerospace services (Air Forces), in which aircrew (tough guy/macho) are critically dependent upon support from engineering and logistics staff (process culture). Another example of a mismatch

Figure 9.4 The Deal and Kennedy framework



under one roof, with consequent potential for clashes, is the ‘talent’ in TV news presenters versus the support teams of videographers, editors and so on.

Looking at the other two quadrants of the framework, examples of the work hard/play hard culture in the service sector would be retail sales service environments, car sales, telemarketing and so on. The response from customers in such environments is almost immediate. Risk is relatively low because there is a steady stream of customers coming through the real – or virtual – door.

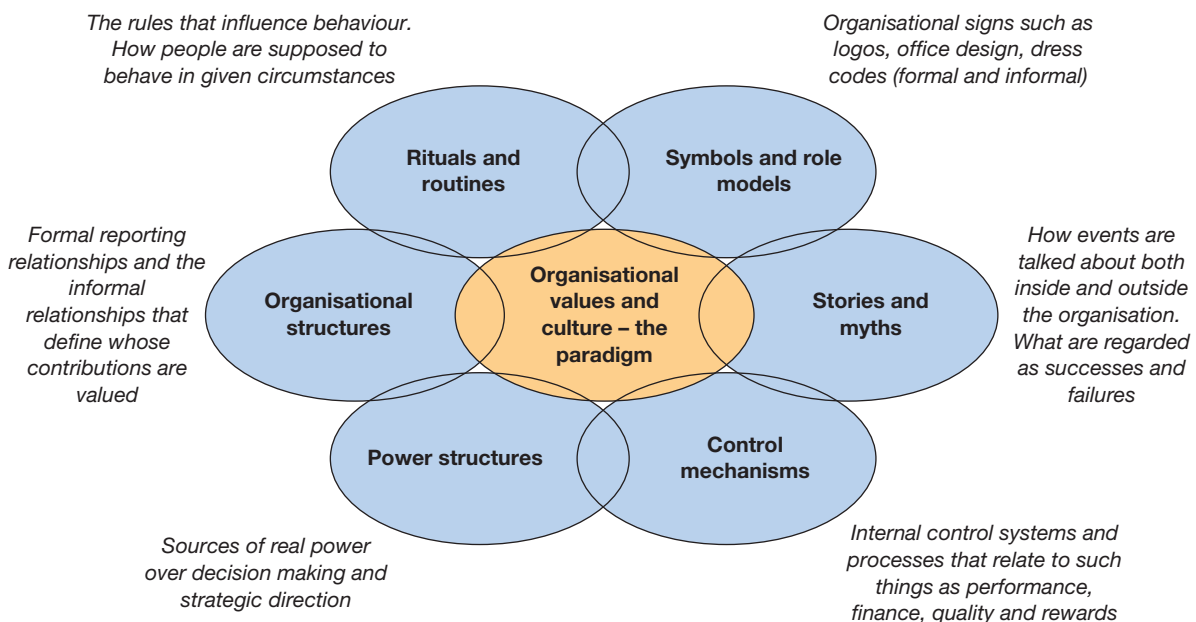
Lastly, in the bottom right of the framework, is the ‘bet your company’ culture. Most examples used to illustrate this quadrant relate to goods production environments, but one could argue that, for example, the world of ‘software-as-a-service’ fits into the ‘bet your company’ quadrant. Consider the very long-term commitments to developing enterprise software. The company that was developing, for example, performance management software might not know for many years whether the strategic choices about their platform and offering were good or bad. Because of the lack of immediate feedback, employees, especially senior developers, are driven to focus more on how they do things – *how* they develop software rather than what is created. The strength of the Deal and Kennedy framework is its explanatory power and also its practical utility in highlighting the potential for cultural clashes.

The cultural web

The cultural web was first proposed by Professor Gerry Johnson⁹ and is a powerful tool for enabling conversations about culture. In this section, we describe the components of the cultural web and outline the process for using it to understand and begin to influence service culture. Before we start, however, a health warning about the use of the cultural web. When managers and staff have an opportunity to talk about their organisation, there is a strong tendency for them to first talk about the negative aspects of their culture. It’s important to allow time for people to work through this potential negativity before moving on to appreciate the things that work. Note, also, that there are several versions of the cultural web. We are using the version shown in Figure 9.5; we will work anticlockwise around the cultural web elements.

Figure 9.5 The cultural web

Source: Johnson, G. (1992) ‘Managing strategic change – strategy, culture and action’, *Long Range Planning*, 25 (1), 28–36.



Organisational values and culture

At the core of the model, the ‘organisational values and culture’ paradigm is ‘the way we look at *our* world’. The emphasis on ‘our’ is significant. Organisations are often reluctant to make significant changes to what they do, because change is rarely about ‘what we do’ alone. Change is also about ‘who we are’. The inertia associated with inevitable change in identity is one of the factors that makes cultural change so difficult. The organisation’s paradigm encompasses a number of assumptions about the organisation, including practical issues such as sector fit, markets and the nature of the service offering, as well as less tangible issues such as attitudes and customer perceptions:

- What sector is our organisation part of? For example, are we in retail, financial services or perhaps the charitable sector? A reconceptualisation here can provide new ways of looking at business problems and thus, potentially, significant competitive advantage.
- Who are our main customers or clients? Multinational corporates, small businesses or individual customers? How is this customer base changing?
- What do we provide for our customers? There is a key link here to the idea of ‘outcomes’ as we discussed in the service concept chapter (Chapter 4). What is the customer buying, as opposed to what is the customer paying for? For example, the home improvement store provides opportunities for a better lifestyle rather than simply paint and power tools. The university management degree is about creating more effective leaders (and a better career) as opposed to just better understanding of management theories.
- What do we say about ourselves when we compare ourselves to our competitors? Are we more innovative, risk averse (safe) or customer responsive?
- What are some of the less positive aspects of our organisation? What negative things might people outside of our organisation say about us? Are we inflexible, are we only interested in large, profitable customers, are we arrogant?

Organisations may attempt to launch a new set of values, often significantly different from the values that have been espoused in the past. However, values can take some time to ‘propagate’ through the organisation and become internalised as new behaviours. It is not unusual to find groups of employees expressing frustration that the new values are not being implemented or lived by senior managers as consistently as employees would like, or vice versa. Therefore, conversations around the ‘values’ aspect of the cultural web can be particularly useful, not least in anticipating and/or mitigating the impact of any ‘value mismatch’.

Service operations managers and employees need to recognise and mitigate any inconsistencies between their service concept(s) and the values paradigm inherent in their culture. They also need to understand that a significant change in values may take a considerable amount of time to be consistently delivered. For example, a group of managers from an organisation that operated a chain of Italian-themed restaurants were considering their organisational values and culture. In their discussion, they were shocked when they realised that there was no mention of service excellence in their description of their paradigm. This lack was all the more surprising because a great deal of company marketing material emphasised service and service excellence. There was no doubt that the managers had worked hard on their service supply chain and on refining the food offer, but in some respects took customer service for granted. It was not until they were forced to write down their service concept, that they understood the mismatch between their service concept and their cultural paradigm.

Organisational structures

The ‘organisational structures’ element of the cultural web explores the way that the organisation allocates responsibility for managing its resources and processes. ‘Organisational structures’ concerns the way that the organisation ‘works’, and how it presents itself to the outside world. (This may not always reflect the reality, as we will explore in the next section on power structures.) In discussing organisational structures, it is useful to go beyond a description of the structure to a

discussion of the implications of that structure. So, for example, an organisation that is hierarchical, has several levels of management and is regionally organised may be efficient, but may also be very slow to make consistent changes.

The implications of an organisational structure can be unearthed by questions such as:

- Is the structure hierarchical, with many levels, or is it relatively flat?
- Is the structure organised geographically, by service type, or some combination of the two?
- Is the structure managed by functions (possibly siloed) or by processes?
- Is the structure bureaucratic or flexible?
- Is the structure team-based or centred around individuals?

These questions are not meant to be judgemental, and it is important to recognise that there is rarely one 'right way' to organise. However, choices about organisational structure inevitably involve trade-offs, and it is useful to recognise such so they can be accommodated. For example, an organisation that is functionally organised may be extremely technically competent but perhaps not as responsive to customers as one that is organised around markets for different service types.

Another useful question to ask about organisational structure is whether the service organisation is centralised or decentralised. Some service organisations pride themselves on having a very lean 'centre' so that operating units may be more flexible. By contrast, centralisation of functions may result in improved consistency and efficiency in some areas, but potentially diminishes flexibility and customer ownership in operating units.

With the advent of virtual organisations, and especially virtual teamworking, many challenges relating to organisational structures have become easier to manage. For example, the large global consultancy firms are able to offer a local presence but also immediate access to subject matter experts through their knowledge management systems. Clearly, the supply network perspective that we will discuss in Chapter 10 will also have an impact on service organisations' ability to manage challenges associated with structure choice.

Power structures

Conversations about power structures should explore the way that decisions are made, implemented or blocked. Sometimes, managers can be hesitant to be explicit about 'power' and may prefer to label this section as 'decision-making processes' rather than power structures. Whatever it is called, this element of the cultural web overlaps to some extent with the 'organisational structures' element. For example, the CEO and the senior leadership team will naturally have a lot of power as a consequence of their position in the organisational structure. However, discussions about power structures provide an opportunity to identify less obvious sources of power, such as expertise or reputation within the organisation. Clearly, judgements about expert or reputational power can be quite subjective. However, the value of systematically discussing and developing the cultural web is that it may provide an opportunity to expose, clarify and sometimes challenge internal misconceptions about power.

When considering culture change, it is important to recognise that negative/countervailing power may be held by employees who are relatively junior in the organisation. For example, in all organisations there are 'influencers' who, though outside the formal hierarchy, have a significant social network and whose opinion will be consulted by a range of people. Recognising and garnering the support of such influencers can be a crucial underpinning of successful culture change.

Similarly, misconceptions about power, influence and worth can diminish service performance. Many service organisations have suffered poor delivery performance because front-line employees perceived that they were relatively unimportant in the service delivery system. So, an important role for service operations managers is ensuring that front-line employees have pride in their work and recognise both its contribution and the real power that they have in underpinning effective service delivery.

Control mechanisms

Control mechanisms provide direction for the service organisation as well understanding of current performance. A treatment of performance management is provided in Chapter 12. For now, typical control mechanisms use measures such as:

- financial targets and budgets;
- sales targets;
- production schedules;
- procurement systems;
- key performance indicators (KPIs);
- decision-making processes and sign-off meetings;
- financial sign-off levels; and
- labour allocation processes.

In some respects, we once again have an overlap among elements of the cultural web. That which is controlled and managed is usually that which is important to the organisation. Often, an easy way into the true intentions of the service organisation is to look at the measures and targets that are managed and controlled most assertively. For example, many organisations will stress service quality, staff well-being, customer retention and so on as being important metrics but, in reality, a cursory examination of the management control mechanism might reveal that sales targets or volumes are measured, and are therefore what matters.

Another example of a control mechanism that can be revealing about a service organisation's culture is the limit to discretionary spend by service staff. Many service organisations 'talk a big game' about empowering staff, but at the same time require senior management sign-off for any expenditure to remedy a customer's problems. An old, but powerful story about the rise of the first successful low-cost airline, Southwest Airlines, was that while staff were clearly encouraged to interact with customers in an innovative way, the first CEO, Herb Kelleher, was in fact the only person authorised to sign-off expenditure above \$1,000.¹⁰

Stories and myths

The 'stories and myths' that circulate in service organisations can be positive – for example, 'managers will support good ideas' or 'it's a great place to work'. However, sometimes the stories can be more negative, such as 'trying to change things is foolish, anyone trying it will take the blame and be fired'. By their nature, 'stories and myths' can sometimes be very old. It is useful to determine whether stories relate to 'the good old days', as opposed to the stories that apply to today's reality.

An area where managers can have a positive impact on service culture is by creating new stories. The ideal venues for telling stories are the annual functions, such as staff Christmas parties or internal conferences. The stories are an opportunity to both recognise the contribution of individuals and teams, and to create exemplars of practice for the wider organisation. For example, part of a process of influencing culture might lie in creating a new set of stories linking exceptional acts of customer service to success. The famous stories, such as Federal Express taking initiative to hire a helicopter to get an essential package through, can build a culture of customer ownership.

Symbols and role models

Symbols are the physical evidence of whom or what is important in the culture. Who has a parking space or a fitted carpet in their office (or who has an office at all) become major talking points. Even in open-plan offices, the size of a person's desk, or who has a special chair, can become all important. Status symbols can be benefits such as the size or location of an office, allocated parking spaces or type of company car. Such symbols can be remarkably powerful and often difficult to remove. The relevance for customer focus may lie in how symbols become linked to service. For example, in some organisations it is not unusual to find that sales people have high-specification cars, whereas service personnel have utility vehicles such as vans and pick-up trucks. This vehicle

allocation may make operational sense in some services, but can also send a message to service personnel that sales is more important than service. The irony is that in many organisations, revenue comes more from ongoing service contracts than it does from sales.

Role models are leaders from the present day or from the past who are perceived to have shaped the culture of the organisation. Richard Branson of the Virgin Group helps to promote a culture of fun; Herb Kelleher of Southwest Airlines embodied low-cost innovation; Jeff Bezos, Amazon's founder and CEO, represents breakthrough efficiency and speed of delivery; and Isadore Sharp of the Four Seasons Hotels group set the foundations of its service excellence.

Another aspect of the 'symbols and role models' element can be the language an organisation chooses to use. For example, an airline that refers to economy class passengers as 'self-loading cargo' will struggle to provide excellent service. But language does not have to be deliberately derogatory to be revealing. For example, patients in some parts of the UK National Health Service, when discharged from hospital are not referred to as 'patients' (still less, 'customers'), but rather as 'finished consultant episodes' (FCEs). Similarly, some claim that the abbreviation FTE to refer to a full-time employee, which is almost ubiquitous, can result in depersonalisation.

Rituals and routines

Routines and rituals describe the informal systems of the organisation. The systems will probably not appear in any procedures manual, but are often a large and significant element of the organisation's culture. For example, an IT project management group celebrates the successful conclusion of each project with cakes provided by the management. Informal routines could affect decision making. For example, a common routine in some organisations is that before a final decision is made by a committee, a number of informal negotiations have to occur. These negotiations are sometimes called 'corridor conversations' (or '*nemawashi*', which in Japanese means an informal process of quietly laying the foundation for some proposed change or project). The routine means that the decision has effectively been made before the committee meets, and the committee's role is merely to officially ratify the decision.

One CEO of a major supermarket chain made regular visits to the stores. In each visit he would pay particular attention to ensuring that displays on the shelves were to a high standard, sending the message that attention to detail was critical. However, this approach can backfire. A senior officer in the UK Defence Staff believed it was particularly important for any facility to have exceptionally clean toilets because it indicated that cleanliness and attention to detail mattered. Whenever he carried out a unit inspection, he would unfailingly wander into several toilets to take a look around. But an unintended consequence of his behaviour and routine was the creation of an attitude that '... as long as the toilets are okay, we will be okay'.

Some organisations have the routine of always recruiting senior appointments from outside, in order to bring a new perspective. Others always promote from within. Routines and rituals such as these can be positive as they reinforce the social norms of the service organisation. Others provide ways of getting around processes that may be perceived as being too rigid or too slow. Often one can hear the comment that, rather than following the official process, they will approach 'that special someone' who 'can get it done'.

Certain aspects of routine and ritual may be less positive. For example, some organisations have 'standing meetings', which take place even when there is nothing worth discussing. The meeting calendar was probably set up with noble intent, to at least get meeting dates in the diary. However, nobody remembered to cancel. Another meeting ritual that can be damaging in terms of its messaging is when, for status reasons, the most senior manager arrives late. The unintended message is that it's okay to waste time. Another problematic pair of rituals is when service organisations fail to celebrate success, seeing success as 'what is expected', but they carry out a major hunt for a scapegoat when something has gone wrong.

Many routines and rituals are developed – or evolve – to protect employees. For example, hospital staff may depersonalise and avoid emotional connection with patients by talking about them, not to them, even though the patient is present and conscious. This approach may be seen as 'professional', but has mostly negative consequences for patients' well-being. Managers who are looking to reduce costs must pay attention to the positive informal systems, as by eliminating them they may lose both tacit knowledge and critical aspects of a supportive culture.

Worked example

Using the cultural web to think about culture change

Table 9.1 shows a cultural web analysis for a financial services firm. The firm's individual managers were organised into several small groups, but the nature of the firm's business meant that getting everyone together for large group discussions was difficult. However, at one meeting when most managers were present, a discussion on the firm's culture was held using the cultural web because of the relative simplicity and efficiency of the model.

What they did

The process adopted in the analysis was as follows:

1. Facilitate small group discussions about the six outer rings of the cultural web, noting what helps and what hinders.
2. From the discussion of the outer rings, consider the implications in terms of the company's values and paradigm. Steps 1 and 2 create the existing, or 'as is', cultural web.

Table 9.1 A cultural web analysis for a financial services firm

	Existing cultural web	Desired cultural web
Paradigm	Provider of general insurance and pensions Dealing through brokers, not the general public Profitable because of good investment management Generally risk averse A 'nice' company	To be seen as providing freedom from worry for customers To be profitable through acting with integrity, providing innovative financial products to meet the changing needs of customers, and delivering them through excellent service
Organisational structures	Regionally organised with branches and sub-branches Hierarchical, with several management grades Insurance and pensions are separate organisations	Organised in teams around customer delivery processes Providing total solutions for customers in 'one-stop shops' Service delivered direct to consumers
Power structures	Executive management committee Managers who came from Company A prior to the recent merger Actuaries	Executive management committee More influence for those in customer-facing roles
Control mechanisms	Company procedures manual Financial services legislation Risk analysis Sales incentives	Long-term customer retention and profitability Emphasis on developing competence of employees Team incentives
Rituals and routines	Management dinners Senior management visits to branches Promotion on seniority Poor performers 'promoted' to 'special projects'	Recognition of excellent performance in both sales and service Promotion on merit
Symbols and role models	Who has a personal assistant Quality of company car Latest laptop/organiser/IT software	Certificates for achievement
Stories and myths	Amount spent on directors' dining room How good Christmas parties were years ago Senior manager fired for fraud	Celebrations of actions 'beyond the call of duty' Generation of new business through customer referrals

3. Facilitate a full group discussion of the desired changes to the values and paradigm. This kind of full group discussion may take some time, and so space and time to focus needs to be provided. Diaries of a leadership team have to be consulted in good time to provide the ideal context.
4. Further small group discussions can then take place to look at which aspects of the six outer rings need to be changed to address this desired future cultural web. Steps 3 and 4 create the 'to be' cultural web.
5. Develop action plans. It's worth recognising that there may be some quick wins in changing the emphasis on one or two key performance indicators or creating new stories.

A final point to note is that although there may be an overall culture in the organisation, there will almost certainly be subcultures and climates in different parts of the organisation that relate to different roles, regions, functional specialisations and so on. The sub-culture of a finance team would usually be quite different to that of a customer service team, for example.

The Competing Values Framework

The third cultural taxonomy we shall explore here, is Quinn and Rohrbaugh's Competing Values Framework.¹¹ This framework again divides organisational culture into four categories, as with the Deal and Kennedy taxonomy. Culture is first mapped according to the direction and extent of focus, whether inward, towards the service operation, or outward towards customers. Second, it is mapped in terms of the extent to which the operation emphasises stability and control, or flexibility and discretion. Both dimensions are particularly relevant for service operations and the understanding of service culture. For example, referring back to the Yahoo case example, one could argue that top management culture at Yahoo was externally focused, whereas the overwhelming body of the workforce was internally focused. Similarly, employees at Yahoo were appreciative of, and engaged in, activities that required flexibility and discretion, whereas the executive was more interested in stability and control. A culture clash was perhaps inevitable.

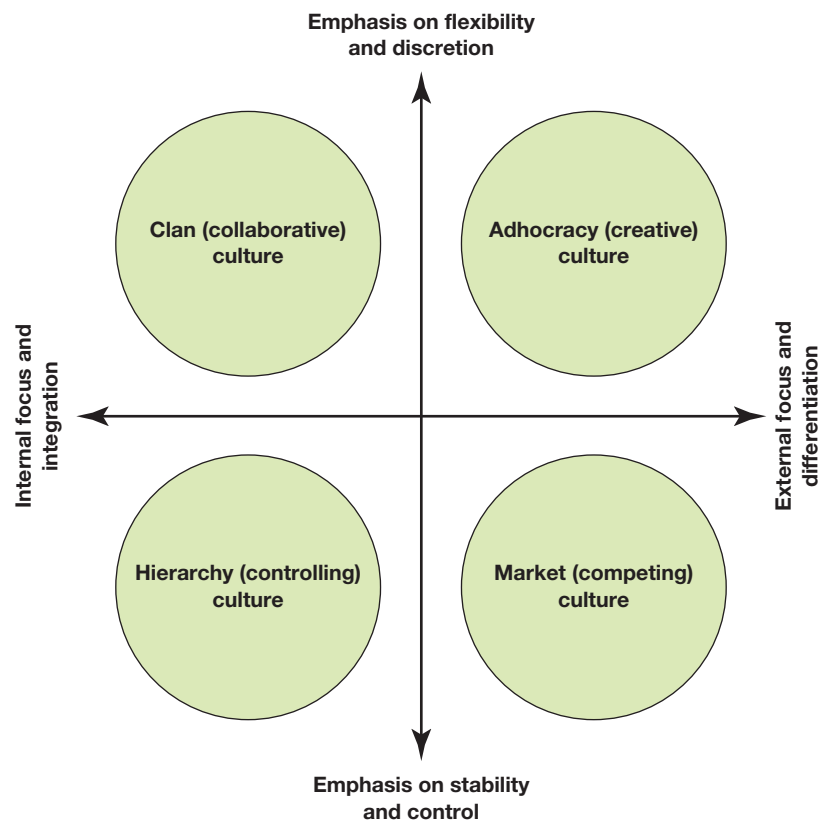
Quinn and Rohrbaugh argued that the four quadrants of the matrix, shown in Figure 9.6, represent cultural archetypes, and that each archetype is associated with a dominant set of criteria or 'core values' that inform decision making.

The clan (collaborate) culture

The clan culture is similar to a 'family'-type organisation. Shared values and goals, cohesion, a participative nature and a sense of 'group identity' permeate clan-type organisations. The clan organisation could be described as seeming more like an extended family than an economic entity. A 'service' organisation that perfectly fits the bill would be a crime family such as the Sopranos, as depicted in the popular HBO TV series. A more realistic example of a clan-type culture is Pixar, the successful animation studio (now part of the Disney Corporation). Pixar is renowned for hiring creative talent but, critically, for not allowing creatives to work in isolation. Instead, the organisation encourages collaboration and learning. Pixar is seen by many as the most successful animation studio in the world.

The adhocracy (create) culture

Arguably the most contemporaneous culture archetype is the adhocracy or 'create' culture. In some ways, the create culture is a response to the turbulence and dynamism of the early twenty-first century. Service and product innovation is extremely rapid, especially since the advent of the internet. The prevailing assumptions that would seem to inform behaviour in the create culture are innovation, risk taking, entrepreneurship and creativity. The word 'adhocracy' comes from ad hoc, or

Figure 9.6 The Competing Values Framework

Case example

Weta Workshops' clan culture

Another 'clan culture' service organisation, which in some respects is modelled on Pixar, is Weta Workshops of New Zealand. Weta is famous for groundbreaking work on movies such as *The Lord of the Rings* trilogy, *Ghost in the Shell* and *Mortal Engines*. Weta's CEO, Richard Taylor, is open about how he and his wife Tania run his business like a family. Talent is carefully nurtured in small teams, with members being selectively rotated among teams to build-up their skills portfolio.

We've been really quite blessed with an extraordinary opportunity to work on some of the seminal films of the last 20 years and because of that got to

*work with some of the most visionary people of the last 20 years. But all that aside, it's ultimately the people that you've worked with in your work environment. Every morning I wake up after all these years just enthused to be back in the workshop. The fact that I run the workshop with my wife so that we socialise and sit together at work and that my friends and their families are so heavily involved in the workshop because they're the people we work with every day, make it just an extraordinary experience.*¹²

(Richard Taylor, quoted in *SyFyWire*)

‘temporary’ and reactive, and obviously democracy. It infers flexibility and ambiguity in terms of leadership and chains of command. A good service example of an adhocracy would be the sort of consulting firm that engages in ‘think tank’-type work or policy development. In such environments, groups of senior consultants come together on a project basis to carry out work that is of value to a paying client, but also of intellectual and developmental interest to the consultants as individuals. The consulting work is anything but routine, and is critically dependent on project teams being able to draw on a mixed portfolio of expertise and creativity. Perhaps one of the most famous examples of an adhocracy culture would be the culture of the crisis management team set up to handle the recovery of the Apollo 13 mission, where the flexible and highly responsive culture of the team at NASA devised solutions that saved the lives of astronauts in an aborted lunar landing attempt.

The hierarchy (control) culture

The ‘control’ culture archetype is not new. Max Weber, the sociologist, wrote extensively about the bureaucratic organisational form. In a bureaucracy, what counts are rules, subject focus, hierarchy, relative impersonality and accountability. In the early twentieth century, bureaucracies were extraordinarily efficient at delivering services reliably, smoothly and predictably. The bureaucracy was critically dependent on stability at the level of the environment and market served, as well as stability of resource-sets such as jobs and skills. Even as late as the 1960s, most jobs could be formally described by both their outcomes and the processes that led to those outcomes. By contrast, the changes in working life that occurred from the 1960s and on into the twenty-first-century saw the emergence of the ‘knowledge worker’. It is possible to define the outputs of the knowledge worker’s job, but the knowledge worker’s processes are often locked inside their head. However, the hierarchy or control culture is characterised by formality and structure. Rules and procedures govern behaviour and compliance is essential. The characteristics of the leader in a control culture are not necessarily creativity and dynamism but coordination and administration. It might be easy to think of the labels hierarchy, control and bureaucracy as entirely negative, but this would be a mistake. Bureaucracy can be a highly effective organisational form and, in its modern manifestation, commercially successful.

Case example

McDonald’s – the exemplar of a hierarchy or control culture

McDonald’s is the world’s leading quick-service restaurant brand. A franchisees-based business, the company enables learning and sharing across its more than 36,000 restaurants, which are, in effect, a collection of small businesses. It has also become something of an exemplar of how to develop smooth and efficient service operations. An important part of this is the control culture of the corporation. McDonald’s has a process manual for almost every process in its business. Moreover, each manual is translated into every language in which the company works. McDonald’s has videos, training courses and even its own university to supply training. Nothing is left to chance, and everything is subject to tight control. McDonald’s can take pretty much anyone and train them up, process by process,

to become an effective employee. The company’s statement on ‘Core Values and Standards of Business Conduct’ emphasises the importance of supporting and developing people with training and development opportunities. The assumption is that individual learning promotes productivity, quality and business effectiveness for McDonald’s. To facilitate individual learning, the company offers training and development opportunities through Hamburger University, internships, global mobility and leadership development programmes. For individual employees who have the ambition and motivation, development opportunities are considerable, though all happen within tight constraints and are provided and controlled by the company. Little is left to chance.

The market (compete) culture

Organisations with a market or ‘compete’ culture tend to be goal-oriented and emphasise results and the completion of the work. Some see this as a consequence of the competitive challenges of the late twentieth century. Note that the use of the word ‘market’ is not meant to relate necessarily only to external customers, but rather to the behaviour of the organisation that functions effectively as a market. Managers can be demanding, closely monitoring employee activities. There can also be significant internal mutual competition. In such organisations, there is likely to be an emphasis on success and winning, with the achievement of measurable goals seen as particularly important. The market culture is primarily managed by explicit and sometimes informal market mechanisms. The core values that inform decisions in the market-type culture are competitiveness and resource productivity. The external emphasis of the market organisation is on positioning and control. Success is defined in terms of measures such as market share and market penetration.

Using the Competing Values Framework

The Competing Values Framework is not radically different from many of the other cultural taxonomies that have been proposed. However, the model and the organisational culture assessment instrument that is built upon it is one of the most popular culture assessment and change tools currently in use. Many writers point to the emphasis on the clear process implied by the model.¹³ It is this attribute that provides the strength of the taxonomy, the culture assessment tool and the change methodology. It can be seen almost as a workbook for cultural change, and this style and relative accessibility could explain the model’s appeal.

9.4 How do national cultures vary?

A chapter on culture would be incomplete without a brief mention of the influence of national cultures on service delivery. Professor Geert Hofstede conducted a comprehensive cross-cultural study of how the values displayed in the workplace are influenced by culture, where culture is described as the collective programming of the mind, distinguishing the members of one group or category of people from others. He identified six dimensions that can be used to characterise national culture:¹⁴

Power distance. A high power distance rating would suggest that employees are relatively passive, have a liking for being directed and inhabit a culture that generally expects superiors to wield power. The corollary to this is that superiors frequently exhibit low trust of subordinates. Many Asian cultures have high power distance ratings. Low power distance rankings encourage greater mutual trust and an expectation that subordinates will be involved in decision making. The UK, some of western Europe and the USA fall into this second group.

Individualism–collectivism. Some societies particularly value the achievements of individuals, while others see it as more important to encourage the performance of the whole team. In the latter case, the emphasis is on belonging, duty and group decision making. It is sometimes expressed as the difference in people’s self-image in terms of whether they think of ‘I’ or ‘we’. In highly individualist societies, people place an emphasis on looking after themselves and their direct family. By contrast, in collectivist societies people belong to other social or work groups that take care of them in exchange for unquestioning loyalty. The UK, along with the USA, score highly on the individualist dimension, because they place a high regard on the achievements of individuals.

Masculinity–femininity. This is a category whose name some might object to, but it relates to supposed differences in decision-making style. What Hofstede called a ‘masculine’ approach to decision making is a more hard-edged, fact-based and aggressive style, with an emphasis on the acquisition of money, material possessions and ambition. Managers are encouraged to press for ever-increasing goals and objectives. By contrast, what Hofstede called ‘feminine’ decision making

involves a much greater degree of consultation, with analysis being more intuitive. Where femininity is dominant, the emphasis is on creating a more collaborative environment.

Uncertainty avoidance. This dimension explores the way that a society copes with the idea that the future can never be perfectly predicted. It evaluates the extent to which the culture encourages risk taking. Cultures with high uncertainty avoidance adopt strategies such as working long hours and enforcing strict obedience to procedures to deal with difficult conditions. Much of the Japanese and South Korean work ethic exhibits these tendencies. Low levels of uncertainty avoidance indicate a readiness to accept more risk, work outside the normal rules and embrace change. Low uncertainty avoidance encourages a more entrepreneurial spirit, with less concern for following rigid procedures.

Long-term orientation. This category is concerned with the different emphases national cultures place on the time horizons for business planning, objectives and performance. Those societies that score low on this dimension generally prefer to maintain time-honoured customs and standards. They might view change with a certain amount of suspicion. By contrast, countries with a culture that scores high are more likely to take a relatively pragmatic approach to change. They probably encourage education and other efforts to prepare for the future.

Some countries place greater emphasis on short-term performance (so-called short-termism), with financial and other rewards biased towards a period of just a few months or years.

Other countries take a much longer-term perspective, which is likely to encourage more long-term thinking. Long-term orientation is a characteristic where the contrast between China's high score and the USA's low score is marked.

Indulgence–restraint. Indulgence stands for a society that allows relatively free gratification of basic and natural human drives related to enjoying life and having fun. It can be thought of as the degree to which individuals try to control their desires and impulses. Relatively weak control over impulses is called 'Indulgence'. Strong control over their impulses is called 'Restraint'. Cultures can be described as indulgent or restrained. A high restraint score indicates a society that suppresses gratification of needs and regulates it by means of strict social norms. On this dimension, Sweden, for example, is a relatively indulgent culture, while China is restrained.

Table 9.2 shows some selected countries scored on Hofstede's six characteristics of national culture. Hofstede's work was interesting in that it challenged assumptions that all people are the same. The research clearly had implications for the implementation of global operations strategies; for example, teamwork and empowerment may not translate from one culture to another. It is necessary to point out, though, that the assumption that all people from a national culture rank high on power distance, low on uncertainty avoidance and so on, is clearly inaccurate. One hypothesis is that, at an organisational level, the company or organisational culture might be more influential,

Table 9.2 Selected countries scored using Hofstede's six characteristics of national culture

	Power distance	Individualism–collectivism	Masculinity–femininity	Uncertainty–avoidance	Long-term orientation	Indulgence–restraint
China	80	20	66	30	87	24
Netherlands	38	80	14	53	67	68
Sweden	31	71	5	29	53	78
UK	35	85	66	35	51	69
USA	40	91	62	46	26	68

Source: Data taken from Hofstede-insights.com.

Case example

Making space for national culture at Four Seasons

Four Seasons Hotels is one of the best-known chains of luxury hotels and resorts, with facilities around the world. One of the hotels' service principles is that they believe in recognising a familiar face, welcoming a new one and treating everyone they meet the way *they would want to be treated themselves*. And because Four Seasons has opened hotels across the globe, carrying out this principle means each hotel must reflect its local culture, while at the same time adhering to its high standards of excellence. Senior managers speak of being cultural chameleons. There are, of course, some global

standards such as cleanliness, 'going the extra mile' and fast response. What differs around the world is that people do it with their own style, grace and personality. In some cultures, it is necessary to add the strong local temperament. For example, an Italian concierge might have his own style and flair, while in Turkey and Egypt the guests' experience and the



RIEGER Bertrand/Hemis/Alamy Stock Photo

nature of the expected service might be very different. Recognition of this local flair enabled Four Seasons to take over the operations of many legendary hotels around the world, operating the core standards of the Four Seasons chain but not insisting on the same service and managerial approach that has been applied in other areas.

not least because the organisation's recruitment policies will tend to favour 'people like us'. Later studies clearly indicate that company culture has more influence on the behaviour of senior executives in global organisations.

When looking at national culture, one issue to be addressed is that of flexibility between the organisational values and the elements of national culture. If the organisational values are perceived to be fundamental to competitive advantage and they clash with national culture, then the service may fail.

9.5 Can culture be managed?

An important issue to consider when looking at culture change is whether cultures can be managed at all. One view is that cultures are an identity, and like any identity they have a life of their own that emerges with time and experience, and as a result cannot be managed. Initially, organisational cultures are based on the philosophy and values of the founder, which may continue for a sustained period of time. Even with the substantial growth of a firm, these values may not easily be altered. The alternative view put forward by others is that cultures can be altered and

changed and, as a consequence, managers can have the capability to shape a firm's culture. But even proponents of the latter view agree that culture change is a complex and difficult process – one that could potentially take a significant investment of time, money and energy, and where there is no guarantee of success. Even with these challenges, many organisations do want to change their firm's culture. Examples of drivers for culture change could include such needs as developing a more team-based, customer-focused, learning, cost or productive culture, or perhaps a merger of two organisations will drive change.

It can be argued that culture could be better used as an explanation of organisational behaviour, rather than prescribing such behaviour.¹⁵ However, there are others, especially management consultants who deal in 'culture change' services, who disagree with this viewpoint. They argue that changing the surface elements of culture, such as symbols, stories and ceremonies, will effect a change at the deeper levels of norms, values and beliefs. So, the assumption here is that changing behaviours results in a change of attitudes. However, individuals might publicly accept the change in cultural values and norms by way of behaviour, but inwardly disagree with these changes as individuals, and not easily change their own attitudes. A kind of 'cultural inertia' could be the result.

Challenges of culture management and change

Investigating the challenges of culture change from the perspective of people in the organisation is likely a central issue for leaders and managers. The two primary concerns for an organisation with regard to such changes are:

- *Ability*: To what degree do people have the necessary skills required in the change initiative, and if they do not currently possess these skills, what is needed in order to equip them with these skills that would impact on time and resources?
- *Willingness*: To what degree are people willing to change and to put in the necessary time, effort and commitment that is necessary? This is where resistance comes in – if and when there is resistance, how might leaders and managers address it? In this latter situation, there would be four different possibilities that leaders and managers would need to consider and handle differently, which would require planning, monitoring and adjustment. The four possibilities are:
 - People are both able and willing to make the change.
 - People are able though not willing to make the change.
 - People are willing though not able to make the change.
 - People are neither able nor willing to make the change.

Clearly, in addressing these challenges there is a crucial role for leaders in addressing the needs of employees during any attempt to change service culture. Employees will often view their leaders and managers as role models. Therefore, employees will frequently pay more attention to what leaders and managers do rather than what they say. This implies that what these role models focus on, measure and reward need to be considered. Change is often viewed as a success when a critical mass buys into and moves with the change, and leaders and managers could use those enthusiastic change adopters to influence other less-willing individuals.

A stage model for changing culture

If one accepts the possibility of changing service culture, what tools and prescription are there to guide managers' attempts? There are several stage models that attempt to give a step-by-step process for changing culture. While there is no complete agreement about exactly what the stages should be, or in what order, most models have a similar sequence of actions. We illustrate one particularly popular approach next.

Cameron and Quinn's recipe for culture change

Cameron and Quinn's recipe for culture change¹⁶ involves nine stages. These are shown in Figure 9.7.

1. Reach consensus regarding the current organisational culture.
2. Reach consensus on the preferred future organisational culture.
3. Determine what the changes will and will not mean.
4. Identify stories illustrating the desired future culture.
5. Identify a strategic action agenda.
6. Identify immediate small wins.
7. Identify leadership implications.
8. Identify metrics, measures and milestones to maintain accountability.
9. Identify a communication strategy.

Clearly, the Cameron and Quinn approach takes a process perspective. Whereas Schein emphasises the need to delve deep and engineer change at the base levels of the 'iceberg', much of Cameron and Quinn's prescription involves changing the more surface/tangible elements of culture – the presumption being that one has to start where one has a chance of actually engineering change, rather than attempting to change deep and abstract intangibles. In other words, the Cameron and Quinn approach presumes that changing surface elements of culture will eventually drag deep-rooted cultural elements into the new desired state.

The organisational culture assessment instrument

The 'organisational culture assessment instrument' (OCAI) was developed by Cameron and Quinn. It is one of the best-known methods of examining organisational culture. It focuses on stages 1 and 2 of the model illustrated in Figure 9.7 and is based on the Competing Values Framework that identifies four 'types' of culture – autocracy, clan, hierarchy and market – as shown in Figure 9.6.

Figure 9.7 The stages in Cameron and Quinn's model of cultural change

Source: Adapted from Cameron, K. (2011) *Diagnosing and Changing Organizational Culture, Third Edition: Based on the Competing Values Framework*, Jossey-Bass, Hoboken, NJ.

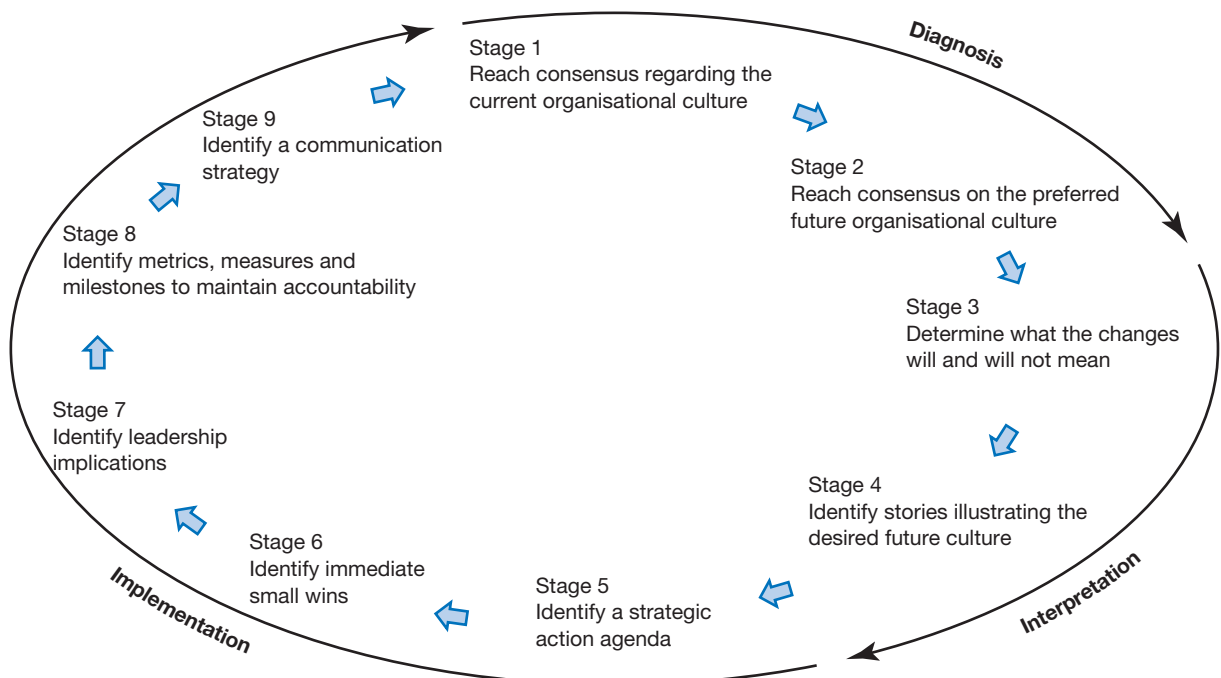
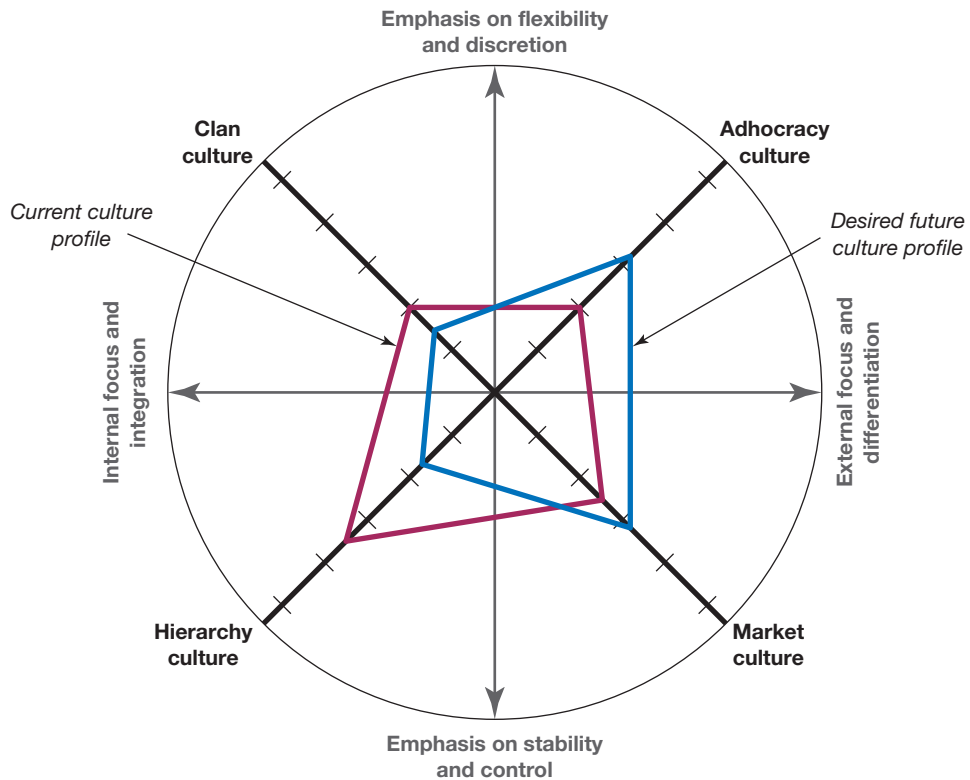


Figure 9.8 Using the organisational culture assessment instrument (OCAI) based on the Competing Values Framework to identify current and future culture profiles



These four ‘types’ characterise the basic values according to which an organisation can be assessed. The balance between each quadrant signifies the basic orientation and values of an organisation’s culture. The OCAI is a method that can be used to diagnose the dominant cultural elements of an organisation. The method provides guidance on how managers and staff can help create a profile of the current organisational culture and the desired future culture.

The OCAI uses templates that require respondents to distribute 100 points among a series of four statements to state their view of the extent that each statement characterises their organisation at present. It then repeats the process to characterise what the organisation should look like in five years’ time. The scores can then be shown as profiles similar to those shown in Figure 9.8. The OCAI process is relatively simplistic but is popular, and has been applied successfully in many organisations. A major advantage of this cultural audit tool is that it is relatively easy to manage. Expert facilitation is not necessary and the basic approach can be laid out as a workbook for managers and employees.

9.6 Summary

What is organisational culture? – Organisational culture is a broad term used to describe and explain the behaviours and attitudes of people in organisations. Organisational culture also attempts to explain the meanings that the people attach to their actions. Culture deals with facets of the organisation such as values, visions, behavioural norms, language, routines, rituals, systems, symbols, beliefs and habits. Culture explains the ‘less-than-obvious’ and sometimes invisible aspects of the organisation that will often make the performance of the organisation greater than the sum of its parts. Similarly, culture can offer reasons why organisations that are replete with potential

sometimes fail to live up to that potential. One way of thinking about organisational culture is using the metaphor of an iceberg. Like an iceberg, the majority of a culture's mass, and its ability to cause trouble, is under the surface.

What is service culture? – Both literature and consulting practice on culture, and culture change, is rooted primarily in service sector organisations. This said, the generally accepted meaning of the term service culture is that it refers to assumptions, values, behavioural norms, routines and rituals, and so on, that are specifically related to customer service. An organisation with a high level of service culture is one in which customers (both external and internal) are central to the way the organisation does its business. Service culture also pays attention to styles of working and relating within service organisations.

Why is service culture important? – The net effect of the various components of culture acting together can have a significant impact on the performance of the service operation. There are many examples of organisations that seem to have the resources to deliver innovative and high-quality service efficiently and sustainably, yet do not. What is missing is service culture, and its role in underpinning service performance means that we need to take it seriously as a concept, even if we might argue about the detail of describing and evaluating it. More specifically, service culture influences how an organisation is seen by its customers, the operation's effectiveness, the way staff feel about their jobs and how an operation learns and adapts.

What frameworks can we use to describe and evaluate service culture? – Over the last 50 years, many frameworks have been developed for explaining, evaluating and categorising culture. One of the earlier categorisation models that remains relevant today is the Deal and Kennedy framework. The framework is of particular relevance to service because of its explicit consideration of feedback from customers. A more complex framework, which requires a longer conversation about culture and what it might mean to change culture, is the Johnson and Scholes cultural web. Finally, the Competing Values Framework classifies the 'components' of culture in order to reach four dominant types. These are the clan (collaborate) culture, the adhocracy (create) culture, the hierarchy (control) culture and the market (compete) culture. Typologies can also be used to classify national cultures. The best-known work is that of Geert Hofstede, who identified six dimensions that can be used to characterise national culture.

Can culture be managed? – One of the seminal writers on culture, Edgar Schein, argued that culture could indeed be managed and changed, and provided frameworks for looking at aspects of culture where change interventions might prove fruitful in modifying culture overall. Schein was also careful to point out potential countervailing forces that would consciously or unconsciously resist change intervention.

What processes or recipes can we use to change service culture? – While the cultural web and Schein frameworks have the potential to be tools for culture change, perhaps the most refined and detailed culture change process is the Cameron and Quinn culture change methodology. Cameron and Quinn's approach is relatively accessible, being workbook based, and is full of practical tools and techniques that managers can apply directly themselves, or with the support of expert facilitators. The tool is underpinned, in turn, by Cameron and Quinn's OCAI tool, which even includes numerical scaling to attempt a degree of quantifying of culture elements.

Discussion questions and exercises



1. Reread the case example on Yahoo in this chapter. What was/were Mayer's mistake(s)?
2. EPC is a network of social policy researchers, consultants and lobbyists. The company provides consulting services to government and the voluntary sector that are, of necessity, low cost. EPC

forgoes a percentage of typical consulting fees in exchange for research access, as well as access to decision makers in local and national government and the European Union. The company has just 16 full-time employees, but a network of 170 part-time consultants drawn from academia and

existing consultancies, as well as senior practitioners in social care, housing, local government and the voluntary sector. EPC was formed by a small group of academics from universities in France, Belgium, Germany and the UK. Today, the company draws on consulting and research talent from every country in the European Union. In an industry that is often characterised by 'cookie-cutter' approaches, EPC takes the bespoke nature of its services seriously.

We don't do 'template' consulting projects. We build on our independence and experience to ensure that all research, surveys, analysis, modelling, consultations, lobbying and consultancy is designed specifically to meet individual client requirements,

says Marco Nasir, EPC's MD.

We bring a vast range of experience held by individuals and existing consultancies together under one cooperative roof. By combining our access, professional expertise and experience in different combinations for different projects, we can deliver value, without the overhead demanded by traditional consultancies. Everything we do is a direct response to the individual client's specification. We

deliver high-quality services efficiently, flexibly and at low cost. Our collective approach lets us do this.

(Sophie Maddox, Chief Executive)

Using the Competing Values Framework, what type of culture does EPC have?

3. Construct a cultural web for your university/college course. Which elements of the web help or hinder service delivery?
4. Which elements of the cultural web can operations managers influence easily, and which might be more challenging? Interview a service operations manager and ask how they can influence their organisation's culture in order to provide better service.
5. Evaluate an organisation's website or annual report and assess the 'language set' in use. Also try to identify words and phrases that you would expect to see, but which are absent. After researching the language set, what can you say about the organisation's paradigm and values?
6. Do you understand what are the principal underlying assumptions and values of your organisation? To what extent do these assumptions and values support your service concept? Where there are mismatches, how might you engineer a reparative change to these aspects of culture?

Case exercise

Modularity, AI and culture change at Dexan Consulting

This case was prepared with the kind assistance of Simon Pridgeon, The Curve Group

Dexan Consulting was an HR outsourcing company based in Dublin. The company employed 90 staff who served client organisations such as Apple, Bank of Ireland, Sandisk, Experian and Google. Dexan's services included recruitment process outsourcing, human resources outsourcing, recruitment on demand and HR on demand. The company's clients were mainly in the technology and financial services sectors. Dexan was founded 14 years ago and the two founders were actively involved in the business, with one of them currently as CEO. Alongside the founders, the executive board consisted of three divisional MDs, the group sales director, finance director and two other operational board members.

The recruitment and HR services sectors were extremely competitive. There were many service providers, and also many options available to customers. Increasingly technology-focused entrants

provided low-cost data-led services, making extensive use of artificial intelligence (AI) and automation, but there were also many traditional small and large consultancy businesses providing specialist/bespoke services.

Two important factors in winning and retaining business were client trust and the quality of the client relationship more generally. The Dexan sales strategy was thus underpinned by the building and nurturing of relationships. Dexan had so far invested little in technology to support the business. The company relied on the teams within the business working hard to develop human relationships with clients and potential clients.

Mark Dillon was employed as a senior operations manager but with a specific project brief of improving efficiencies within the main service lines. One of the problems at Dexan was that the majority of

implementations were bespoke. This said, the company recognised several years earlier that there were many common elements to each service implementation, and therefore the opportunity for 'modularising' in some way. There was a need to simplify, reduce costs and create modules or 'set pieces', while also improving customer ownership of the new services.

Managed co-creation of service implementations from 'modules' was seen to be an exciting opportunity that would allow Dexan to cut costs, but avoid the 'dive for the bottom' that seemed to be in progress, led primarily by the technology and AI-based HR outsourcers. Managed co-creation, with elements of mass-customisation, seemed to be a fertile ground for maintaining and leveraging the relationship-building strengths of Dexan, but at the same time reining-in the 'free-for-all' service design practice that was proving so costly to the firm. Further, historically within Dexan there was often a reactive approach to developing new service instances, so a more structured and menu-based consideration of co-creation seemed a good area to explore.

An alternative, or possibly additional, option for Dexan would be to embrace new technology and to employ specialist AI for HR data analytics. In-house development of AI data analytics solutions was beyond the current capabilities of Dexan, however. If AI was to be adopted to improve efficiencies, it would largely involve purchase of off-the-shelf solutions or possibly involve working with an AI data analytics partner. Ready-made solutions were available for processes such as candidate screening, candidate engagement and re-engagement, offer management and on-boarding. These and other AI-based solutions could be incorporated as part of the modularisation process.

Mark and his chief executive wanted to create scalable service solutions or 'packages' that could be replicated efficiently across many customers, as this was seen as the way to drive profitability and growth. Mark thought there were many opportunities to apply the principle of co-production and involve client managers in the creation of new services. In so doing there would be benefits in several areas including greater client visibility of service modules, with consequent clarity of expectations. Mark also thought that in order to modularise, there would be a need to precisely define the nature of the offering and this would have significant benefits for quality assurance. Clearly there were risks. Of necessity, the change to the new way of working would involve a change to the culture of Dexan. Mark anticipated

several areas of tension and potential cultural resistance, which to some extent overlapped.

Customer discretion versus control

A potential challenge identified was the need for clear client decision making in order to allow co-creation. At the same time, it was obvious that there was a distinct desire within Dexan to have more control and to drive implementations internally. This desire for greater control was for commercial reasons, in terms of keeping resource use to a minimum and as planned. But also, without some level of control, it was felt it would be hard to demonstrate competence and the value of the relationship – 'expertise' and flexibility being two of the main reasons why clients chose Dexan in the first place.

The AI threat

The business press was peppered with tales of failures from naïve application of AI for HR decisions. Mark got a sense that many of the problems with AI stemmed from failure of managers to understand the causality, assumptions and complex variables that underpinned typical HR analytics algorithms. The specialist teams at Dexan had a history of being hands-on in managing many of the processes that could potentially be replaced by AI. Mark was concerned that his specialists might resent having to release decision making to AI. Mark was also pretty sure that many of his colleagues would be anxious about job losses, although he thought that job losses were unlikely because of the steady growth of the company's portfolio. But he could understand there would be natural human concerns about being replaced by machines.

Employee discretion versus control

Then there was the tension between the commercial needs of Dexan, which needed to run a profitable business, and the creative needs of the implementation teams. The Dexan staff historically responsible for design and implementation were used to and enjoyed designing a bespoke service that could evolve during implementation. Dexan had a culture that just wanted to say yes to clients. This attitude made for difficulties in creating an approach to implementations that was scaleable, because each time things were reinvented in response to client requests, and thus more time and resource was used than originally priced to win the business.

Mark thought that the overarching tension was that a more standardised AI-based approach to

implementations, or a modularised approach, either of which may allow more scaleable implementations of services, did not balance well with Dexan culturally. However, the current cost of implementations was not sustainable, and the technology-led competition was snapping at Dexan's heels. The challenge would be to move Dexan to a new configuration while still

maintaining Dexan's important operating principles and values.

Question

How would you characterise the challenges associated with change at Dexan, and how might these be overcome?

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Notes



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Part III

Delivering service

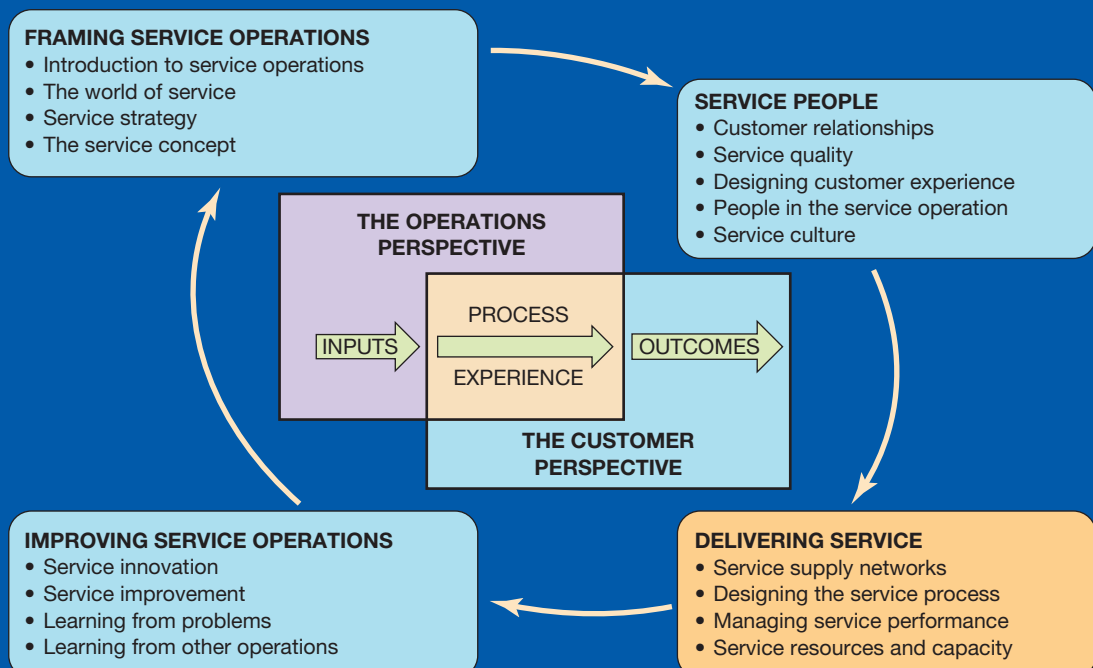


Managing service operations to deliver good service is essentially a practical business that requires the basics of operations management to be followed. Managing service delivery is concerned with designing, resourcing and running service operations.

This part consists of four chapters:

Part III Contents

- 10 Service supply networks
- 11 Designing the service process
- 12 Managing service performance
- 13 Service resources and capacity



Chapter 10

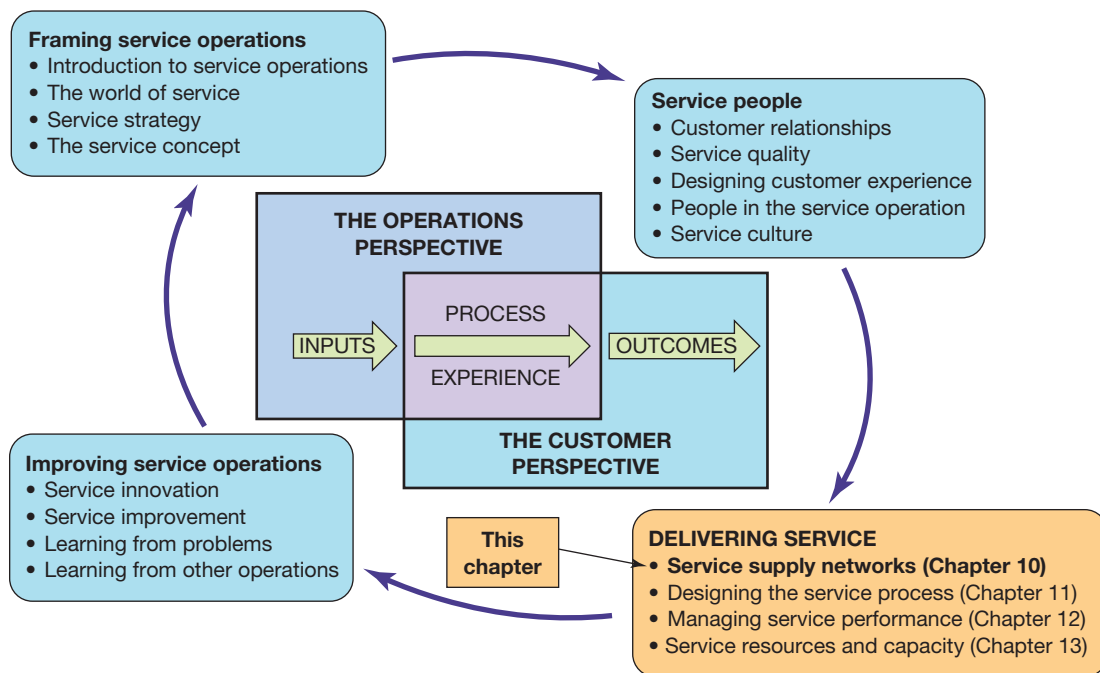
Service supply networks



This chapter is about how to harness the potential and manage supplier relationships in the context of service supply networks. In particular, the chapter looks at the ideas and models used to describe service supply networks and how they are configured by decisions such as outsourcing supply, reducing the number of suppliers, disintermediation and network complexity. It also examines some of the activities of the ongoing management of service supply networks, including partnership relationships, coping with supply network dynamics, service-level agreements and the purchasing or procurement function. Figure 10.1 shows where this topic fits in our model of service operations management.

Learning objectives

- To understand the difference between dyadic and triadic relationships
- To be able to explain the concept of internal and external supply chains and networks
- To be able to identify the decisions that describe how supply networks are structured
- To gain an appreciation of the main issues involved in the ongoing management of service supply networks

Figure 10.1 This chapter looks at the management of service supply networks

Introduction

The responsibilities of service operations managers do not stop at the boundary of the operation, or its immediate interaction with the operation's customers. The delivery of all services relies on exchanges of services, information and sometimes products between an organisation, its customers and suppliers. All operations are, directly or indirectly, part of a larger network of other operations. Some of these are customer operations, some are suppliers of service, some are competitors, others are collaborators. Some may even be all these things at different times and in different places. The shorthand term for this collection of (sometimes) interacting operations is the 'supply network'. Supply networks are an interconnection of entities, where 'entities' can be whole organisations, parts of an organisation, processes or individuals. It follows that no operation can work in isolation – it must always consider the position and role of the operation in the supply network of which it is a part. Or, put another way, the underlying performance of a service is increasingly determined by those decisions relating not only to what an organisation does by itself, but also how it manages its crucial external connections.

The activity of considering the relationships between this network of operations is sometimes (mistakenly) referred to as supply chain management. But supply *chains* are different to supply *networks*. A supply network is *all* the operations that are linked together so as to provide products and services through to end customers. Supply chain management (SCM) is the management of the relationships and flows between the 'string' (or chain) of operations within a network. In large supply networks, there can be many hundreds of supply chains of linked operations passing through a single operation. However, it was the term supply chain management that became popular during the 1980s and 1990s, and was used to describe the flow and transformation of goods from raw materials through to the end user, as well as their associated information flows.¹ Since that time, the term has become ubiquitous in most industries and the subject of much research and consultancy. Yet, until recently, almost all of this attention was devoted to supply chains and networks for manufactured goods, rather than services.

Do not think that service supply networks are unconcerned with physical manufactured goods. Service supply networks are not confined to those dealing in intangibles – definitions of service supply are more complex than that. In fact, though we will frequently point out the differences between tangible and intangible supply, networks that deliver ‘service’ can include both. In this chapter, we will explore the issues in managing supply networks and the relationships among their various elements, or nodes. We will first look at the different structures of supply networks, then describe the ways in which organisations manage these often complex networks of flows and relationships.

10.1 How can service supply networks be described?

A supply network is an arrangement of interrelated entities, such as organisations, operations or processes, and the connections between them that add value through the creation and transmission of products and/or services. The separate sequences of linkages through a network are called supply *chains*. At a simple level, describing a supply network, especially a goods-based supply network, is relatively straightforward. Suppliers serve a manufacturing company that sends its goods via a logistics company to either a retailer, in the case of B2C, or another business in the case of B2B. But that conception is too simple. In reality, supply networks can be complex, with almost all the organisations involved having, at one time or other, some kind of interaction with others.

Dyads and triads

Diagrams that try to describe supply networks can often be complicated. There can be many organisations, all interacting in different ways to produce end products and services. Because of this complexity, and to understand them better, supply network academics and professionals often choose to focus on the individual interaction between two specific operations in the network. This is called a ‘dyadic’ (simply meaning ‘two’) interaction, or relationship, and the two operations are referred to as a ‘dyad’. So, if one wanted to examine the interactions that an operation had with one of its suppliers and one of its customers, one would examine the two dyads of ‘supplier–operation’, and ‘operation–customer’ that form a chain. For many years, most discussion (and research) on supply networks was based on dyadic relationships and the study of such chains was (and is) called supply *chain* management. However, more recently, and certainly when examining service supply networks, most authorities make the point that dyads do not reflect the real essence of a supply network. Rather, they say, it is triads (meaning three interrelated operations), not dyads, that are the basic elements of a supply network.

As a simple example, Figure 10.2 illustrates the relationship between three organisations that, together, provide the retail services within an airport. The retailer has its own brand and manages its stocks and staff. It rents retail space from the airport retail organisation, which is responsible for the physical infrastructure of the retail space. The airport retail organisation also provides cleaning services for its retail customers; however, to do this, it outsources to a specialist cleaning company. So, at a simple level, the cleaning service provides service to the airport retail organisation, which in turn provides service to the retailer. This is shown as two simple dyadic relationships in Figure 10.2(a). However, the cleaning service, although having been commissioned by the airport retail organisation, will perform its service in the space rented by the retailer and have far more day-to-day contact with them. Moreover, if it fails to perform satisfactorily, it is the retailer that will suffer. So the triadic relationship in Figure 10.2(b) is a far better representation of the nature of the relationships.

As a further, and slightly more complex, example, Figure 10.3 shows a supply network for an orthopaedic clinic (orthopaedics is the surgical specialisation aimed at treating bones, muscles and joints) that specialises in joint replacement surgery. It does not show every entity in the network, nor every relationship. For example, the facilities service that cleans, maintains and looks after the

Figure 10.2(a) Relationship between three organisations described as a dyadic relationship in a simple supply chain



Figure 10.2(b) Relationship between three organisations described as a triadic relationship in a more realistic representation of the supply network

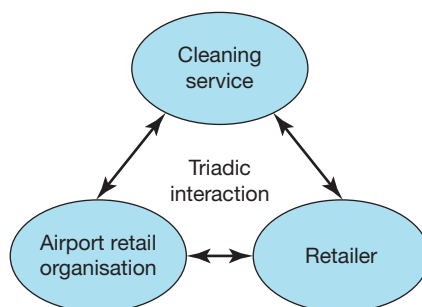
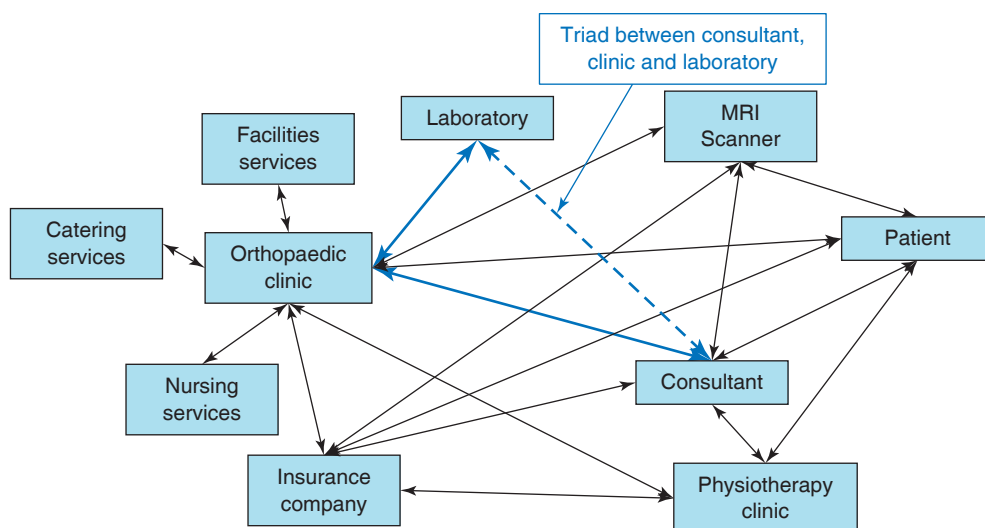


Figure 10.3 The supply network for an orthopaedic clinic



clinic's buildings is shown as having a relationship only with the clinic itself, yet, at times, other entities in the network might interact with it: the consultant could advise on the positioning of equipment, patients may complain about the cleanliness of the rooms, and so on. If every single relationship was shown, the diagram would become too complex. Generally, only the main players and relationships are shown.

Within this network one can identify both dyads and triads. For example, the consultant will arrange for the clinic to request the laboratory that it normally uses to examine and analyse a patient's blood sample. This seems to be a conventional pair of dyadic relationships – the clinic

serves the consultant and is itself served by the laboratory. Yet, sometimes, the consultant may want to interrogate the laboratory regarding the tests, or ask for more tests. The relationship between the three entities is actually better described as a triad. No matter how complex a network, it can be broken down into a collection of triadic interactions. The idea of triads is especially relevant in service supply networks. Service operations are increasingly outsourcing the delivery of some aspects of their service to specialist providers, who deal directly with customers on behalf of what is often called the focal operation. This is the operation in the network from whose perspective it is drawn. For example, the focal operation in Figure 10.3 is the orthopaedic clinic. If it was drawn from the perspective of (say) the catering service operation, it would look different with different entities and relationships emphasised. Similarly, internal services are increasingly outsourced to form internal triadic relationships. For example, if a company outsources its IT operations, it is forming a triad between whoever is purchasing the service on behalf of the company, the IT service provider and the employees who use the IT services.

Implications of triadic relationships

Thinking about supply networks as a collection of triads rather than dyads has important implications. First, it emphasises the dependence that organisations are placing on their suppliers' performance when they outsource service delivery. A supplier's service performance makes up an important part of how performance is viewed from the customers' point of view. Second, the control that the buyer of the service has over service delivery to its customer is diminished in a triadic relationship. In a conventional supply chain, with a series of dyadic relationships, there is the opportunity to intervene before the customer receives the product or service. However, products or services in triadic relationships bypass the buying organisation and go directly from provider to customer. For example, an airline buys-in its baggage-handling services, but the airline is blamed if bags are lost.

Third, and partially as a consequence of the previous point, in triadic relationships the direct link between service provider and customer can result in power gradually transferring over time from the buying organisation to the supplier that provides the service. For example, a client using a consultant may come to view the relationship with the individual consultant as being far more important than that with the consultancy that employs her. The reduced relationship between the supplying firm and the customer is known as 'bridge decay'. Fourth, it becomes increasingly difficult for the buying organisation to understand what is happening between the supplier and customer at a day-to-day level.

Finally, this closeness between supplier and customer, if it excludes the buyer, could prevent the buyer from building important knowledge. For example, suppose a specialist equipment manufacturer has outsourced the maintenance of its equipment to a specialist provider of maintenance services. The ability of the equipment manufacturer to understand how its customers are using the equipment, how the equipment was performing under various conditions, how customers would like to see the equipment improved and so on, is impaired. The equipment provider may have outsourced the cost and trouble of providing maintenance services, but it has also outsourced the benefits and learning that come from direct interaction with customers. For all these reasons, it is often suggested that suppliers of service should put effort into maintaining direct contact with customers in order to reduce the risk of 'bridge decay' occurring between the supplying firm and its customers.

The idea of the 'business ecosystem'

An idea that is highly relevant in complex supply networks is that of the 'business ecosystem'.² It is usually described as an economic community supported by a foundation of interacting organisations and individuals. The entities in the network produce goods and services of value to customers, who are themselves members of the ecosystem. Over time, the entities coevolve their capabilities and roles, and tend to align themselves with the directions set by one or more central companies. However, there are subtle differences between the concept of the supply network and that of the business ecosystem. One of the main differences is the inclusion in the idea of the ecosystem of businesses that may have little or no direct relationship with the main supply network, yet exist only

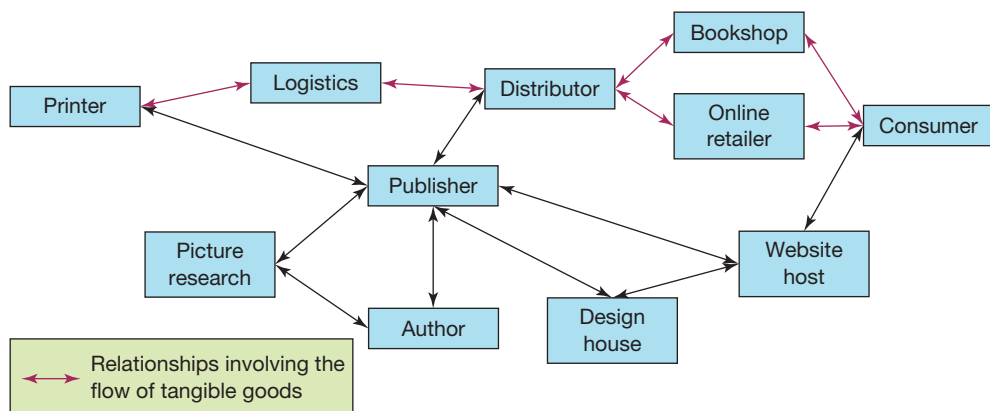
because of that network. They interact with each other, complementing or contributing significant components of value for customers. For example, the app developers that develop applications for particular operating system platforms may not be ‘suppliers’, as such, but the relationship between them and the supply network that supplies the mobile device is mutually beneficial. Building an ecosystem of developers around a core service or product can increase its value to the end customer and by doing so complement the value of the core product. Such an ecosystem of complementary offerings can also create significant barriers to entry for new competitors. Any possible competitors would have to compete against the entire ecosystem of complementary services and products.

Tangible and intangible supply

Most of the relationships that were shown in the network for the orthopaedic clinic that was illustrated in Figure 10.3 do not involve any significant physical exchange. The consultant rents consulting room and operating theatre capacity from the clinic, but the clinic does not supply significant amounts of ‘stuff’ as such. Similarly (with the possible exception of the catering service supplier), the relationships between all the other entities are largely intangible. And, if we drew the supply networks for most financial services, property companies, insurance providers, designers, consultants, universities and so on, the same would hold true. This does not reduce the importance of supply network management. They all have suppliers and customers, they all purchase services, they all have to choose how they get their services to consumers. However, as we pointed out in Chapter 1, many services have a tangible element as part of what they are offering. Moreover, customers may not distinguish between the intangible and tangible elements of service. In fact, for many services, the quality of service will be judged mostly on tangible elements of the service.

Again, as we discussed in Chapter 1, we can imagine a spectrum of relationships within a service supply network that go from no tangible elements to one where the tangible elements are a very important part of the service. The important point, though, is that service relationships often do involve the transfer of tangible goods. In fact, many service supply networks involve relationships between entities, some of which are largely tangible and others that are largely intangible. Figure 10.4 shows the supply network (again simplified) for a publisher of educational books and online learning products. In it there is a clear flow of tangible goods (books) from the printer, via a logistics service, to a distributor and on through bookshops and online retailers, eventually to the ultimate consumer. At the same time, and integrated with this tangible flow, there are largely intangible relationships, centred on the publisher, who not only manages the flow of goods, but also the creation and design of the books. In addition, there is the creation of e-books and other intangible learning materials communicated to the consumer through the publisher’s (outsourced) website.

Figure 10.4 The supply network for a publisher of educational books and online learning products



Internal and external supply

Although we describe supply networks as an interconnection of ‘entities’, this does not necessarily mean that these ‘entities’ are distinctly separate entities belonging to and managed by different owners. The idea of networks can be applied not just at the supply network level of ‘organisation-to-organisation’ relationships, but also at the ‘department-to-department’ and ‘process-to-process’ within-operation levels (and even between individuals within process level). This type of internal network does not behave in exactly the same way as an external supply network, but is nevertheless important. The entities in an external network are, to a large extent, independent actors making decisions in their own (hopefully, long-term) interests. Internal entities are not. They have a greater potential to be coordinated towards a shared goal. (Of course, arguably, external networks should also strive for a shared goal – but it is usually much harder to achieve.)

Recognising that individual processes are linked together to form networks is important. Processes are the building blocks of any operation. Their ‘internal process network’ is where information, or people, or tangible goods are ‘processed’. But no network is stronger than its weakest link, and its output is limited by the effectiveness of its worst stage. So, configuring internal process networks involves designing each process and integrating individual processes to form an effective network. (We shall look at the design of processes later, in Chapter 11.) The root causes of business failure are often the result of the failures of everyday operational processes. More positively, long-term success can be built on getting these process networks right. One of the major opportunities for these organisations is to develop more effective methods of collaboration across traditional (functional) boundaries.

Internal processes within a network need a clear ‘line of sight’

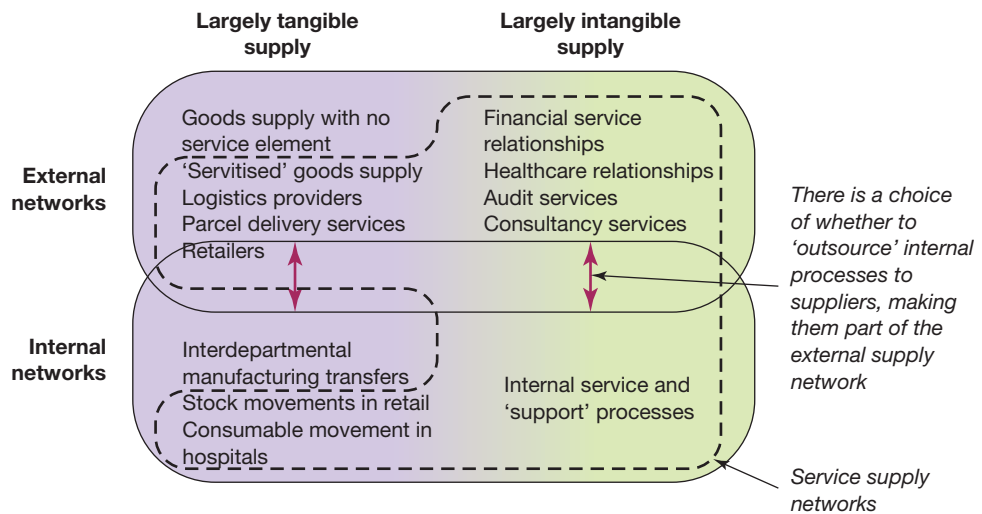
One of the great advantages of understanding each process or department’s position in the internal process network is that it gives one a clear ‘line of sight’ forward through to both one’s internal and external customer groups, so that the people working in each process have a better chance of seeing how they contribute to the final value added. Also, importantly, it shows how they can help the intermediate processes that lie between them and the external customer. Reversing the idea, it also gives a clear ‘line of sight’ backwards through to one’s suppliers, making it easier to understand how previous processes help to add value. In other words, thinking about the internal network helps to contextualise each part of an organisation.

What are service supply networks?

So, supply networks can be internal or external, and concerned largely with the ‘flow’ of tangible or intangible supply. Figure 10.5 shows some examples of supply networks that could be characterised in this way. The first point to make is that the boundaries between the categories are not clean. There is overlap between them. Some tangible supply from manufacturers might have no intangible element, and some consultancy services might have only insignificant tangible elements, but many supply arrangements deal in a mix of tangible and intangible. Nor is there always a clear demarcation between internal and external elements in a network. As we shall discuss later in this chapter, an important decision in how a supply network is shaped is which (if any) elements are outsourced – in effect moving them from being parts of the internal network to the external network. This is illustrated in Figure 10.5, which also gives an idea of what, in this text, we regard as ‘service’ supply networks.

Note how we do not confine our description of service supply networks to those dealing in the supply of intangible services. And here is the paradox. Many services are concerned with the transformation in some way of physical products – they design them, transport them, store them and sell them. In other words, service supply chains (and networks) may be concerned with physical products. And, just as important, many of the operations involved in the supply of tangible manufactured products also include intangible service. So, for example, a manufacturer of home furniture makes its products (probably buying-in parts from other manufacturers), but it may have

Figure 10.5 Examples of supply networks, both external and internal, and largely tangible and largely intangible



commissioned a professional design *service* to design its products, used a firm providing logistics *services* to transport its products, and relied on a retail *service* to sell them. So, a significant part of the supply chain for a manufactured product involves a set of service organisations.

How is 'service' supply different?

The concept of the product supply network, at least in its simple dyadic form of a supply chain, is well established, both as an academic area of study and a professional management activity. And, as we have pointed out previously, there are many service operations involved in product supply networks. The nature of supply networks that rely largely on the supply of intangible services is more difficult to define. Product-based supply networks all involve managing the physical flow of goods, but there is no obviously equivalent common factor in service supply networks. Yet, at an abstract level, product-based or intangible service-based supply is similar. Both are concerned with supplying those activities that the customers have decided not to perform. Both involve a similar set of tasks and decisions, such as which suppliers to choose. However, there are differences, and the models that were developed to describe product-based supply do not always fully reflect the nature of intangible supply.³

The obvious difference is the absence of physical flow between entities in some service networks, with the corresponding absence of accumulated inventory. Since inventory is used to cope with variability in demand, this is not a feasible option in intangible service networks. Instead, services must rely on other strategies, such as allowing backlogs or queues of orders to accumulate. For example, if a surge in demand for a call centre occurs, the capacity of the operation cannot be stored, so the customer must wait. However, if sufficient 'spare' capacity has been planned, the wait can be minimised. In other words, for intangible service supply, capacity is the equivalent of inventory.

Another significant difference in intangible service supply is that triadic relationships are more common. Service supply is best described by hubs rather than chains, with the corresponding difficulty of predicting their behaviour or how relationships could develop. A related issue is the co-creation of value between supplier and customer, as we discussed when describing service dominant logic (SDL) in Chapter 2. In other words, service acts on customers or customer surrogates. The implication of this is that there can be two-way flows between customers and suppliers (known as bi-directional supply relationships).

The direct involvement of the customer can introduce some considerable variability. For example, customers can vary in the nature of their requests, their timing, their individual subjective preferences and the ability of the operation to understand any of them. In addition, customer information can be of poor quality or misleading, either deliberately or through customer ignorance. In fact, identifying and coping with customer-stimulated variability is an important task in service supply network management. At its extreme, the impact of customers on the bi-directional relationship is self-service. This can be a particularly important factor when thinking about service supply networks, because 'self-service' usually requires some kind of 'fall-back' procedure for when customers need help or make a mistake. For example, if the online appointment website for a utility is perfectly understandable for 99 per cent of customers, only 1 per cent of users will need help from the utility's staff. Yet, a small change to the website might now confuse 2 per cent of customers, and although this is a relatively small change, to the staff who have to cope with the demand for help it is a doubling of demand for their services.

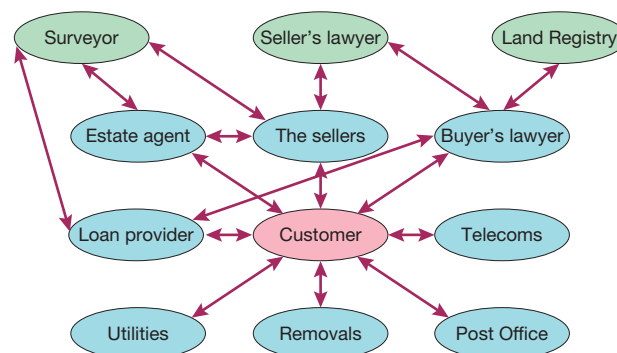
Supply networks – the customer's perspective

How supply networks are drawn has an effect on how one thinks about them. Traditionally, supply networks have been analysed from the point of view of an organisation in the middle of the supply network. However, a different perspective can be taken by placing the customer as the focal point. A customer, whether they are a business, a consumer or a user of public services, will rarely be involved in only a single supply network. Rather, they will be the customer and/or user of multiple supply networks. They may even have to coordinate the activities of some or all of these to achieve the total service they require. And, to make the situation more complex, those individual networks may have many interconnections.

Take the example of a person wanting to buy a house. They will have to interact with several service supply networks (see Figure 10.6). Entities in this network of networks could include the following:

- The real estate agent, whose network includes many house sellers trying to sell their houses.
- The sellers with their own lawyer (solicitor), and the network of organisations to arrange their next house purchase.
- The mortgage (house loan) provider, with their access to funds and property surveyors.
- The buyer's lawyer, who is responsible for checking title deeds with the Land Registry, ensuring funds are in place, and drawing up the contracts, checking them and getting agreement.
- The house removals company, which moves the customer's furniture on the right day.
- The post office, which redirects mail at the right point in time to the right new address.
- The telecommunications company, which transfers the old landline number and connections to the new house at the right time, and provides a final bill.
- The utility companies that need to produce final bills at the point of moving and set up new accounts for the new address.

Figure 10.6 A simplified house-moving network from a customer's point of view



The customer will also be reliant upon many of those organisations not only managing their own chains but coordinating with the other networks. For example, the mortgage provider will have to instruct a surveyor to check out the property, and this will require them contacting the customer's real estate agent to contact the seller to arrange for access to the property. The buyer's solicitor will have to liaise with the Land Registry to check the title to the property and also check that the customer's mortgage provider has agreed to lend money on the property (which, in turn, depends on the surveyor). This illustrates how difficult supply networks can be to manage when the customer has a significant coordination role.

Case example

The lunch delivery service of Mumbai⁴

Online food-delivery services, aided by convenient apps, have grown dramatically in the last few years. In most cities, it is no problem to get specially prepared food brought to your door or desk. India is no exception to this trend. Yet in India, Deliveroo and Uber Eats have to compete with 'dabbawalas' who have been providing a similar service for 125 years. Using the dabbawala service, workers in Mumbai can have a hot, home-cooked lunch delivered to their place of work every day. The service is used by factory workers, office workers, managers, students, even school children. Around 8.00 in the morning they join the crowded trains, buses

and roads to go to work or school in the city. Later that morning, their wife, mother or maid prepares a hot meal, which is carefully packed in a tiffin box – a tubular-shaped tin with a handle, (although many families now use modern colourful insulated lunch bags). The tiffin box is then collected by a dabbawala at around 10.30–11.00 and delivered to the hungry recipient by 12.30–1.00.

This door-to-door service is provided by the Mumbai Tiffin Box Suppliers Association (MTBSA). Within just two hours, this network of around 5,000 dabbawalas picks up and delivers 400,000 tiffins every working day. Many of the dabbawalas are uneducated and illiterate, yet they form part of a vast complex delivery system that makes few errors. To aid correct delivery and return, each tiffin has a unique identifier painted on it – a series of coloured



Dinodia Photos/Alamy Stock Photo

letters and numbers that identifies both its home and destination.

In something resembling a relay race, a single tiffin is passed along a chain of up to ten different dabbawalas as it makes its way from the apartment pick-up, where one dabbawala might be responsible for a whole block, to another who collects from a series of streets, to another who is responsible for a suburb, to another who takes them on the train or bus to the city centre. There are around four hubs in the city next to the train and bus stations, such as the area outside Churchgate Station, where dabbawalas gather around midday to receive and sort thousands of tiffins – a process that only takes around 10–15 minutes. Each dabbawala is responsible for locating, sorting and packing his tiffins into crates or onto his bike. He then moves them swiftly

through the crowded streets by foot, bike or cart to deliver them to their final destinations. After lunch, the dabbawalas pick up the empty containers and return them through the hub to the dabbawala who first picked up the tin, ready for return the next morning when the next day's tiffin is collected.

All the 5,000 or so dabbawalas are partners in the MTBSA. They each own a share in the business and have good pay and perks. Each dabbawala considers himself a shareholder and entrepreneur. As one worker explained: 'It's our own business, we are partners; this is a high-status job. We earn more than many educated graduates.' MTBSA is a flat organisation with just three tiers. The top tier is the governing council (president, vice-president, general secretary, treasurer and nine directors), the second tier comprises the supervisors, or mukadams, and the third tier is the dabbawalas. The dabbawalas are organised into sub-groups of 15–25, each supervised by a mukadam. The mukadams are also responsible for dealing with disputes, maintaining records of receipts and payments, acquiring

new customers and training the junior dabbawalas. Every month there are meetings to discuss customer service, and to investigate and resolve any problems.

Despite the large number of tiffins moved each day, the distances travelled, the multiple transfer points, the many handovers, zero documentation and the very short period of time in which it is all accomplished, there are rarely any mistakes. It has been estimated that there is only around one mistake per eight million deliveries. Yet, despite being one of the world's most efficient logistics systems, the service may face problems in the future. Their more traditional customers do not like apps and trust the dabbawala, who 'can do a proper job', but younger customers are less averse. The concern is, as the convenience of app-based delivery services catches on, will the dabbawalas keep up? Some commentators think that the dabbawalas will adopt technology at some point, but others point out that many dabbawalas are over 50, and there is no retirement age, so it will take time.

10.2 How can supply networks be configured?

By 'configuring' the supply network, we mean shaping the overall pattern or arrangement of its various entities. Even when an operation does not directly own, or even control, other operations in its network, it may still wish to change the nature of their relationships. This may involve parts of the operation being merged, not necessarily by changing ownership, but rather in the way responsibility is allocated. Several trends are reshaping networks in many industries. Here we focus on those aspects of supply networks that are particularly relevant to service supply networks. These are:

- Outsourcing or in-house supply?
- Choosing suppliers.
- Disintermediation.
- Network complexity.

Outsourcing or in-house supply?

A fundamental decision for any type of organisation is what it wants to create itself (called in-house supply) and what it wants to buy-in from suppliers (called outsourcing). No organisation does absolutely everything itself, and no organisation does nothing. (Even the so-called 'virtual' businesses contribute some sort of value through the coordination they provide.) So, somewhere in between doing everything and nothing is where they will want to be – the question is where? The line that divides in-house from outsourced activities defines how much of the supply network an organisation wants to own. Some organisations do choose to perform a high proportion of the activities that

go into creating their services themselves: Starbucks buys and roasts all its own coffee and then sells it through its own stores; Zara owns and integrates much of its supply chain to achieve fast delivery; and streaming networks, such as Netflix and Amazon, have moved into creating original programming.

In-house/outsourcing and vertical integration

Outsourcing (also known as the ‘do-or-buy’ decision) is the process of taking activities that could or have been carried out in-house and moving them to outsourced suppliers. Vertical integration is an arrangement in which an organisation owns some or all of its own supply chain. The two ideas are clearly related; the difference between them is one of scale. Vertical integration is a term that is usually (but not always) applied to whole operations. So, buying a supplier because you want to deny their services to a competitor, or selling the part of your business that services your products to a specialist servicing company that can do the job better, is a vertical integration decision. Outsourcing usually applies to smaller sets of activities that have previously been performed in-house. Deciding to ask a specialist laboratory to perform quality tests that your own quality control department used to do, or having your call centre taken over and run by a larger call centre company, are both outsourcing decisions.

Outsourcing has become an important issue for most businesses. This is because, although most companies have always outsourced some of their activities, a larger proportion of direct activities are now being bought from suppliers. In addition, many indirect and administrative processes are outsourced. This is often referred to as business process outsourcing (BPO). Financial service companies, in particular, are outsourcing some of their more routine back-office processes. In a similar way, many processes within the human resource function, from simple payroll services through to more complex training and development processes, are being outsourced to specialist companies. The processes may still be physically located where they were before, but the outsourcing service provider manages the staff and technology. The reason for doing this is often primarily to reduce cost. However, there can sometimes also be significant gains in the quality and flexibility of service offered.

In recent years, there has been a major increase in organisations outsourcing aspects of their operations that can be managed more effectively (and more efficiently) by specialist companies. Many of these service providers have built upon a particular expertise and have repositioned themselves to provide a package or solution for their customers. Examples include:

- Companies who used to maintain building equipment, such as air conditioning or lifts, now provide a total facilities management service, replacing the customer’s site maintenance function.
- Information systems support, including helpdesk functions.

A key reason for the effectiveness of the outsourcers is that they can offer the benefits of economies of scale and investment in information systems that provide opportunities for operational effectiveness. However, outsourcing frequently involves a transfer of employees from the original organisation to the new supplier. This is particularly true in the public sector, and this shift in culture from public service to commercial operation has proved to be a major factor in the success or otherwise of the activity.

Outsourcing and offshoring

When outsourcing involves moving activities to a foreign location, it is known as offshoring. Increasingly sophisticated telecommunications technology enabled the rise of ‘offshoring’ of many service activities, not just of low-skilled jobs but also some requiring advanced skills, such as computer programming and medical diagnosis. One commonly offshored activity is call centre work. India, among other countries, became a prime destinations for call and contact centres offshored from the USA and the UK (see also the case example ‘Vodafone brings back call-centre jobs’). However, some organisations are facing a backlash from their customers and shareholders who are questioning the need to offshore jobs. Other organisations believe there is a benefit to making a point of not offshoring services. For example, the Nationwide Building Society (a UK financial services company) cited ‘concern for its customer base’ as the reason it decided to invest in its

existing UK centres rather than transfer business to India. It said that, because it does not have shareholders, its two stakeholders were its employees and customers, and that it wanted to invest in the communities where its business comes from. And, although it could have justified the move on cost grounds, it did not believe that short-term cost-savings were worth risking customer dissatisfaction.

Case example

Vodafone brings back call-centre jobs⁵

In 2017 Vodafone, the UK-based telecommunications company, announced that it would be transferring over 2,000 jobs from its overseas call centres (mainly in South Africa, where it was using an external agency) to the United Kingdom. The new roles, it said, would be spread across the existing Vodafone call centres in various parts of the UK. It said that reshoring of the call-centre jobs would bring the company's consumer mobile customer services in line with its UK-based call centres for UK business and broadband customers, and that the new roles would make a real difference to its customers, as well as a real difference to the communities that would be the focus of its customer services investment. Nor was Vodafone alone; it joined several companies that were bringing at least some of their call-centre roles back to their home country. It marked what some commentators saw as a reversal of what had been orthodox call-centre-location policy for decades. Driven largely by the cost savings that could be made in relatively low-cost countries, the call-centre industry had grown substantially in countries such as India, the Philippines and South Africa.

In fact, the term 'call centre' is relatively recent: its first recorded use was in 1983. However, the call-centre-like operations date back much further than that, possibly back to the widespread adoption of the (landline) telephone. But it was during the 1970s and '80s that the big growth of call centres occurred as they were adopted by large service companies that had to deal with high volumes of queries from customers. As firms started using internet channels to communicate with customers, 'call' centres transformed into 'contact' centres. Yet, whether talking to customers or answering emails, and despite the increasingly common use of technology, contact centres are labour intensive, and labour can be expensive. Which is what prompted the migration of many contact centres

from (especially) English-speaking countries to regions where labour was less expensive but where English was widely spoken and education standards were high. However, from the beginning of this offshoring trend, problems started to emerge. Customers complained about difficulty understanding agents over the phone because of language barriers and cultural gaps between contact-centre staff and customers. Some technology could even make things worse for customers. Automated phone systems were seen as another barrier to be navigated before one could speak to a 'real person'. And receiving calls from a call centre was even worse. So-called 'cold calls' were increasingly seen as an intrusive nuisance. (Although not at Vodafone, which became the first telecommunications company to receive the Telephone Preference Service Assured accreditation.)

While still cost-effective, wage inflation in some of the countries where call centres had been set up had made the cost savings of offshoring less attractive. But it was customer frustration at being routed to overseas locations that prompted companies to consider bringing work back to home countries. So, notwithstanding the cost savings of offshore operations, Vodafone's move was directed at enhancing the quality of its UK customer services operations. In some parts of the world, legislation was a factor. For example, the Italian government introduced a law that gave consumers calling a company the option of speaking to a call-centre worker in the country rather than someone overseas. Yet, in the longer term, and no matter in which location, advances in technologies such as automation, advanced customer relationship management systems and artificial intelligence could see fewer call-centre jobs in the future. One report suggested that many thousands of jobs will be replaced by such technology before 2025.

Choosing suppliers

One of the more obvious decisions that will shape a supply network is which of all the potential suppliers should an organisation choose. It is a question that assumes the existence of at least two potential suppliers. If no other organisation is capable of supplying a necessary service, then it will have to be performed in-house. If there is only one, then presumably there is no alternative as such, and the decision is one of how best to develop a productive relationship. Also, if one potential supplier is clearly superior, again the decision is obvious. However, usually the decision is one of trading-off the various attributes of alternative suppliers. It nevertheless is an important decision. Every purchase decision involves putting some of one's reputation into the hands of a supplier. Get it right and you could acquire (or at least, borrow) capabilities that you don't have. Get it wrong and you are exposed to potential delay, disruption and disorganisation. In fact, there are two decisions wrapped up in the supplier selection task. The first is deciding on the criteria that you are going to use to evaluate potential alternative suppliers. The second is the process by which you use the criteria to choose your supplier(s).

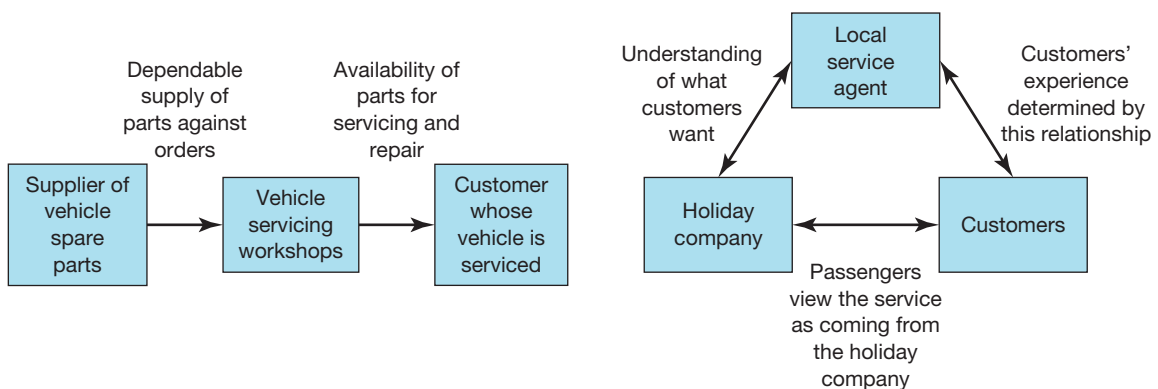
Service supply selection criteria

The thing that differentiates selecting suppliers of service, as opposed to goods-based supply, is the prevalence of triadic relationships in service networks (see earlier). In triadic relationships, the 'supplier' of service deals directly with the customer, whereas a conventional dyadic relationship provides a certain degree of protection for the end customer if supply problems occur. For example, Figure 10.7 shows two types of relationship. One is for a partially goods-based service – a chain of operations that service and repair motor vehicles. One of its important suppliers provides it with spare parts to be fitted into the vehicles. The supplier is expected to deliver parts dependably to orders placed by the vehicle repairers well in advance (demand is relatively predictable). Any failure to meet a promised delivery date will cause problems for the vehicle repairer, but it can moderate this by holding 'safety' stocks of parts, or even having two suppliers. Contrast this with the triadic relationship, also shown in Figure 10.7. This shows a 'supplier' of local services (transport, tour guides, excursions, etc.) to a holiday company. Any problems with these local services cannot be hidden from customers, nor is it possible to have two suppliers.

So, the selection of a local agent is both important for how the holiday company is viewed by its customers and more difficult to manage if anything goes wrong. Of course, there are some basic criteria that both examples in Figure 10.7 will use to select suppliers. These include such factors as:

- price;
- quality guarantees;
- reliability;
- flexibility.

Figure 10.7 Choosing service suppliers when a relationship is triadic is riskier than when the relationship is dyadic



But, when the customer has such a close relationship with the end customer (such as the local agent acting for the holiday company), other criteria also become particularly important. They could include:

- the ease of doing business;
- financial standing of the supplier;
- people management skills, including training and industrial relations record;
- commercial awareness;
- focus on continuous improvement activities;
- shared ethical values.

The closeness between the cultures of supplier and customer can be particularly important for services that convey a distinctive atmosphere. For example, it is a widely held criticism of the hospitality industry that most businesses ordinarily just go with the best supplier that offers the best price. Yet, although pricing is an important issue, excellence, hospitality and shared values should also be prominent factors in the selection process. It is difficult to imagine deriving so much pleasure from, for example, a restaurant, were it not for the important and enjoyable relationships that they have had with their suppliers. This probably includes a wide range of relationships, including greenmarket farmers, wine producers, cheesemongers, printers and graphic designers.

One or several? The single- or multi-sourcing decision

As we illustrated in the previous example, it is not always practical to have more than one service supplier. Yet, even for those that can, there has been a trend to consolidate and rationalise suppliers. And there are examples of where single sourcing has been very successful because there can be some significant advantages:

- It is easier to build strong relationships that are more durable.
- There are opportunities to work closely to solve quality or delivery problems.
- Greater dependency encourages more commitment.
- Communication is easier.
- Economies of scale for the supplier to be (potentially) passed on.

But these have to be balanced against two disadvantages:

- Service can be vulnerable to disruption in the event of a supply failure.
- Gives the supplier power if no alternative supplier is available.

A major consideration is the extent to which the buyer's requirements comprise a significant amount of the supplier's business. A supplier who is totally dedicated to one buyer may seem like a good idea at first sight, but may lead to complacency in the relationship. Many buying organisations set targets that limit the proportion of business to be transacted with any one supplier. This has a particular benefit in that if the buyer's business should decline in the short term, their supplier base is more likely to remain viable.

One-stop shops

One consequence of organisations wishing to reduce their administrative overheads is the rise of the opportunity for service providers to sell a comprehensive package to customers. For example, facilities management organisations (FMO) offer full maintenance for organisations that do not wish to employ their own staff to look after their buildings, i.e. they outsource buildings maintenance. So, the FMO acts as a one-stop shop for all their needs, from cleaning to maintenance.

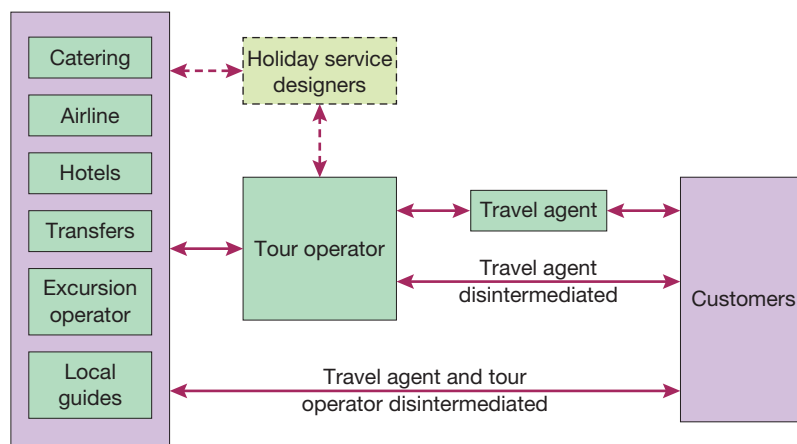
Disintermediation

A trend that has had a significant impact in some supply networks is that of companies within a network bypassing customers or suppliers to make contact directly with customers' customers or suppliers' suppliers, an action referred to as disintermediation. An obvious example of this is the

way the internet has allowed some suppliers to ‘disintermediate’ traditional retailers in supplying goods and services to consumers. For example, the holiday (vacation) industry used to rely on selling its ‘products’ (holidays) through retail outlets (travel agents), with those holidays organised through ‘tour operators’. These companies ‘assemble’ the individual components of a holiday, such as the airlines, hotels, car-hire operations, etc. Some tour operators also owned their own travel agents, and some also owned other elements, such as hotels.

Now these services are available directly to customers by purchasing the individual components via the websites of the airline, hotel, car-hire operation, etc. Of course, they may still wish to purchase a service package from travel agents, which could have been specially ‘designed’ to appeal to a particular market by a ‘holiday package designer’ and can have the advantage of convenience. Nevertheless, the process of disintermediation has developed new linkages in the supply network. Figure 10.8 illustrates these routes to market.

Figure 10.8 The supply network for the holiday industry, showing possible disintermediation



Case example

Dark kitchens disrupt the restaurant industry⁶

At one time, if you wanted a restaurant meal you went to a restaurant. If you wanted a take-away, you phoned the restaurant and went out to collect it. Then some restaurants started delivering to your home. Then (a big innovation, this) ‘aggregator’ apps allowed you to order from a variety of restaurants, online. But did you really get your meal from the ‘restaurant’? Possibly, it was actually being prepared in a ‘dark kitchen’ and delivered to your door by a delivery company. It has never been near the restaurant,

as such. The real change was the advent of these ‘dark kitchens’, also known as ghost kitchens, virtual kitchens, cloud kitchens or delivery-only restaurants; many names, but one concept. Dark kitchens are designed to sell meals exclusively through delivery, rather than cooking for eat-in diners, so the food that is produced there can only be consumed elsewhere.

It was the online ordering app that paved the way for dark kitchens. These third-party delivery platforms meant that food businesses could easily

connect with potential customers and deliver meals quickly to their door. Face-to-face contact between the restaurant and the customer was lost, but even smaller, single restaurants could access customers as never before. Some dark restaurants prepare food associated with several brands, others have separate areas for each brand's food. Some are owned by the online aggregators, some are owned by the restaurant brand. Others may even be fully outsourced. What they generally have in common is state-of-the-art kitchen equipment and staff trained to the corporate guidelines of whichever brand of food they prepare.

However, the companies that build dark kitchens and rent them out do not usually own the brand of the products they make. Often there is no obvious indication of what a dark kitchen does. They can be anonymous (usually temporary) container-like buildings, equipped with a ready-designed kit of parts, sometimes using similar technology to that used by the military to build its catering facilities. Connect the facility to local services and it can be 'up and running' within days. This allows operators to deliver food quickly without taking up capacity at their high-street locations. All they have to do is cook the food and have it picked up.

Dark kitchens have several operating advantages. Without customers, they have no tables or waiting areas to provide, which significantly lowers the cost of rent. Staff can be used more efficiently, as none is needed to serve customers and they can move between tasks easily. Utilisation of kitchen capacity can be high, with some kitchens renting out space to different businesses at different times of day. Delivery is also speeded up. Together with streamlined online delivery services, and algorithm-driven optimisation to lower overheads and increase output,



Dhiraj Singh/Bloomberg/Getty Images

food can be cooked and sent out to the customer in as little time as possible. They are also flexible. Because there are no physical high-street premises to consider, changing consumer food trends can be accommodated relatively cheaply. Kitchens can move quickly on to producing a whole different menu or concept. Expanding capacity into a new location is simpler. Space on an industrial estate is easier to find than an ideal high-street location, and less capital is needed. Moreover, aggregating orders through an online platform makes the whole network 'data-rich'.

When dark kitchens work closely with delivery platforms, they can identify areas of unmet demand, either by location or by cuisine. And the constant flow of data allows algorithms to forecast each week's sales more accurately, which leads to efficiencies in scheduling staff and ordering ingredients. Dark kitchens and home delivery services have changed the way we eat. So, if it does not undermine your experience, remember that your next meal might not come from a quaint ethnic restaurant, but from a bleak and desolate industrial estate.

Managing through intermediaries

Supply networks often involve intermediaries – 'middlemen', distributors, agents or dealers who take responsibility for managing a section of the supply network, thus making managing the chain easier for the service provider or customer. For example, many financial service companies have

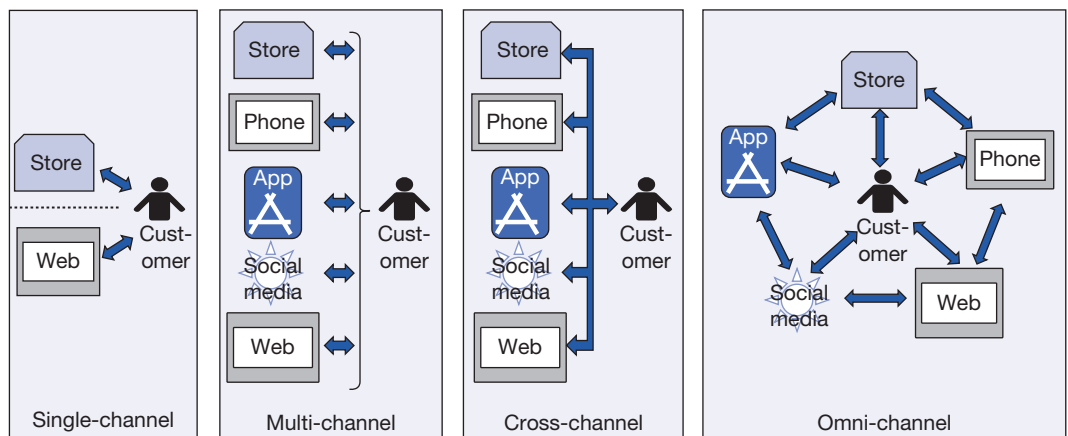
chosen to sell through brokers, not seeing the customer contact as part of their core business. Car producers, likewise, do not see their role as selling cars to the public and often set up owned or franchised dealerships to deal with the consumer. And there are many good reasons for using intermediaries, such as:⁷

- *Closeness to customers.* Many customers prefer to deal with an organisation that is physically close to them. This might be because they prefer to deal 'face to face', have not got access to electronic processes, or the nature of the service requires the presence of the service provider. For example, one of the major drivers for customer satisfaction in the ownership of cars is the ease of access to a recognised dealer for service and repair.
- *Local knowledge.* The major supplier may have insufficient knowledge of local conditions and culture. In the development of global strategies, much emphasis is placed on 'thinking globally, acting locally'.
- *Poor service margins.* The volume of service revenue may be too small in some geographical regions for the provision of a dedicated service unit. Capital equipment suppliers may sell only one or two units initially into a region, but must provide after-sales support. Rather than recruit and train service engineers for a few service calls per year, the company may use local service agents, who may also service competitors' equipment.
- *Insufficient capacity.* A strategy adopted by many call centres is to have 'subcontract' capacity available through providers set up explicitly for this type of activity. The information systems available to call-centre agents enable them to act in such a manner that the customer is unlikely to detect any difference in service delivery.

Issues in managing intermediaries

One issue in dealing with intermediaries is that their objectives may not always coincide with those of the main organisation, or indeed the customer. Another challenge is to provide intermediaries with sufficient financial incentive while developing the customer service values required to generate customer loyalty. Strategies include:

- *Financial incentives.* This is particularly relevant when the intermediary is not dedicated to providing service for only one organisation. The parent organisation may provide financial inducements, discounts or credit facilities to encourage the intermediary to favour its services ahead of its rivals'.
- *Punishments.* The ultimate sanction for poor performance is for the parent organisation to withdraw its support. This has become more common in recent years in the motor vehicle industry, with manufacturers removing franchises from dealerships. Usually, though, this approach is only used as a last resort, because other dealers, no matter how good they are, wonder if they will be treated in a similar manner.
- *Providing expertise.* One of the most effective ways of motivating intermediaries is to provide support for their business. The parent organisation frequently has considerable resources in areas that are lacking in the intermediary. For example, Caterpillar has created high levels of dealer satisfaction through the support given to its dealer network.
- *Training.* McDonald's Hamburger University is occasionally a source of jokes, but there can be little doubt as to its value in creating a consistency of approach throughout the network of outlets, both company-owned and franchised.
- *Information systems and technology.* Provision of process technology will assist in ensuring consistency of delivery. A franchisee generally receives a package of standard equipment and operating procedures to deliver the core service in the manner laid down by the parent organisation. Some companies provide online technical support to their partners and dealers. This serves the dual purpose of ensuring high-quality technical support is given to their customers and also training their partners and dealers in the desired approach.

Figure 10.9 Single-, multi-, cross- and omni-channel retail modelsSource: Slack, N. and Lewis, M.A. (2020) *Operations Strategy*, 6th edition, Pearson, Harlow.

Network complexity

As more options to link customers with suppliers become available, so the complexity of the network increases. An example is how retail networks have moved from single-channel to what have become known as omni-channel networks, as both markets and technologies have developed. Previously, the relationship between a retailer and its customers was straightforward – the retailer expected customers to collect goods from its stores, or be delivered later when the customer requested it. When online retailers emerged as the internet developed, there was little overlap between conventional ‘bricks-and-mortar’ stores and online firms. Even when conventional retailers developed an online presence, they often kept their online operations separate from their high-street stores. This is the ‘single-channel’ model, as shown in Figure 10.9. As more methods of contacting retailers became available, such as mobile phones, apps and social media, managing the many alternative ‘channels’ of communication became difficult and most retailers struggled to fully integrate them. In fact, they often treated them specifically as independent entities so that they could align each channel with specific targeted customer segments. This is the ‘multi-channel’ model in Figure 10.9. Later came the first attempts to integrate high-street stores with (initially) web and other channels in order to enhance their cross-functionality, which in turn allowed a better shopping experience for customers. Finally, the ‘omni-channel’ model is seen by many retail analysts as being one of the most important retail developments since the advent of online services. It seeks to provide a seamless, all-inclusive customer experience by fully integrating all possible channels so that customers can use whichever is the most convenient for them at whatever stage of the transaction. A customer could browse alternative products through social media, order their choice via an app, manage their account through a website, pay using their phone and return the product to a physical store, should they wish to. This requires a degree of technical sophistication as well as coordination between internal functions such as marketing, retailing operations, distribution and IT.

10.3 Managing supply networks on an ongoing basis

The nature of how supply networks are configured can lead to very messy and complex relationships, with multiple ‘flows’ of physical products, information, intangible service and perspectives on what is important. Running supply networks is just as complex. Here we will look at some of

the more important issues in the ongoing management of service supply networks. In particular, we will examine:

- Developing supply relationships, including partnership relationships.
- Supply network dynamics.
- Measuring performance – service-level agreements.
- The purchasing or procurement function.

Supply relationships

The relationship between suppliers and customers can be positioned on a spectrum. At one end are strictly contractual relationships, defined by explicit (usually written, often detailed) and formal documents that specify legally binding obligations and roles, both for suppliers and customers. At the other end are ‘partnership’ relationships. These rely less on formal contractual mechanisms, but are closer, informal, long-term arrangements that attempt to embody the idea of a shared future between supplier and customer. However, it is misleading to view contractual and partnership relationships as being either mutually exclusive or alternative options. In most buyer–supplier relationships they coexist and are complementary. It is the balance between the two ‘ingredients’ that will define any relationship.

Contracting

The purpose of a supply contract is to reduce uncertainty – for example, by providing a well-defined description of what is and what is not acceptable within a relationship – while at the same time reducing the risk of inappropriate opportunism by either party in the future. Broadly, suppliers should be meeting three conditions for a customer to achieve effective control:

- A contract should be adequately specified in a way that specifies ‘up front’ measurable outcomes.
- A contract should include details of how it is to be adequately monitored.
- A contract should contain adequate safeguards indicating measures and penalties that enforce the contract.

Partnerships

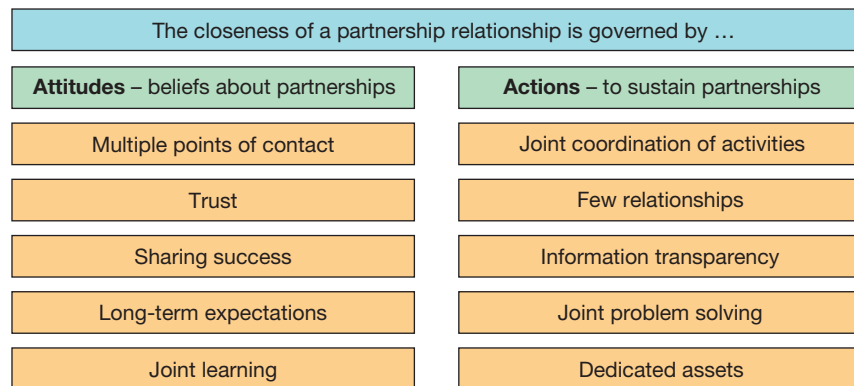
In some ways, partnership relationships are attempts to achieve some of the advantages of closeness and coordination efficiencies that come from owning your ‘supplier’s’ assets yourself (vertical integration). At the same time, they try to capture the keenness of service and the incentive to continually improve that can be achieved in the best free-market trading. Partnerships are an approach to how relationships in supply networks can be formed with a degree of trust that effectively substitutes for the ownership of assets. In the whole of operations management’s daunting portfolio of responsibilities, they are one of the most potentially rewarding yet one of the most difficult relationships to make work.

Partnership relationships are not ‘designed’, they are built over time. They are alliances where partners are expected to cooperate, even to the extent of sharing skills and resources, in order to realise joint benefits beyond those they could gain by acting alone. But, as in any partnership, there are compromises and sacrifices. The idea of partnership is that one gives something up in order to get something greater. One gives up the option of ‘promiscuous’ switching of suppliers (or customers) in order to share the joint benefits of mutual security and improvement.

The degree of closeness that you can achieve in a partnership arrangement is built on two sets of things:

- How you think about the relationship – the attitude you have towards it.
- What you do to sustain the partnership – the actions that you take.

Figure 10.10 illustrates some of the attitudes and actions that contribute to the closeness of a partnership arrangement. In other words, the degree of intimacy, understanding and mutual support

Figure 10.10 Some elements of partnership relationships

that exists between partners. Intimacy relies on one party's belief in the other's attitude and motivation in maintaining the relationship. Belief helps dispel any doubt that one can rely on supportive actions from one's partner, while actions, over time, deepen and enhance the positive beliefs and attitudes concerning the relationship itself.

Attitudes – beliefs about partnerships

- *Accept multiple points of contact.* This is as opposed to insisting on one or two formally defined channels of communication.
- *Trust.* If there is no risk involved in a relationship, there is not any need for trust. But without some degree of trust there is little justification for taking risks with a partner.
- *Sharing success.* Shared success means that both partners recognise that they have more to gain through the success of the other than either have by exploiting the other.
- *Long-term expectations.* Partnerships are for the long term, assuming that each behaves in the best interests of the other.
- *Joint learning.* Presumably partners have been selected on the basis that they have something to contribute.

Actions – to sustain partnerships

- *Joint coordination of activities.* With fewer partners, coordination can be mutually agreed.
- *Few relationships.* Partnerships do not necessarily imply single sourcing by customers, or exclusivity by suppliers. But partnerships inevitably involve a limit on the number of other partnerships.
- *Information transparency.* Open and efficient information exchange is vital for encouraging good decision making.
- *Joint problem solving.* No partnership will always run smoothly. The way problems are addressed is central to how a partnership develops.
- *Dedicated assets.* One of the most guaranteed ways of demonstrating commitment to partnership, but one of the most risky, is for one partner (usually the supplier) to invest in resources that will be dedicated to a single customer.

How are service relationships different?

One obvious difference between the nature of service relationships and those in purely manufacturing supply networks is the feasibility of short-term contracts. For example, if a manufacturing company wants to find a supplier of standard parts (say nuts and bolts), it is unlikely to be difficult, there will probably be many alternative suppliers. For the same reason, it will be easy to

switch suppliers. So why develop partnership relationships? Of course, if the supplied part is more complex, or critical, or customised, it will be more difficult to switch suppliers, and some form of partnership could be beneficial to both parties. Now contrast the ‘nuts and bolts’ supplier with a similar service – one that does not require any special competence and is bought largely on price – for example, a contract to clean offices. Both are commodity supplies, almost certainly selected using price and quality criteria. Neither involves any special competence, and the customers for such supplies are likely to have several competing suppliers to choose from. Yet, in spite of these obvious similarities, there are differences that mean that the office cleaning (service) supply will probably be treated differently from the (product) supply. Table 10.1 identifies some of these similarities and differences.

The first difference concerns the local nature of services. Many services have to be delivered to the customer’s location and cannot be centralised. This makes the delivery of the service more complex. Supplying standard products needs no knowledge of the customer, whereas cleaning offices requires knowledge of the extent and nature of what needs cleaning. It would also be difficult (and pointless) to have two cleaning firms supplying the service simultaneously, so multiple suppliers would not be possible. Also, the intangible nature of services makes the evaluation of suppliers more difficult and the specification of the desired service less precise.

So, even though both supplies are ‘standard’, judging the office cleaners is more subjective. Standards of what is acceptable cleaning may differ, and how could a quantified standard be agreed? And, if the standard of supply is unsatisfactory, it will take a little time to switch cleaning services, whereas switching a nuts and bolts supplier is simply a matter of placing an order with an alternative supplier. Perhaps the most significant difference comes from the idea of ‘customer–supplier duality’ where the customers are also suppliers. The quality of the office cleaners’ performance will depend not simply on the cleaning itself, but also the nature of the customers and their interaction with the cleaners. Careless and dirty office workers will make the cleaning service far more difficult.

The net result of these differences between service and product supply is at least to shift the relationship towards the long term, and possibly towards a partnership arrangement. Certainly, as we have demonstrated, short-term purely transactional relationships are unlikely to be appropriate. Nevertheless, as we mentioned earlier, this does not mean that the contractual element of a relationship ceases to be important. Even office cleaners will need to abide by contractual arrangements (see the discussion on service-level agreements, later in the chapter).

Table 10.1 Comparing two standard, non-specialist types of supply

	Standard ‘nuts and bolts’ supplier	Contract office cleaning
Supplier selection criteria	Price and quality	Price and quality
Location	Supplier could be anywhere	Supplier must have local presence
Number of suppliers	Could be more than one	Almost certainly just one
Ease of judging quality of supply	Straightforward	Elements could be subjective
Ease of switching supply	Easy	Would need notice period
Customer input	Little, after placing order	Customer behaviours can impact the difficulty of providing the service
Likely length of contract	Could be very short	Minimum feasible length

Worked example

Caterof and Hotspace

Caterof was a catering services company, based in Berlin. Catering services companies provide food at remote locations for institutions, either on a regular or 'one-off' basis, and for special events.

We started Caterof because we felt that there was room for a progressive catering company that understood how younger workers' tastes and attitudes to food generally were changing. Our first customers were technology start-ups who wanted lunchtime delivery of more interesting and sustainably sourced snacks, salads and sandwiches for their staff. Then we started to provide vending machine services to the same customers, so now about 10 per cent of our revenue comes from vending machines. But, the Hotspace partnership contract is a real step up for us.

(Rikard Blaine, Co-founder of Caterof)

Hotspace was the new brand of a long-established office rental group. It was being set up to provide shared workspaces, particularly for technology, design and creative firm start-ups and enterprises. The new brand had been set up to serve the growth in co-working spaces that could be rented, on a dedicated-desk or hot-desk basis, by clients who valued the flexibility and the working environment that such spaces provided. It was a market that Caterof saw as becoming increasingly important for them.

The nature of work is changing. There's a decline in the more conservative traditional office spaces, particularly for small- and medium-sized enterprises and start-ups, and we think that we understand the changing nature of the market. After all, we spend all our time catering for these types of people through our current delivery and vending machine services. The departure for us is having to set up and manage a foodservice facility on the client's premises.

(Rikard Blaine)

What they did

Initial discussions with Hotspace to agree the details of the catering contract went well. In particular, Hotspace valued the knowledge that Caterof had developed regarding the tastes of the 'Millennial' (born between 1981 and 1995) and 'Generation Z' (anyone born after 1995) workers, who were likely to be the main users of Hotspace offices. However, as discussions progressed, different priorities started to emerge. At this time, Rikard Blaine tried to summarise the attitudes to the catering generally and what the various parties wanted from the partnership. In abbreviated form, this is shown in Table 10.2.

My first task was to persuade all the parties that the catering service really was a partnership, and in

Table 10.2 Summary of Rikard Blaine's view of the various groups' attitudes to what the catering service should achieve

	Attitude to catering service	'What do you want from the partnership?'
Hotspace	Minimise space in offices Value-for-money food	Efficiency, reliability, keep to budget, keep clients happy
Hotspace clients	Flexible availability Exciting food	Ideally 24/7 availability, keep our workers happy
Clients' staff	Sustainable/ethical food Tech-enabled personalisation	Variety of types of food, flexible ordering, fun experience
Caterof	Margin potential Opportunity for innovation	Learning opportunity, cost control, secure continuation of contract

a partnership there has to be compromise, everybody can't have everything they want. I saw it as my responsibility to work out a set of proposals that could give the partners most of what they wanted, while not damaging the other partners' interests. I proposed that we should follow a four-stage process. First, identify who the 'end users' were, who we were all trying to satisfy. Second, identify what the end users were going to find increasingly important. Third, identify what the implications were for the service features to be offered. Fourth, identify the constraints to delivering any service features. When we started this process, we soon agreed that the key people here were the staff employed by Hotspace clients, who would use the service. They were the end users and so, within the cost constraints, if they were happy, everybody would be happy. That is why we placed their requirements (or at least our assumptions about

their requirements) at the centre of how we developed the service.

(Rikard Blaine)

A summary of some potential service solutions to upcoming trends that could satisfy all parties is shown in Table 10.3.

The eventual agreed service to be provided by Caterof included: a staffed eating area during 'normal' working hours, offering a limited but changing range of hot meals plus a range of sandwiches, salads and snacks, all prepared in the Caterof kitchen. Also, an 'advanced' vending machine would be available at all times. In addition, an app was to be developed that would allow clients' staff to order food from a limited range, to be delivered either to their home address or Hotspace premises during an 'extended' day (later agreed as 07.00 until 23.00).

Table 10.3 Summary of some potential service solutions and constraints for end-user trends

Staff preference	Implications for service feature	Constraints
Staff increasingly motivated by flexible working hours	Vending machines Delivery-to-site service	Delivery out of hours constraints governed by Caterof kitchen hours
Staff increasingly motivated by flexible working location (home working)	Introduce a delivery option or meal takeaway service to cater for those working from home	With more people opting to work from home it presents problems for contract caterers faced with an empty canteen
Staff showing a desire to work with organisations who have a strong commitment to corporate social responsibility	Healthy snack options Recyclable packaging	Must provide acceptable margin and shelf life
Staff comfortable with digital solutions	Build-in apps and online booking tools in service options	Must be able to compete with national platforms
Staff increasingly consider themselves flexitarian, with many vegetarian/vegan	Check all menus and bought-in products	More people willing to pay more for products and services that demonstrate positive social and environmental impact
Staff increasingly influenced by fashion in food types	Review meal offerings regularly	Requires increased development budget

The bullwhip effect

There are dynamics that exist between firms in supply networks, or rather supply chains, that cause errors, inaccuracies and volatility. In the case of a set of dyadic relationships between a chain of interlinked operations or process stages, the variation in the pattern of demand coming out of the chain will be greater than the variation of the demand that came into the chain. Moreover, the variation increases for operations further upstream in the supply chain. This effect is known as the

bullwhip effect – so called because a small disturbance at one end of the chain causes increasingly large disturbances as it works its way towards the end. It is a well-known phenomenon in manufacturing supply chains, and there is evidence that it also occurs in service chains.⁸

In product-based supply chains, such as those supplying retailers, there are several causes of the variability that promotes the bullwhip effect:

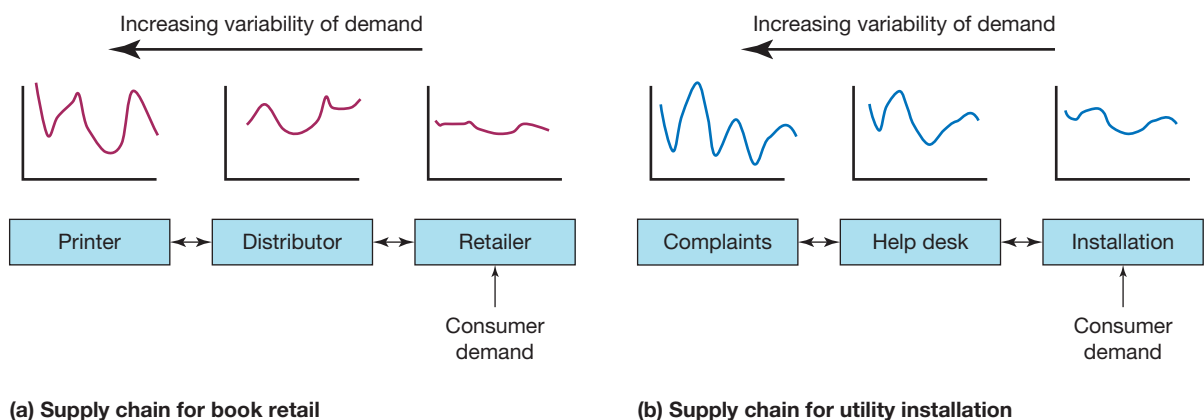
- *Response delays* – because it takes time for supply chain managers to notice that there is a change in demand, and then react to that change.
- *Immediate response* – because supply chain managers are over-influenced by immediate demand and tend to forget part of the ordering decisions they have already placed.
- *Order batching* – because of the economies associated with order quantities, orders larger than actually required are placed, resulting in a surge in demand at some stage followed by no demand after that.
- *Promotion campaigns* – because special sales promotional activities such as price discounts can distort regular buying patterns, which can cause uneven and distorted demand information.
- *Shortage gaming* – because even the potential of future shortages may result in the over-ordering of products.

Service bullwhips

In service supply chains, there are both similarities and differences when compared with product supply chains in terms of the nature and causes of the bullwhip effect. Although not as well-researched as the bullwhip effect in product-based supply, there is evidence that an increase in both demand and backlog variability as one moves along a supply chain can occur in intangible service networks.⁹ And, for a similar set of reasons, some effects may be even more significant. For example, as demand increases above what is regarded as normal capacity, staff providing the service may respond by increasing their pace of work. However, this increased pace, if sustained over anything longer than a short period, could lead to an increase in errors, which in turn creates errors that eventually will need some kind of re-work, which creates further overloading of capacity, and so on. There is also likely to be similar response delays, promotion distortions and even shortage gaming. The only unlikely bullwhip stimulus is order batching, otherwise service supply can be similarly prone to the same types of demand fluctuations as in product-based supply.

Figure 10.11 illustrates two supply chains (chains rather than networks, to keep things simple). One is a product-based supply chain for a retail bookshop. Demand from consumers will vary, although the demand at the book distributors will vary more, and the variation in demand at the printers is likely to be even greater. Also shown in Figure 10.11 is a supply chain for an intangible service-based chain. Here, a utility, such as a super-fast broadband cable installer, will respond to a certain level of uncertain demand from consumers. A proportion of these consumers will have queries or problems with the installation and will call the company's helpdesk. And, although most of the

Figure 10.11 The bullwhip effect in (a) product-based supply, and (b) intangible service-based supply



queries can be dealt with, a certain number will go on to form complaints and be reported through the company's complaint processes. As in the product-based chain, the variability of demand is likely to increase as demand works its way 'upstream' away from the initial cause of the variation.

In many ways, the causes of bullwhip variations in service supply are similar to those in product supply, including sales campaigns, poor communication through a network and inadequate planning. But an important difference in pure service supply networks is the lack of physical inventory. It is, after all, inventory (or the effect it has on decision making) that drives the bullwhip effect in product-based supply networks. However, there are backlogs (queues of outstanding orders), and these act in a similar way to inventory, except that, without inventory to maintain supply to the customer operation, service operations need to have the capacity to respond to demand fluctuations. In effect, it is capacity that absorbs demand uncertainty, so there is something of a trade-off between cutting backlog variance and increasing the costs of capacity.

Measuring performance – service-level agreements

Service-level agreements (SLAs) are forms of contracts agreed between a service supplier and the service purchaser or user. These are usually found in a business-to-business context and often between internal suppliers and customers, where a traditional contract is not felt to be appropriate. They are an important means of managing the relationship between partners in a supply chain.

Whether for internal use or external use, an SLA goes beyond the traditional remit of a contract, i.e. a statement of service specification and the price that will be paid for it. While an SLA, like a contract, defines the nature of the products or services and the level of quality to be provided, the idea of an 'agreement' is that it is a mutually agreed view of what can and will be provided, but also, and importantly, it exists for the mutual development of both parties. That is, an SLA is seen to be an integral part of the development of a relationship between a supplier and a customer – indeed the SLA attempts to formalise this relationship. There are three key features of an SLA: setting a service specification; dealing with day-to-day routine issues; and the development of the relationship.

Service specification

The core of an SLA is the development and agreement of the service specification. This will include:

- *Agreeing the key dimensions of performance, such as response times, availability, accuracy, etc.* This allows for both customer and supplier to understand what is important about the service from each other's points of view.
- *Agreeing how each dimension will be measured.* Discussion and agreement about the measures to be used reduces the likelihood of disagreements about performance at a later date.
- *Setting mutually agreed targets for each dimension.* It is possible that standards set by one party may be too high for the needs of the other; clarity and agreement over what is needed and what is possible should lead to a feasible and achievable – and indeed low-cost – outcome.
- *Defining where the responsibility lies for the measurement of each dimension.* Unlike a traditional contract, the responsibility for performance measurement may rest with either the supplier or customer, but such information is made openly available to both parties.

Routinised relationship

The routine part of the relationship formalised by the SLA concerns the day-to-day operation of the agreement. This may include:

- *Providing a mechanism for reporting performance against standards at agreed intervals.* Underpinning an SLA is the sharing of information, the purpose of which should not be unilateral action, as it might be in a traditional contract, but understanding and improvement.
- *Setting out the procedures to be invoked if a failure against standard should occur.* Routines for dealing with problems should be agreed in advance so that both parties understand their obligations and duties in such an event. Failures should not be seen to be negative but as opportunities for supplier and customer to work together to solve each other's problems.

Developmental relationship

A key, though often ignored, element of an SLA is its role in developing a long-term relationship between supplier and customer. This involves providing a mechanism for routine discussion of the measures and targets and to share ideas for all-round improvements. This ‘double-loop learning’ activity (see Chapter 16) formalises the need to regularly review the agreement, the measures used, the targets applied and the relationship between the parties.

Advantages and disadvantages

Clearly, SLAs require considerably more input of time and effort by both parties than a traditional contract. They have to be tailor-made for each service with each supplier in the supply chain, they can be complex, and they need an investment of time and effort in the long term to secure the potential benefits. However, they do have the potentially significant benefits of a closer working relationship and therefore better service between supplier and provider. They can reduce risk for the supplier and the purchaser or user, and they create loyalty and reliability by focusing on the development of people and systems rather than focusing on systems of ‘punishment’. They also prevent unnecessary and expensive over-provision of quality by defining agreed standards.

Counterpoint

Service-level agreements have been common practice for many years, both for internally provided service and when a service has been outsourced, or bought-in from a supplier. But this does not mean that they always work smoothly, or that they are always the best way to formalise a relationship. Here are just some of the problems with using SLAs that have emerged:

They are either over-simplistic or over-complex. Defining the exact nature of performance expected from a supplier can be complicated. Detailing all the elements of performance to be expected under every possible set of circumstances is clearly impossible, so some degree of simplification is necessary. But take this too far and the SLA fails to provide guidance to a supplier.

SLAs can motivate the wrong behaviour. SLAs are set at a point in time, and may, very quickly, fall behind what a customer really needs from a service. A service provider may just meet the specified service levels stipulated in a contract and therefore be satisfied; they may not make any effort to meet the customer’s rapidly changing needs. This may mean that, over time, SLAs drive behaviours that focus on delivering the minimum level of service at minimum cost to the supplier.

SLAs are unambitious. SLAs provide measurable required levels of service provision, and ‘if something

isn’t broken, why fix it?’, In other words, they rarely provide any motive for improving the service. Some SLAs do contract for a specified rate of improvement (for example, increasing ‘availability’ by one percentage point per year over a five-year period), but what should be the set rate of improvement, and under what circumstances should or could it be adjusted? And specifying improvement to service performance raises another issue – who benefits from these improvements?

Who benefits from improvement to performance? If there are improvements to the performance of a supplier’s service, how should the benefits from the improvement be allocated? A customer might argue that better supplier service is the best way that the supplier can hope to retain the business in the future. Unless a specific improvement rate is specified in the SLA, the supplier could argue that benefits should be shared. Moreover, sometimes improvements are the result of changes made to the customer’s processes, and nothing to do with the supplier. Nor may a customer always be aware of improvements to a service. For example, if a supplier makes substantial cost savings without compromising its service, is there any incentive for the supplier to make the extent of such savings clear?

Case example

The Hoxby Collective¹⁰

The increase in the number of people working as independent service professionals has been called the ‘freelance revolution’. But, in spite of the independence and flexibility of being able to do one’s own thing that freelance working brings, there are clear disadvantages also. One of these is that individuals find it more difficult to make an impact on their supply network. A formal organisation, with a market image, legal responsibilities and connections with the rest of its supply network, is always going to find it easier to capture the benefits of operating within a business network. It was to appropriate some of the benefits of acting together that led to the emergence of online talent marketplaces, which had an impact on how organisations sourced the professional talent that they needed. These marketplaces (which are sometimes called talent platforms) provide the connections between experts in a wide variety of disciplines and the organisations that need their expertise, usually on a short-term or contract basis. Originally, these marketplaces focused on freelance computing and other technical experts, but soon broadened to include such varied professionals as freelance musicians, freelance illustrators, freelance pilots and freelance archaeologists.

One such network of freelancers is the Hoxby Collective – a global platform that provides experts to work on projects of all shapes and sizes for multinational clients. And from the freelancers’ point of view, they can work in their own time, and with their own ‘workstyle’. The Hoxby Collective said that it wanted to ‘turn the concept of modern work on its head’. It had no offices, and each member was their own boss, but they were also part of a community that was much greater than the sum

of its parts. Its explicit vision was, it said, ‘to create a happier, more productive and healthier society by revolutionising the way people approach their work’. When the joint founders of the Hoxby Collective, Lizzie Penny and Alex Hirst, set it up, they were in search of a better work–life balance. Penny had been running a traditional advertising agency, and was juggling her work commitments with trying to be a good mother to her first child. Alex had a different incentive – he wanted to create a new way of working. The daily commute and working days of over 14 hours had slowly eroded his passion for work. But both Lizzie and Alex also recognised that there was a much wider issue. Estimates were suggesting that 58 per cent of women leave the sector after having a baby, thus eroding diversity and limiting access to creativity. Their solution was to offer not just flexible working, but to create what they called ‘the workstyle movement’, that would enable all those within the Hoxby community to choose exactly where and when they liked to work. The result was that, wherever they may be in the world and whatever their circumstances, they could fit their work around their lives and not the other way round.

However, the Hoxby team decided to take seriously the important commitment that individual freelance members were expected to make to the Collective for the common good. Joining is deliberately demanding. Applicants are asked to write about why they see themselves as a good fit to Hoxby and are asked to spend time working on a Hoxby initiative with members. If they are then admitted to the collective, they can expect current members to welcome them, work with them and invite them on projects where they can contribute.

The purchasing or procurement function

The function traditionally responsible for managing direct relationships in the supply network is the purchasing and supply, or procurement, department. This is an important activity found in all organisations – public, private, governmental and charity – and can be responsible for a large amount of spending. Spending by service organisations on, for example, materials, components, facilities, subcontract capacity, IT equipment and supplies, consumables, stationery, travel and insurance, can constitute a significant amount of money, often 30–60 per cent of an organisation’s turnover.¹¹

Procurement is traditionally an internal service provided by a dedicated team of professionals. It typically operates at the interface between the organisation's external supplier marketplace and the organisation's operational processes. Procurement has many of the characteristics of the marketing function, although it faces the other direction in the supply chain. Procurement is usually responsible for the identification of (internal) customers' needs, translation of those needs into specifications, management of the delivery of products and services and an assessment of the (internal) customer's satisfaction with those products and services. The other elements of the process involve communication with suppliers – sourcing, requests for tenders, price negotiation, ordering, receipt and invoicing.¹²

E-procurement

Electronic procurement systems are a form of disintermediation. In essence, e-procurement systems mirror the procurement process through the provision of two distinct, but connected, infrastructures – internal processing (via, for example, corporate intranet) and external communication with the supply base (via, for example, internet-based platforms).¹³ The critical difference is that such systems allow individual employees to order products and services directly from their own PCs through the web. Requests and orders are channelled through various forms of 'hub' or database, which act as online catalogues of specifications, prices and, often, authorisation rules. Such systems allow individual employees to search for items, check availability, place and track orders and initiate payment on delivery.

Research found that e-procurement provides three key benefits over traditional procurement:¹⁴

- *Customer satisfaction.* Internal customers reported greater satisfaction with electronic-based procurement systems. Even though they had to undertake more work (searching, ordering and paying) themselves, they appreciated greater accessibility and availability of purchased products and services, faster fulfilment of requests and much greater control over the process and their own budgets.
- *Process compliance.* E-procurement systems provided greater reliability than traditional systems and, because they were easy for individuals to use, there were less 'maverick' purchases made (for example, small purchases that were then reclaimed on expenses). The processes tended also to be more transparent and afforded better control of the purchasing process.
- *Cost reduction.* Not only were there significant savings in the cost of purchasing, but because employees had greater control over the process, less 'emergency' or 'just-in-case' supplies needed to be kept.

An additional and important impact of e-procurement is that the traditional roles of the purchasing department, such as placing and managing orders, can now be done electronically. This leaves the purchasing function in a position where it can either be more easily outsourced or take on a more strategic role, such as evaluating the impact of e-procurement, advising on systems and policies and driving savings across the whole organisation.

10.4 Summary

How can service supply networks be described? – A supply network is an arrangement of interrelated organisations, operations or processes, and the connections between them, that adds value through the creation and transmission of products and/or services. The separate sequences of linkages through a network are called supply chains. Supply networks can be complex, but are usually best described as interrelated 'triads' of entities. The triadic relationship is particularly descriptive of many service relationships. The connections between service organisations can involve both tangible goods-based supply and intangible supply. They can also describe networks that are internal to an organisation as well as relationships between organisations externally. So, the scope of service supply network management covers examples that might involve largely tangible or intangible supply between entities that are internal or external.

How can service supply networks be configured? – By configuring the supply network, we mean shaping the overall pattern or arrangement of its various entities. Several trends are reshaping networks in many industries. For example, no organisation does absolutely everything itself, and no organisation does nothing. So, a fundamental decision for any type of organisation is what it wants to do itself (called in-house supply) and what it wants to buy-in from suppliers (called outsourcing, also known as the ‘do-or-buy’ decision). It has become an important issue for most businesses, because a larger proportion of direct activities are now being bought from suppliers. When outsourcing involves moving activities to a foreign location, it is known as offshoring. If suppliers are used, a choice must be made between alternative suppliers. It is a particularly important decision for services because the prevalence of triadic relationships means that the ‘supplier’ of service deals directly with the customer. Also of increasing importance is the issue of disintermediation. This involves companies within a network bypassing customers or suppliers to make contact directly with customers’ customers or suppliers’ suppliers. Whereas the idea of using intermediaries is the opposite: it means ‘middlemen’ taking responsibility for managing a section of the supply network, thus making managing the chain easier for the service provider or customer. And, as more options to link customers with suppliers become available, so the complexity of the network increases. An example is how retail networks have moved from single-channel networks to what have become known as omni-channel networks, as both markets and technologies have developed.

How can service supply networks be managed on an ongoing basis? – The nature of how supply networks are configured can lead to very messy and complex relationships, with multiple ‘flows’ of physical products, information, intangible service and perspectives on what is important. Running supply networks is just as complex. An initial decision is the type of relationship to pursue with suppliers and customers. These can be positioned on a spectrum, with strictly contractual relationships (explicit and formal) at one end, and ‘partnership’ relationships that rely less on formal contractual mechanisms at the other. However, contractual and partnership relationships are not mutually exclusive – usually they coexist. It is the balance between the two ‘ingredients’ that will define any relationship. In service relationships, the role of partnership is likely to dominate for many relationships. Another issue in ongoing supply network management is how to cope with supply dynamics, the most significant of which is the ‘bullwhip’ effect. This is when a small disturbance at one end of the chain within a network causes increasingly large disturbances as it works its way towards the other end of the chain. It is a well-known effect in goods-based chains and there is evidence that it also occurs in service chains. Service-level agreements are forms of contracts agreed between a service supplier and the service purchaser or user. The three activities involved in managing SLAs are: setting a service specification, dealing with routine issues and the development of the relationship. Many SLAs do not realise their potential benefits.

Discussion questions and exercises



1. Reread the ‘Lunch delivery service of Mumbai’ case example. (a) What makes the dabbawala service so successful? (b) What do you see as the threats to the business as Indian society changes?
2. Reread the case example on dark kitchens. (a) Why did this change to the home delivery network happen? (b) What points would you make if you had to make a case against the changes in the delivery network?
3. Reread the case example ‘Vodafone brings back call-centre jobs’. What are the advantages and disadvantages of locating call centres in low-labour-cost areas?
4. Read the following statement by the chief service officer of an elevator maintenance company:

We found ourselves unable to compete against the really big elevator manufacturers, yet we were great at providing maintenance services. Also the margin on new elevator systems had gotten smaller, but servicing profits were holding up well. So I guess it was obvious; we sold our manufacturing business and focused on offering a subscription-based maintenance service. We aim to provide a real partnership-based service. We provide a single point of contact, who is an industry-leading expert, for every

customer. One of his or her jobs will be to teach our customers what is in their best interests in terms of how best to use the elevators so as to minimise our emergency call-outs. Of course, some customers will be better at this than others. I guess in the longer term we will have to decide what to do with the less compliant customers, especially if they seem to be taking advantage of our service guarantee. I hope to grow this service to double the number of clients we have at the moment. That should let us gather plenty of information on the performance of different elevator systems. And information is valuable.

Use the criteria listed in the chapter to decide if the chief service officer is describing a partnership relationship.

5. Being a supplier in the airline catering business is tough. Meals must be of a quality that is appropriate for the class and type of flight, yet the airlines who are their customers are always looking to keep costs as low as possible, menus must change frequently and respond promptly to customer feedback. Forecasting passenger numbers is difficult. Suppliers are advised of likely numbers for each flight several days in advance, but the actual minimum number of passengers is only fixed six hours before take-off. Also, flight arrivals can be delayed, upsetting work schedules – even when on time, no more than 40 minutes are allowed before the flight takes off again. Airline caterers usually produce food on, or near, airports, using their own staff. Catering companies' suppliers are also usually airline specialists who are located near the caterers. So it caused surprise in the industry when a consortium of Southern Foods, a leading food producer that normally supplies retailers with 'ready-meals', and DXX, a logistics company, won a large contract at Heathrow airport against the traditional suppliers. DXX was already a large supplier to 'airside' caterers there, with its own premises at the airport. Southern Foods made the food at its existing factories and delivered it to DXX, which assembled it onto airline catering trays and transferred them to the aircraft. (a) Why would an airline use a catering services company rather than organise its own on-board services? (b) What are the main operations objectives that a catering services company must achieve in order to satisfy its customers? (c) Why is it important for airlines to reduce turn-around time when an aircraft lands? (d) Why was the Southern Foods–DXX consortium a threat to more traditional catering companies?
6. Many retailers devise a policy on ethical sourcing, trying to stock items that conform to such things as workplace standards and business practices, health and safety conditions, human rights, legal systems,

child labour, disciplinary practices, wages and benefits, etc. Some suppliers have focused specifically on guaranteeing their sourcing integrity. One such is The North Face, part of the VF Corporation – a \$9 billion giant that dominates the leisurewear garment market. Named for the coldest, most unforgiving side of northern hemisphere mountains, its range of high-performance outdoor apparel, equipment and footwear has developed a reputation for durability, fashionable styling and, increasingly, sustainable sourcing of its materials. VF Corporation's claim is that it responsibly manages the industry's most efficient and complex supply chain, which spans multiple geographies, product categories and distribution channels. The North Face is keen to promote sustainable purchasing in its supply chain management. Its commitment to sustainability, it says, comes from a desire to protect the natural places associated with how and where its products are used and from its concern about the effects of climate change. As a sign of its determination to pursue sustainable purchasing, The North Face has partnered with the independent bluesign standard – a Swiss-based organisation that promotes maximum resource productivity with a view to environmental protection, health and safety – thus representing an assurance for manufacturers and retailers that today's quality criteria are fulfilled in the best possible way, and that applicable regulations and limits are complied with. (a) What do you think motivates a company to draw up a policy of this type? (b) What other issues would you include in such a supplier selection policy?

7. Everyone wants children to be safe, for society to identify those who are 'at risk' and for those 'in authority' to put processes in place to ensure that no child 'slips through the net'. The key challenge is that a large number of individuals and agencies are involved in this activity, each with a significant contribution to make. In most countries, heads of local governments' children's services are responsible for ensuring that safeguarding processes and procedures are adhered to. But the key to success is the cooperation from all the other agencies involved. Such commitment comes from a clear process, which sets out the stages and target times for the creation of a child protection plan for each case referred to children's services. These referrals can come from a number of sources, including schools, social services, the police and anonymous reports. Regular strategy meetings determine if a deeper investigation should be carried out by the police and/or by social services. What do you see as important in ensuring that such complex service networks operate effectively?

Case exercise

Holmart and Wersa – the food waste partnership¹⁵

This case was prepared by Dr Daniel Chicksand and Dr Dev Boojhawon of Birmingham University

Food waste is a hugely important issue, and we continue to make giant strides in keeping it to an absolute minimum across our entire value chain. This partnership is an important contribution towards continuing to make progress towards the United Nations targets. We're fully committed to working together with our suppliers and customers to ensure we hit our targets.

(Jenny Marchant, Sustainability Director of Holmart)

Introduction

Holmart was a medium-rank UK supermarket that was growing faster than most food retailers in its markets. Its reputation rested on a commitment to stocking high-quality produce and taking an ethical stance on several environmental issues, including the reduction in packaging and food waste. It had developed a set of 'sustainability plans' that emphasised its commitment to taking a long-term approach. One particularly important issue that had received significant media coverage was that of food waste. It was generally acknowledged within the UK food industry that all parties, including production, manufacture, retail, hospitality and food-service, needed to collaborate closely to prevent food surplus and waste being produced. Moreover, when it could not be used to feed people, food should then be diverted to animal feed or 'biomaterial processing' (for example, fuel conversion or composting).

The priority for retailers such as Holmart was, first, to reduce the volume of surplus food generated and, second, to donate any extra food to such institutions as food banks, soup kitchens and shelters. However, when food could no longer be consumed, alternatives to landfill or incineration had to be found. Because of this, a key part of Holmart's food waste strategy was to explore converting food waste into energy using anaerobic digestion (AD), the process by which organic matter such as animal or food waste is broken down to produce biogas and bio-fertiliser. The process happens in the absence of oxygen within a sealed, oxygen-free tank called an anaerobic digester; Figure 10.12 illustrates the process.¹⁶ AD was seen as a viable solution because not only did it help to achieve food waste reduction

targets, it also produced sustainable energy. Holmart therefore needed to find a technically competent partner who had the UK infrastructure, technical skills and supply network that was capable of receiving all of Holmart's food waste and converting it into energy through AD. The waste management company Wersa was chosen as an appropriate partner.

Wersa was a leading waste management company, based in the south of the UK, whose activities included waste collection, recycling, treatment and energy generation. Over a five-year period, it had reduced its landfill operations from over twenty to just three. Simultaneously, the UK government had implemented legislation to encourage recycling, including the imposition of a landfill tax.

They [the government] didn't introduce a very high rate of tax in one step. Instead, in the first year, the tax was £5/tonne, the second year it was £8. Eventually, the landfill tax reached £85/tonne. So, every tonne that you put into landfill, you've a tax of £85 that goes to the Government. In addition, you have a gate fee. This is the actual variable cost to take the waste and put it into the ground.

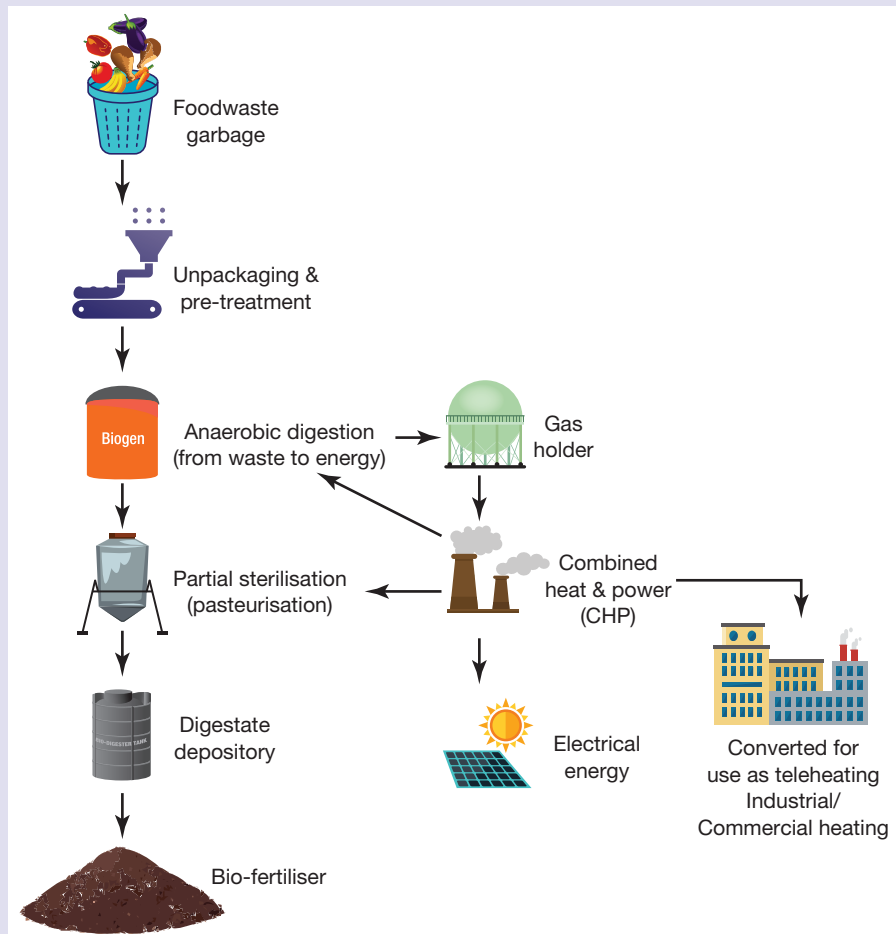
(Dr David Crawley, Director for Wersa's Didcot AD plant)

The investment decision

With taxation making landfill increasingly expensive, and potential customers such as Holmart committing to zero landfill waste, Wersa became interested in developing an AD plant to process food waste into energy. AD was an established technology, initially developed in the farm sector and used quite extensively in continental Europe. However, the costs of setting up a large-scale AD plant were high (in the region of £26 million). If Wersa did make the investment, there could be two revenue streams to support it; one being 'gate fees' for food waste entering the site; the other being the generation of electricity from the waste. However, one of the biggest challenges was securing the continued and reliable supply of suitable organic waste. Which is why the invitation from Holmart for Wersa to remove food waste was particularly attractive. Moreover, there was a large Holmart superstore located less than two kilometres from the proposed AD site.

Figure 10.12 The Biogen process

Source: Based on 'What is Anaerobic Digestion?', Biogen.



As detailed discussions started of how the Wersa-Holmart partnership would work, the idea of generating electricity from Holmart food waste and running an electricity cable from the AD facility directly to the superstore was proposed. It was an idea that excited both organisations. Also, Holmart committed to supply a regular supply of food waste per year that would amount to 55 per cent of the total that could be processed at the facility. The result was a three-year deal for Wersa to recycle all of Holmart's food waste at its AD facility – an agreement that the industry, media and environmental observers applauded as an example for 'closing the loop' on food recycling.

Making the partnership work

An immediate challenge for both companies was how to set up the food waste collection network.

For two months after the partnership agreement, the only Holmart food waste supply came from the Holmart store that was close to Wersa's AD facility, but for volume supply a more extensive network would be required. The solution was to adapt eight existing Wersa distribution centres (DCs) for food waste. The agreement was that Holmart would be responsible for sorting and delivering the food waste to the nearest Wersa DC and Wersa would ship it to its AD facility. As the collection network developed over a period of a year, all of Holmart's supermarkets in the UK started supplying their food waste to their nearest Wersa DC. However, as the efficiency of Wersa's AD facility increased, it became clear that all of Holmart's food waste could only supply around 60 per cent of Wersa's 'full capacity' needs. To fill its AD capacity, Wersa began collecting food waste from foodservice companies such as pubs, clubs, restaurants, and fish and chips shops.

Holmart did not have any objection to this expansion of Wersa's network. It understood the need to increase supply to the AD facility. However, it did cause some complications for Wersa. Instead of food waste being delivered to its DCs, as in the agreement with Holmart, most of the new customers required Wersa to collect food waste directly from the back of their premises. For these suppliers, Wersa ran a regular collection schedule. However, the increase in the number of smaller customers did make forecasting the supply of food waste more difficult. There had always been some seasonality in supply: at some periods, such as Easter, Halloween (pumpkins) and post-Christmas, the amount of waste increased and extra collections had to be deployed. Yet it was the unpredictable events that were more common with the smaller customers that started to significantly affect waste availability. For example, food waste could significantly increase because of a customer's refrigerator breaking down, a water leak flooding a store, which spoils stocks of food, or poor weather hitting sales in BBQ food. This required Wersa to organise additional collections, often at short notice.

When the food waste was received at Wersa's DCs, it was 'initially sorted' before being shipped to the AD facility. This initial sorting was important because the quality of the organic material going into the AD affected its efficiency. Digesters are driven by microbiology in a similar way to a human stomach. Underfeeding or overfeeding, or ingesting the wrong types of organic material, can cause the biology to go wrong (like a human being getting sick), which affects the effectiveness of the process. It was critical to remove contaminants such as paper, card, plastics and glass from the collected food waste. The amount of pre-sorting varied between customers and, with Holmart, between stores. Some were significantly better than others.

Because the initial Holmart store and the Wersa AD facility were geographically close, the two companies felt more could be done to demonstrate the success of the partnership. The decision was made to install a dedicated 1.5 km cable linking the power plant to the superstore. This provided a direct supply of renewable electricity produced from the AD process. It was seen as a landmark achievement of the partnership, meaning that the local Holmart store could use its own renewable energy produced by its own food waste to satisfy all its energy needs. And although it involved a significant investment for the installation of power cables, switchgear and legal fees, Holmart estimated that it would pay for itself within two years in reduced energy costs. The

power link represented a small, but pioneering contribution to decarbonising the electricity grid and ensuring that the store would receive a guaranteed low-cost and sustainable supply of ongoing renewable energy in the long run.

How did the partnership develop?

For Wersa, investing in and developing the technology around AD was at the heart of the partnership. The biogas it produced was used to produce heat or to fuel its own electricity generators, with any excess fed into the national grid or used as vehicle fuel. Yet, both Wersa and Holmart were keen to move away from a traditional, purely commercial-type relationship.

Of course, the arrangement has to make commercial sense, but we were always hoping for more than that. We saw ourselves as pioneers in food waste management. We wanted to develop a relationship that would help us become not only the most efficient and cost effective, but also the most sustainable, in the business. That is why, from the very start of the partnership, we tried to integrate our [Wersa] operations with theirs [Holmart] to a far greater extent than we had previously with other customers. For example, instead of us having just one account manager in touch with each Holmart store, as was normal, our engineers, operations and distribution managers coordinated the sourcing and delivery of food waste together. And, as well as on-the-ground cooperation, there was also considerable work done at a strategic level to align Holmart's sustainability plan with our service offering.

(Dr David Crawley)

Nevertheless, some problems remained. A key issue for Wersa was the variable quality of food waste that it was receiving, including from Holmart. Although processes had been put in place to encourage the careful segregation of food from other types of waste, too often food waste was received containing contaminants such as paper, card, textiles, and even knives and chopping boards. If not removed, these could negatively impact the microbiology of the AD process. In order to prevent this, Wersa engineers visited some of the stores and advised the store managers and the staff on how to segregate food and educated them as to why it was important.

We provided store managers with feedback but we still had problems. Once, when we had a problem with chopping boards being put in with food

waste, a joint investigation isolated the source down to one person in a specific Holmart store. For whatever reason, the training and education of staff with regard to food waste just wasn't happening. There were also noticeable peaks in contamination around holiday periods such as Christmas, when Holmart employed temporary staff. The problem was only solved when we started embedding our own specialists in Holmart. It was an expensive solution because we picked up the bill, but it was mutually beneficial to the partnership.

(Dr David Crawley)

Ongoing issues and future challenges

Although the partnership was generally agreed to have been successful, there were a number of issues that both companies recognised would need addressing in the future:

- As part of Holmart's overall drive to decrease food waster, it had been reducing the amount of food that went to AD. Although this was regarded as a positive trend, reducing overall food waste for Holmart, it was an operational concern for Wersa, as it required certainty of supply to support such a large-scale AD facility.
- An important part of the management of AD is to ensure it meets regulatory standards. Odour is one issue. It can be reduced using sealed doors and compartments and by biofilter processes, but there is always the potential for leaks. Other potential hazards include emissions to water, noise and vermin. The risk of reputational damage is a particular concern for Wersa, as is the

cost of meeting any possible new regulatory pressures.

- Maintaining and developing a suitably skilled workforce is an industry-wide problem for AD operations. As the technology develops and the number of AD plants increases, the shortage of AD operators with appropriate skills could get worse.
- The location of future AD plants was already under discussion at Wersa. The dilemma was that, ideally, AD plants should be positioned close to places where people live, in order to minimise the cost of transporting food waste. However, public concerns have been raised about the smell and pollution risks from AD plants.

The future of the Holmart-Wersa relationship was under active discussion in both companies, and while both were broadly happy with the way it had developed, Wersa had more concerns about the future.

It sometimes feels as if we are taking all the risks here. Waste management is our life. To Holmart, it is an important, yet secondary, issue. I sometimes wonder if it is possible to have a true partnership under such unbalanced circumstances.'

(Dr David Crawley)

Questions

1. Why was the partnership between Wersa and Holmart seen as successful by both parties?
2. Is the partnership really 'unbalanced' as David Crawley says?
3. What should Wersa do to ensure the future viability of the partnership?

Further reading



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Notes



- 1 The term supply chain management is generally supposed to have been first used by Keith Oliver, a consultant at Booz Allen Hamilton, in an interview for the *Financial Times* in 1982.
- 2 For further details of the origin of this concept, see Moore, J. F. (1993) 'Predators and prey: a new ecology of competition', *Harvard Business Review*, May–June
- 3 Sampson, S.E. (2012) 'Visualizing service operations', *Journal of Service Research*, 15 (2), 182–198
- 4 The information on which this example is based is taken from Gross, L. (2019) 'Forget Uber Eats: Mumbai's 125-year-old food delivery system wins the day', *Adventure.com*, 12 March [online] <https://adventure.com/dabbawalas-mumbai-india/>
- 5 The information on which this example is based was taken from Flinders, K. (2017) 'Investment industry to spend \$2.8bn on AI by 2021, expected to cut quarter of a million jobs', *Computer Weekly* [online] <https://www.computerweekly.com/news/450414475/Investment-industry-to-spend-28bn-on-AI-by-2021-expected-to-cut-quarter-of-a-million-jobs> [accessed 20 April 2020]
- 6 The information on which this example is based is taken from Hayward, T. (2019) "'Dark kitchens' spell trouble for the restaurant trade", *Financial Times*, 29 March
- 7 See, for example Armistead, C.G. and Clark, G.R. (1992) *Customer Service and Support*, Financial Times/Pitman Publishing, London
- 8 For example, see the evidence presented in Akkermans, H. and Voss, C. (2013) 'The service bullwhip effect', *International Journal of Operations & Production Management*, 33 (6), 765–788
- 9 Anderson, E.G., Morrice, D.J. and Lundeen, G. (2005) 'The "physics" of capacity and backlog management in service and custom manufacturing supply chains', *System Dynamics Review*, 21 (3), 217–247
- 10 The information on which this example is based is taken from: Hirst, A. and Penny, L. (2018) 'Marketing's flexible future: why working in new ways is vital', *Campaign*, 26 March; Younger, J. (2019) 'The Hoxby Collective: putting heart and soul into the freelance revolution', *Forbes*, 1 June; and The Hoxby Collective website www.hoxby.com [accessed 20 April 2020]
- 11 Croom, S. and Johnston, R. (2003) 'E-service: enhancing internal customer service through e-procurement', *International Journal of Service Industry Management*, 14 (5), 539–555
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- 13 Croom, S. (2000) 'The impact of web-based procurement on the management of operating resources supply', *Journal of Supply Chain Management*, 36 (4), 4–13
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- 15 Dr Dan Chicksand and Dr Dev Boojihawon of Birmingham University, UK prepared this case. It is written to promote class discussion, and does not necessarily illustrate either good or bad management practice. It was first published in Slack, N. and Lewis, M.A. (2020) *Operations Strategy*, 6th edition, Pearson, Harlow.
- 16 The information on which this example is based is taken from <http://www.biogen.co.uk/Anaerobic-Digestion/What-is-Anaerobic-Digestion> [accessed 20 April 2020]

Chapter 11

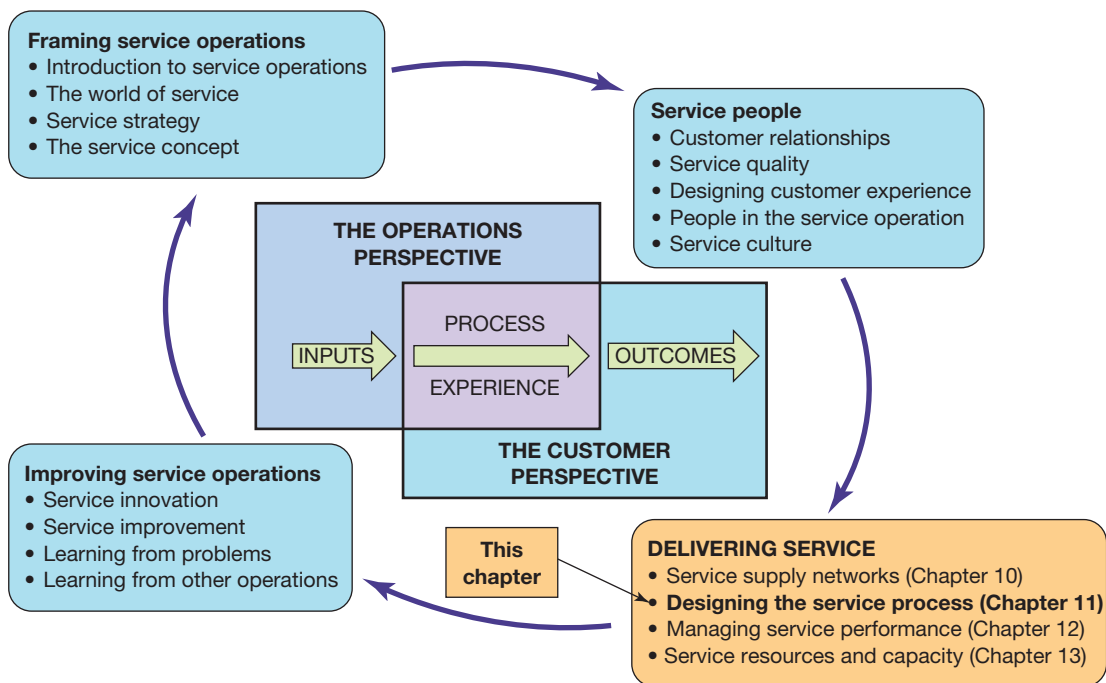
Designing the service process



In Chapter 7 we looked at service processes from the perspective of customer experience. Here we look at service process design primarily from the operations perspective. This includes examining the main types of service process, looking at how the details of service processes can be 'engineered', how processes can be repositioned in terms of their volume and variety, and how service process technology can impact on processes. Figure 11.1 shows where this topic fits in our model of service operations management.

Learning objectives

- To be able to explain why service process design is important
- To define the main types of service process
- To be able to explain how managers can 'engineer' service processes
- To understand how service processes can be repositioned
- To understand the impact of technology on service process design

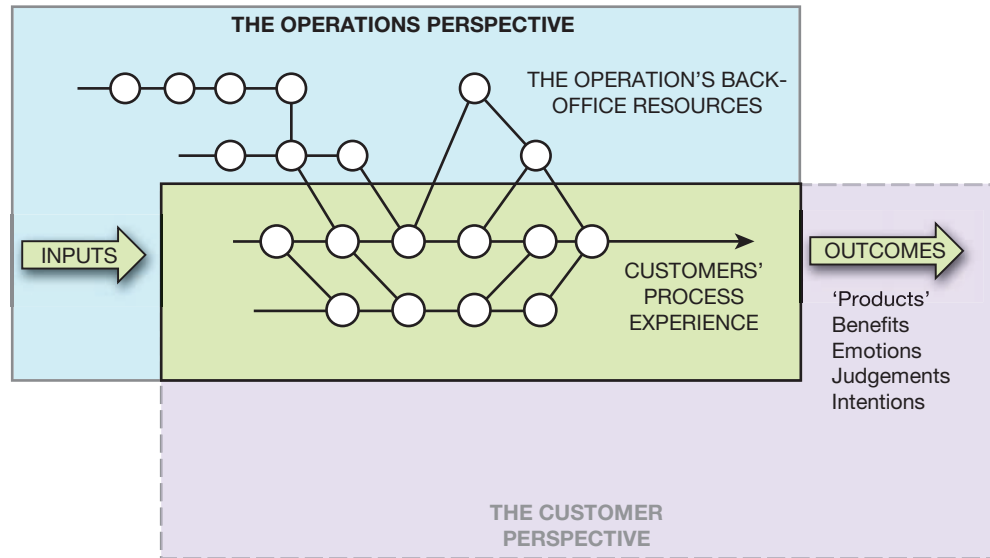
Figure 11.1 This chapter looks at designing service processes

Introduction

Service processes are where the operations and customer perspectives meet. In Chapter 7 we discussed process design from the customer perspective. This involved designing their experience of the service provided. In this chapter we will look at the design of the service process from the operations perspective (see Figure 11.2). There will be more of a focus on how the operation can provide service efficiently. However, that is not to say that delivering an appropriate customer experience is ignored. Service processes have to be designed to be both efficient and deliver the right experience, as required by the service concept. We will also look at the design of non-visible, back-office processes and the role of technology in service process design.

Processes are the building blocks of all operations. What is different about processes in the ‘front office’ of service operations is the intimate nature of the operation’s contact with its customers. So, not only do these processes have to be efficient, they must achieve efficiency while being (at least partly) visible to the customers. They must be efficient without distracting from what customers find acceptable. Which is why designing and then controlling service processes is not easy. Processes are as varied as the service organisations of which they are a part. Some are extremely flexible – able to meet a wide variety of customer requirements using the same set of resources. Management consultants, for example, are able to utilise a wide range of approaches in developing customised solutions for their clients. Other processes, such as many contact-centre operations, are far more closely defined in order to achieve benefits of consistency and efficiency. In a similar manner, some processes depend a great deal on the skill, knowledge and expertise of individual employees, such as medical doctors in general practice, while other processes employ resources such as technology or information systems to reduce the dependence on individual skills – thus enabling the service organisation to deal with greater volumes and to grow geographically.

Figure 11.2 Service processes can be viewed from both the operations and customer perspectives; in this chapter, we look at service process design from the operations perspective



11.1 What is service process design?

Process design, whether for contact centres, doctors, social workers or management consultants, describes and prescribes the procedures to be followed and how staff will use or interact with other resources such as materials or equipment in order to deliver the service concept. Take the example of a contact centre answering customer queries. Contact-centre agents in a telephone bank are given clear guidance as to how to speak to the customer, what questions to ask and what performance standards are expected. The agents also have access to screens on their computers to prompt them to ask particular questions or to help them answer routine enquiries. Finally, the information system will guide the agents through the customer data requirements to be filled in during or immediately after the call.

How individual processes are linked together to form networks is also important. Processes link together to form an 'internal process network' through which material, or information, or people, are 'processed' to provide the service concept. In the telephone bank, the service is not simply that delivered by the agent but also involves loan application processes, credit card issuing processes, international funds transfer processes and so on. The whole interrelated chain of processes needs to be carefully designed, managed and controlled to deliver value to customers and to the organisation. Unfortunately, many large organisations have such a complex web of processes, both functionally and regionally based, that coordination across processes seems to be an almost impossible task.

Resources and processes

First, a reminder from Chapter 1. The purpose of service operations management is to add value for all stakeholders. It does this by managing two vital ingredients of any business – resources and processes. Resources are the assets the operation has. Processes are what the operation does – in other words, how it uses its resources. But resources and processes are not physically separate; they are simply a way of thinking about what goes on in your operation. Moreover, resources and

Counterpoint

There is a tendency for some people to react against the very idea of ‘process’. Some even believe that trying to characterise activities as ‘processes’ depersonalises or takes the ‘humanity’ out of the way in which we think of the organisation. This point is often raised in not-for-profit organisations, especially by ‘professional’ staff. For example, the head of one European ‘medical association’ (a doctors’ trade union) criticised hospital authorities for expecting a ‘sausage factory

service based on productivity targets’. No matter how similar they appear on paper, it is argued, a hospital can never be viewed in the same way as a factory. Even in commercial businesses, professionals, such as creative staff, often express discomfort at their expertise being described as a ‘process’. Yet, process designers might counter that this is to misunderstand what is meant by ‘process’ (see our description of what we mean by ‘process’).

processes impact on each other. They can be both mutually supportive and mutually limiting. Choosing the right resources is obviously important for service processes. Without enough well-trained and motivated staff, appropriate technology and suitable buildings and facilities, processes cannot operate effectively. Resources set the limits for what your processes can and can’t do. They will not add any value if they are not used effectively. Just as important, the experience gained over time by operating processes can add to the capability of resources. Processes should not simply ‘do what they do’ without learning from what they do. Processes are the best source of learning that service operations managers have. This idea is essentially the same as what we described as the ‘bottom-up’ perspective of service operations strategy in Chapter 3.

Processes

At its simplest, a ‘process’ is how you do things, how you perform activities. A process is simply a framework, around which you can think about who should do what, and when. Even if your ‘process’ is to relax in an armchair and wait for inspiration to strike, it is still a process. Processes are not necessarily formal, highly constrained or detailed – though they might be. Some processes need to be meticulously defined, with every activity tightly controlled and double-checked. For example, the ‘sitting-in-an-armchair’ approach doesn’t work for airline pilots performing their pre-flight checks: that kind of process must be both detailed and defined. But not all processes need be. The point is that processes need to be designed to fit with what they are supposed to achieve.

Service processes

Once more, the interesting question is ‘what is distinctive about service processes?’. And, yet again, we need to return to the IHIP characteristics to answer it. The implications of these characteristics are illustrated in Table 11.1. But, again recalling the points we made in Chapter 1, it is best to think of these characteristics as spectra rather than absolute characteristics of all services. Services vary in the extent that they exhibit these characteristics. Some services, and therefore also the design of their processes, will not exhibit these characteristics. For example, an internal (back-office) process that checks and approves expense claims deals with online submissions, follows strict guidelines on what is allowed, needs relatively little discretion, will rarely (if ever) see its customers, and can keep submissions in the inbox until there is time to process them. None of the IHIP characteristics apply to any great extent. The process can be designed in the same way as any manufacturing process. By contrast, management consultants can define their service only in the most general terms, must deal with an almost infinite variety of situations, will be very careful to manage how clients perceive them, and usually work on an assignment-by-assignment basis (while trying their best to persuade clients to commission another assignment).

Table 11.1 Implications of the IHIP characteristics on process design

Service characteristic	What does this mean?	Implications for process design
Intangibility	Processes often have to deal with non-physical items	Need to set boundaries for what the process should and should not do
Heterogeneity	Processes can find it difficult to standardise	Need to built in some degree of discretion to cope with unforeseen circumstances
Inseparability	Production and consumption are often simultaneous	The presence of customers (or their surrogates) in the process can mean that it is not just <i>what</i> is done in the process that is important, but also <i>how</i> the customer perceives it is done
Perishability	Whatever is being processed cannot be stored	Extra capacity may need to be built-in to the process to cope with short-term high demand without making customers wait too long

Why is service process design important?

Rather as DNA provides the pattern for a living organism, a good process ensures that a service is delivered consistently time after time, and creates the desired experience and outcomes for the customer, thus delivering the service concept. Excellent service – that which satisfies or delights the customer while meeting the strategic intentions of the organisation – is not accidental, it is usually the result of careful design and delivery of all its back- and front-office interrelated processes. These processes not only ‘process’ customers to create the customer experience, but they also process materials, information and even staff. Many service processes are therefore quite complex, involving many interrelated processes, departments, people, decisions and activities.

Although the service process is only one element of the service operation, it is the ‘glue’ that holds the rest – the customers, staff, equipment and materials – together. And it is the mechanism that delivers the service concept, creating the customer’s experience and delivering the service outcomes. However, it is important to note that when we are talking about processes we are not simply referring to the point where the customer receives the service. Service providers that consistently meet both cost and quality targets know that they must manage the chain of processes from start to finish (often designated end-to-end, or e2e, processes), rather than simply the final stage of delivery to customers. It is also crucial to remember that services frequently fail because they have been inadequately designed and executed.

Broken processes

Poorly designed processes are more likely to go wrong, or appear to get in the way of effectively performing a task. Such processes are often referred to as ‘broken processes’. Broken processes don’t do what they are supposed to do. Most of us have been the victims of them: a bank fails to stop a direct debit, or someone in human resources fails to authorise a new appointment, or a supplier supplies the wrong information. Poorly designed processes are both frustrating and inefficient. They are also frequently wasteful because they distract from what is really important. Broken processes might be minor and the frustration relatively small compared with the really big challenges in life, but they add up to a constant, debilitating irritation. Moreover, broken processes destroy the stability that should be the foundation of improvement. They represent a waste of time and effort that are paid for one way or another. Of course, such processes can be repaired, but to do this one must first have the skills to redesign them, which is the subject of this chapter.

11.2 What are the main types of service process?

One type of service process does not fit all purposes. It is a mistake to take the same approach to designing them irrespective of their purpose. Therefore, some way to distinguish between different types of process is needed. There are many ways of doing this, some of which are more useful than others. Here we will focus on three methods of distinguishing between service processes:

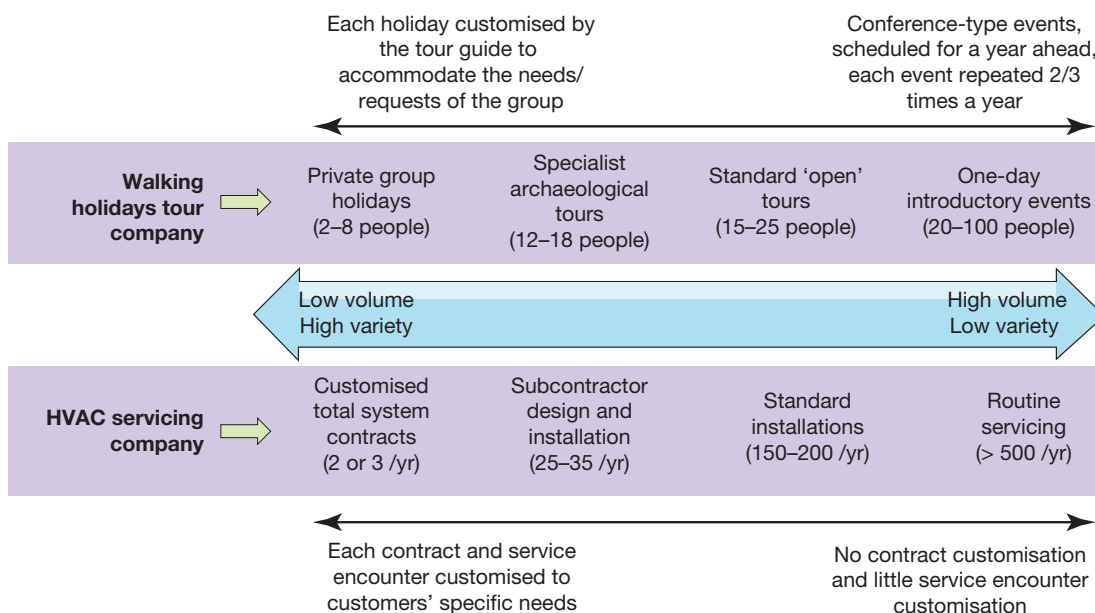
- The volume of services that have to be processed.
- The variety of different services that have to be processed.
- The degree to which the process requires customer involvement.

Service volume

Different processes provide us with different benefits, and also different challenges. From an operations perspective we tend to be less concerned with the type of organisation or the sector in which we are working, or the 'technical' nature of what a process does, and more concerned with the types of processes we are managing. And one of the most common approaches to classifying processes is by the volume of services that they deliver. High-volume services may be worth automating; low-volume services, not. High-volume services can benefit from specialised staff roles, while low-volume services usually require a more flexible skill set. High-volume services can spread fixed costs over a large number of customers, low-volume services are usually more expensive. Service processes with different volume positions are likely to need to be configured in different ways, and will need different types of resources. Figure 11.3 shows examples of services from two businesses, one B2B and one C2C, with different offerings that have different volume positions.

These examples also illustrate how the volume and variety of services processed are often related. Low-volume processes usually have a high variety of services to deal with, and high-volume processes usually have a far narrower variety. It is not always the case, but it generally holds true. This has important implications for process design. Processes with low volume and high variety

Figure 11.3 Examples of processes in two businesses that have different volume positions



often need to be flexible in order to respond to a wide range of special customer requirements. On the other hand, processes suited to delivering high-volume, low-cost services are usually not very flexible. A simple example drawn from the hotel industry illustrates the differences:

- A five-star hotel prides itself on providing a wide range of services for its guests. Staff at the reception desk are prepared to spend time dealing with each customer's request, and endeavour to answer every question. As a result, each transaction is quite lengthy and the hotel employs extra staff to ensure that the highest levels of service are achieved at all times for guests, who are paying premium prices.
- A budget hotel provides basic, reasonably comfortable accommodation for travellers normally staying for one or two nights. In this case, reception processes are designed to carry out only the basic check-in and payment activities as quickly as possible. Guests are not encouraged to request extra services and the number of receptionists is maintained at the minimum level to keep costs low.

Service variety

Processes can differ in the variety of tasks that they are required to perform. Usually, individual service operations have processes that each have to cope with different degrees of variety. For example, take a vehicle servicing operation. Superficially, it might be seen to have one end-to-end process, which includes sub-processes or tasks, such as customer greeting and discussion of the job to be done, initial diagnosis, parts procurement, vehicle service, customer billing and vehicle return. Yet, through this one process may flow a variety of types of jobs: some may be routine, such as a 10,000 kilometre oil change; others may be less routine but still involve standard activities, such as a gearbox repair; others may be non-standard activities that happen infrequently and can be more difficult to predict how long or how many resources they will require, such as an intermittent electrical fault. The first step in designing and managing service processes is to understand the mix of what are sometimes called 'runners', 'repeaters' and 'strangers',¹ which the process has to deal with.

Runners

Runners are standard activities predominantly found in high-volume operations, such as the request for the balance of a bank account made to a telephone call centre. From an operations point of view, runners:

- are often relatively predictable, allowing the operations manager to match resources to forecast demand with reasonable accuracy;
- lend themselves to efficient operations through tight process control or automation.

Repeaters

Repeaters are also standard activities, possibly more complex than runners, but which occur less frequently. Repeaters may be created by default rather than by design, when an organisation significantly expands the range of services it offers. This may mean that processes that were designed to handle relatively few standard activities must now deal with much greater variety. Banks have experienced this problem, having moved from providing one or two standard deposit or chequing accounts to offering 'personalised financial packages'. As a result:

- Repeaters often absorb more resource than an equivalent runner because lower volumes cannot justify process automation.
- There may be some degree of relearning or readjustment of a process required for each reoccurrence of the repeater activity if the previous occurrence was some time in the past.

Strangers

Strangers are non-standard activities, perhaps associated with a one-off project or activity. New service introduction may give rise to stranger activities in the first instance, which usually will migrate to repeaters or runners as service volumes increase. Strangers are the least efficient and indeed the most difficult processes for operations managers to deal with because:

- it may be more difficult to forecast demand;
- the resources required to deal with demand may be less certain;
- they are least-well-defined in terms of resource requirements.

However, an organisation that is used to dealing with strangers will be far more flexible and adaptable than one that is used to dealing with repeaters or runners.

Managing runners, repeaters and strangers

Table 11.2 gives some examples of these three types of activities in three different organisations. The problem is that all three can, and sometimes do, exist within the same organisation, such as the example of the vehicle servicing shop described earlier.

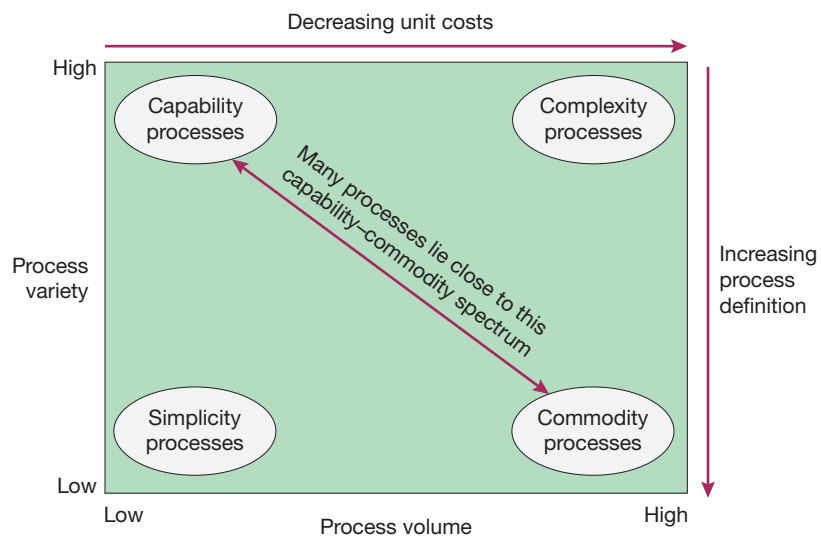
Importantly, the relative mix of these activities will suggest the most appropriate type of service process. In addition, the type of service process may limit or restrict the variety of activities that can be carried out. A vehicle service shop that accepts a wide range of jobs will need to have a more flexible process than one that focuses exclusively on performing oil changes. It will also need more flexible and skilled mechanics and will not have as high a throughput of vehicles. The oil change specialist may have a high throughput, will need less-skilled mechanics but will also need to turn away the potentially higher-margin jobs that are outside its area of competence.

Combining volume and variety

As we mentioned earlier, volume and variety are often (inversely) related – but not always. Considering volume and variety together allows us to think in more detail about the differences between the extremes of high volume/low variety and low volume/high variety – what we will call ‘capability’ and ‘commodity’ processes. Figure 11.4 illustrates the volume–variety matrix that shows the two extremes of ‘capability’ and ‘commodity’ processes. It also shows processes that do not lie on this spectrum.

Table 11.2 Runners, repeaters and strangers

Service	Runners	Repeaters	Strangers
Vehicle service	Standard oil change and maintenance Gearbox repair Replacement of brake pads, etc.	Body panel replacement	Intermittent electrical fault Product recall
International airline	Passenger check-in Baggage handling In-flight service Maintenance Scheduling	Aircraft overdue or replacement required ‘Serious’ customer complaints	Special charter for VIPs
Hospital	Patient records Standard operations Recovery and rehabilitation Domestic services	Surgery with ‘complications’ Dealing with difficult or distraught patients and relatives	New surgical procedures

Figure 11.4 The volume–variety matrix

Capability processes (low volume and high variety)

Processes that lie in the top left-hand corner of the volume–variety matrix (Figure 11.4) are typically focused on providing a capability for their customers or users, rather than a ‘pre-prepared’ service. As such, they do not have the clarity of service concept that characterises high-volume consumer services, but they have far more flexibility to change service outcomes, customer experience and service delivery processes. These processes are more suited to managing strangers than runners, and probably need relatively little definition because each task is potentially significantly different from its predecessor. For example, the reception activity in the five-star hotel, mentioned previously, is probably closer to this position, rather than the commodity position of the budget hotel. The service concept is likely to be far less defined than mass services such as a fast-food chain and the ‘have-a-nice-day’ service that goes with it. In fact, many customers will be buying the ability of the service organisation to work with them to clarify the need or problem to be solved and then to develop a customised solution. Some professional service providers, such as consultants, will work in this way, although larger global professional service firms often adopt a relatively standardised way of working, implementing pre-packaged solutions, which places them closer to the bottom-right corner of Figure 11.4.

Other examples of this type of service include:

- Traditional professional services, such as lawyers or accountants, particularly in those small firms that deal with a wide variety of work for their clients.
- Companies that sell their creative ability, such as advertising agencies, software developers and engineering design consultants.
- Organisations that adapt their capabilities to satisfy a wide range of customer needs, such as consultants, counsellors and management development providers.

A key task for all these organisations is to ensure that they maintain their skill base. The firm of lawyers must ensure that it retains its capability to deal with employment or patent law, just as the business school must employ professors of the major management disciplines. A number of attributes generally apply to this type of service operation:

- The service concept is based on the provision of a particular skill set or knowledge base.
- This capability frequently resides with specific individuals, and may be lost to the organisation when the individual leaves.

- Few processes are documented in great detail, partly because there is no consistency in types of activity performed, and partly because the individual service providers may resist what appears like an attempt to impose controls on their autonomy.
- There is little consistency in approach to tasks. Similar tasks may follow different routes through the organisation, at times dictated by the whims of certain individuals in the organisation.
- Research and development is centred on the individual's capability to deal with a wider range of customer requirements.
- Many professional services are in this category, moving further down the diagonal towards commodity as volume and standardisation increase.
- Such processes tend to be service partnerships or service projects.
- Strangers and repeaters dominate activities, with few runners except in support functions.

Managers of capability operations must be good at assessing the impact of an additional task on an existing workload. So, for example, a firm of management consultants must be able to negotiate with a new client as to when a new assignment can be carried out without adversely affecting existing assignments. This is a major issue because the firm's real capacity will alter rapidly as assignments call for differing areas of expertise. This is complicated still further by the fact that the level and nature of expertise may not be fully understood at the point where contracts are signed.

Commodity processes (high volume and low variety)

At the other end of the spectrum from 'capability' processes, we find high-volume and low-variety 'commodity' processes. These are ideal for runners, such as high-volume consumer services like fast-food restaurants, general insurance providers and specialist retailers. Processes here are clearly defined, leaving little room for individual customisation. Many consumer services employ these types of processes, having benefits of consistency as well as economy. Other examples include many contact centre processes and retail activities. We have termed these 'commodity' processes because there is little differentiation between services. They do, however, have the benefit of delivering a clear service concept: a customer knows exactly what product and service to expect when purchasing a Big Mac from McDonald's.

The service concept for these organisations is, of necessity, clear and relatively rigid. This particularly applies when service must be delivered across several service locations, by a wide variety of service employees. Whereas capability operations offer 'solutions' to their customers, commodity operations are much clearer in their definition and marketing of the service concept. They will tend to compete on their ability to provide consistent operational quality at a competitive price. One of the most significant service dimensions will frequently relate to the availability of service, through the absence of physical queues or through rapid telephone response. Examples of these service operations include:

- Multi-site services, such as restaurant chains, supermarkets or online retail operations.
- Centralised communication-based services, such as 'direct' insurance and telephone banking.
- Equipment repair services based on simple replacement processes, such as car tyre and exhaust centres, domestic appliance repairs or computer services.

In these mass services, the service concept is translated into a series of tightly controlled processes, with little opportunity for deviation from standard activities. Customer-facing employees are often relatively junior staff, and sometimes poorly paid. The capacity of such operations is generally well defined, with an emphasis on developing flexibility to deal with rapid changes in demand.

Central tasks for the majority of these operations include:

- Maintaining consistency of service delivery to ensure that customer expectations are met across all encounters.
- Managing standard service in such a way that individual customers still feel that they are not just a number.
- Providing an appropriate level of service and managing resource productivity to tight targets.
- Providing focused training, often of a few days' or weeks' duration, for its customer-facing staff, as compared with several years' professional training for key staff in capability operations.

By contrast to capability operations, the central task of managers in commodity operations is to create a planned environment where the various activities of its constituent parts can be carried out as efficiently and consistently as possible. Managing the fast-food restaurant supply chain requires forecasts and schedules to be given to all suppliers in a timely fashion, with as few last-minute changes as possible. Thus, capability managers may strive to get better at reacting to changes, whereas commodity managers strive to get better at reducing unforeseen variances to plan. This is important to note, as we discuss later in this chapter the challenge of moving along the capability–commodity spectrum. It may be possible to change the process design, but it is certainly harder to change the behaviour of process managers. Table 11.3 summarises the main differences between capability and commodity processes.

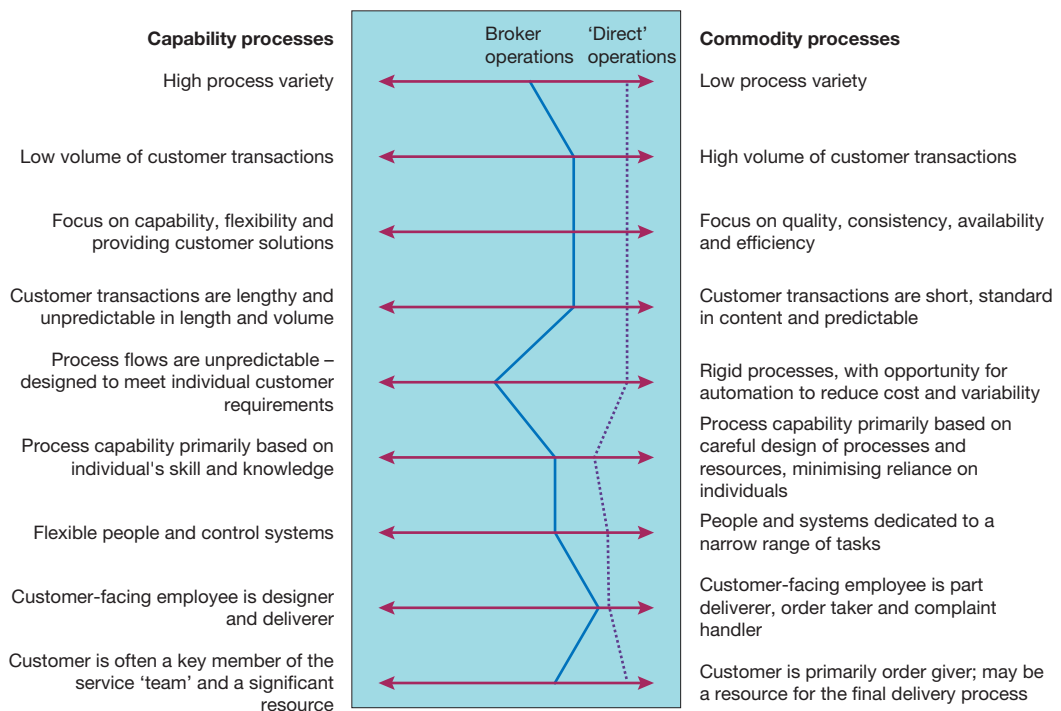
Profiling processes

It is important to remember that the capability–commodity diagonal is a spectrum. Processes can lie between the two extremes. In fact, it can be useful to chart where different processes are on the spectrum. Figure 11.5 summarises key points from the preceding discussion in the form of a chart (sometimes called a capability–commodity profile) to assist operations managers to locate their existing processes on the capability–commodity spectrum and to determine whether action needs to be taken to make appropriate adjustments. It illustrates the profile for a motor insurance provider, showing the difference between its direct operation (providing policies to individual users) and its support for insurance ‘brokers’ who sell both their and other companies’ insurance products.

Use of this profiling approach identifies the potential mismatches to be addressed by service managers. These frequently arise because the service task has changed, whereas the delivery processes have not evolved to meet the new requirements adequately. For the insurance company in Figure 11.5, a shift from broker operations to direct operations may well mean that the processes are more flexible than necessary and some staff may be overqualified for their new duties. This move would almost certainly mean a significant change in management style and, of course, a change in

Table 11.3 Capability versus commodity processes

	Capability	Commodity
Examples	Luxury hotel Management guru Corporate lawyer Builder of architect-designed luxury homes Aviation insurance broker	Budget hotel chain Software package training provider House conveyancer Garden shed erector Motor insurance provider
Process style	Flexible processes allowing for wide range of experiences and outcomes	Relatively rigid processes focused on narrow range of experiences and outcomes
Service offer	Ability to diagnose customer needs and to develop a customised solution	Ability to provide an economical and consistent service to meet the needs of many customers
What do they do well?	Flexible, innovative and responsive to individual customer needs	Low-cost, with consistent quality and often rapid response
Major challenges	Coordinating the response of individual employees Maintaining differentiated competencies to justify premium prices Managing productivity Making best use of highly skilled and knowledgeable individuals	Delivering consistently across multi-sites and many providers Employee morale and ownership of process and customer Managing innovation Managing large numbers of staff and customers

Figure 11.5 A capability–commodity profile for two motor insurance processes

the priorities among the key performance indicators utilised. The direct operation would probably concentrate on fast response and low cost, while broker operations would place more emphasis on flexibility and personal service.

It should be understood that using the volume–variety matrix or the capability–commodity profile to compare and contrast processes in totally different service sectors is of limited value. It is almost meaningless to compare a small firm of corporate lawyers (capability) with a restaurant chain (commodity). However, it can be very helpful when comparing different process types within the same sector.

Case example

Shouldice Hospital changes its position on the spectrum²

Shouldice Hospital is a Canadian hernia treatment hospital that has moved what used to be a 'capability' process to being closer to a 'commodity' one. At one time, hernia operations were seen as difficult and complex procedures. Now they are far more of a standard procedure, thanks partly to the Shouldice Hospital. Its approach to hernia

treatment started when Dr Earle Shouldice, the founder, found that encouraging post-operative activity could make recovery times shorter and more predictable. Together with colleagues, he developed a standardised surgical procedure, called the 'Shouldice method', that all its surgeons follow strictly. Pre-surgery, Shouldice sends surveys to

its patients asking for information that helps ensure that the patients are good candidates for the treatment Shouldice offers (this further helps reduce variability in process time). Shouldice requires patients to be at an acceptable weight appropriate to their height. Prospective patients who are overweight must lose weight. Patients enter the hospital the day before surgery and are given a briefing about the procedures to be followed the next day. The night before the operation is also intended as an opportunity for patients to get to know each other – Shouldice encourages patients to work together to promote recovery. The hospital schedules the surgeries in such a way that variability in the arrivals of customers is virtually nonexistent. This means that Shouldice can operate in a routine and regular manner and it can keep nearly all its beds full without creating customer waits. The procedure most commonly used at Shouldice involves sewing muscle layers together in an overlapping manner – a technique that is said to be particularly reliable. After discharge, Shouldice sends out an email newsletter to



HUMBERT/BSIP/Alamy Stock Photo

all of its patients that includes a questionnaire for Shouldice's post-operative follow-up programme, which shows that fewer than 1 per cent of patients have a recurrence after hernia repair. This focused approach has now been replicated across the world and extends to similar surgical procedures. In this case, the move from capability towards commodity does not deskil the surgeon, but it does mean that surgeons may become increasingly specialised and less able to revert to more general surgery.

Off-diagonal processes

While many, if not most, processes lie somewhere on the capability–commodity diagonal, not all do. In Figure 11.4 we identified two ‘off-diagonal’ positions – ‘simplicity’ and ‘complexity’.

Complexity (high volume and high variety).

Processes in the top right-hand corner of Figure 11.4 are attempting to provide high-volume services that are capable of great flexibility. At first sight, this position might seem to be the ideal – providing maximum flexibility for as many customers as possible. In reality, however, providing flexibility for large numbers of customers is invariably expensive, achieved by employing large numbers of highly skilled people and/or high-tech equipment. Processes in this area, sometimes referred to as ‘mass customisation’,³ attempt to provide the customer with whatever they want, however they want it and wherever they want it, at an affordable price. One example of this is internet banking, which, although not providing the complete range of banking services, provides a wide range of services, 24 hours a day, every day of the year, accessible from any computer or mobile device and at little cost.

One of the challenges for service operations managers is to ensure that the type of process is appropriate to deliver the service concept. As service concepts change and evolve, existing processes

may become less appropriate for the task in hand. Effective managers will recognise this and proactively develop new process designs to meet the future requirements.

Simplicity (low volume and low variety).

These include small operations such as microbreweries, and small and specialist consultancies. Some larger organisations may also develop ‘simple’ operations as start-up services, which then may grow in terms of volume or variety, or both. The issue here is that the operation is unlikely to be operating as efficiently as it might because it has low volume. This could mean that either resources are underutilised or the organisation is unwilling at this stage to invest in process technology to decrease its unit costs. However, this position could suit a small niche player, such as a microbrewery that produces very small quantities of a single beer for consumption in one or two outlets, or a corporate lawyer with just one or two clients. It is likely that the margins earned by these niche players far outweigh any operational inefficiencies. However, this position on the matrix could be used deliberately by large or small organisations as a pilot or as a start-up operation, hence its alternative description as an ‘incubator’.

The degree of customer involvement

Distinguishing between service processes by their volume and variety is useful, but misses one of the most important characteristics of service, as opposed to general, operations – the significance of the customer. Some service operations, and their processes, rely on a high degree of involvement from their customers. Others, less so. Take a bank, for example. Its customers, and even its staff and management, may say that personal interaction between customers and the bank’s staff is important, and indeed it is. But from an operations perspective, the bank is essentially a big factory that processes millions of financial transactions every day, such as maintaining standing orders and direct debits, most of which we do not see or even think about unless there is a problem. The bank certainly has to get its customer interaction right, but the main value it provides is in handling accounts and managing financial movements.

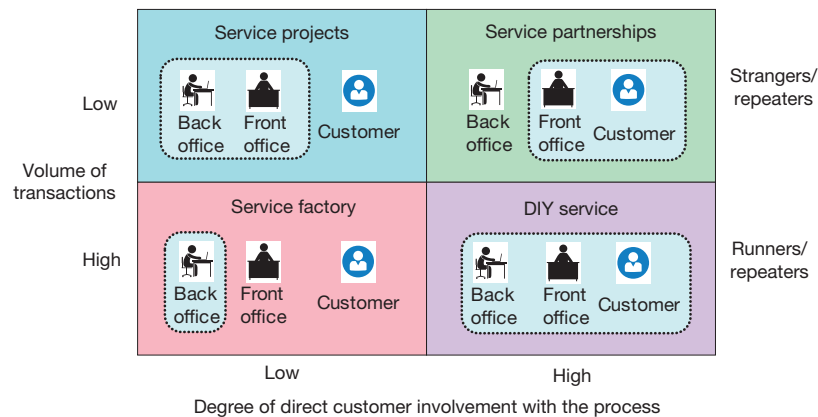
This example highlights the difference between customer contact and customer involvement. Customer contact simply means the extent to which customers have some type of communication with a service operation’s processes. Customer involvement, however, is the extent to which the customer is an intrinsic part of the service delivery process, and thus can be thought of as a resource for the organisation. The bank has a high degree of customer contact, but in many of its processes it does not have a significant degree of customer involvement. Even operations whose competitive position depends fundamentally on how they treat their customers, do not necessarily have high customer involvement. For example, a luxury hotel can be described as having high customer contact rather than requiring high customer involvement. Customers directly experience the facilities of the hotel, and there are large numbers of staff to attend to their every need. The hotel would move higher on the customer involvement scale if customers were required to make their beds and cook their own meals.

One method of incorporating the degree of customer involvement in a typology of processes is shown in Figure 11.6. It is sometimes referred to as the key decision area matrix (KDAM).⁴ The matrix helps us understand where the prime value is added and therefore what should be the key focus of attention for operations managers. The figure identifies four types of decision area (the area within the dotted line) in the relationship between back office, front office and customer, for relatively high-volume processes (runners and repeaters) and relatively low-volume operations (strangers and repeaters), and the level of customer involvement. Using this classification leads to four broad types of service process:

- the service factory;
- do-it-yourself (DIY) service;
- service projects; and
- service partnerships.

Figure 11.6 The key decision area matrix (KDAM)

Source: Based on Larsson, R. and Bowen, D. (1989) 'Organisation and customer: managing design and the coordination of services', *Academy of Management Review*, 14 (2), 213–233; and Clutterbuck, D., Clark, G. and Armistead, C. (1993) *Inspired Customer Service*, Kogan Page, London.



The service factory

A service factory is a high-volume, low-variety operation dealing in runners and occasionally repeaters, with low customer involvement. Examples include high-volume consumer services, such as most retail operations, restaurant chains and many financial services. The key decision area for these services is in the back office, where the prime task is efficient and consistent high-volume operations. For example, if a bank wishes to offer a faster cheque-clearing service to its customers, it will examine the capability of the back office, first and foremost. These operations will place as much of the value-adding activities as possible in the back office.

This is not to deny a role for front-office staff. The front office's role is to make this service factory seem friendly and to give the impression that each customer is valued and special. The front office, however, has no ability to offer significantly different services to individual customers. These organisations may look to provide a degree of personalisation in the front office but without encouraging customers to make too many special requests, which tend to reduce the efficiency of the operation as a whole.

There is also a role for customers in the service factory. Customers are 'trained' to fit into the service delivery system: filling in the right forms, standing in the correct queues and not making non-standard requests.

The service factory is potentially efficient and consistent (particularly across multi-site operations), but may feel impersonal to customers. There may also be significant problems with low morale in the front office as staff deal with mismatches in customer expectations compared to service delivery.

Do-it-yourself service

DIY services are high-volume, low-variety processes, with runners and repeaters, but with high levels of customer involvement. We find examples of this type of service in the leisure industry, in tourism and in sports and fitness clubs. Online and self-service retailing is also moving from the service factory towards the DIY service quadrant.

We have drawn the key decision area around the entire customer, front-office and back-office chain. This reflects the fact that these services have to balance decisions in all areas. Significant effort lies in the design work for the initial set-up of facilities and networks. For example, Amazon has devoted much design time to its web-based interface and in setting up back-office distribution activities to fulfil customer orders. The capability of the customer must also be included in the design brief to ensure that the service runs smoothly. In the case of Amazon, the front-office decisions regarding the design of the website, and its ease of access and use by customers, are also critical.

Service projects

Service projects utilise processes that are predominantly repeaters and strangers, with limited customer involvement. A good example of this type of service is provided by a market research company. There is frequently an intensive initial diagnosis/specification phase carried out with the customer by front-office personnel. The second phase consists of research work carried out by staff in the back office without the presence of the customer. There is usually a final stage where results are presented and discussed.

In many small market research firms, of course, the front and back offices are one and the same, although this becomes less common as the organisation grows. However, the principle remains that service project organisations must have much closer links between front office and back office than is necessary for the service factory, not least because they will be dealing predominantly with strangers and some repeaters, rather than runners, with resultant variability in demand volumes and process type.

The front-office staff must have more skill and flexibility than in a service factory. When face-to-face with a potential customer, front-line employees or service professionals must be able to demonstrate considerable technical as well as interpersonal skill. They must have considerable knowledge as to both capability and capacity of the combined front office/back office, often making commitments on behalf of the organisation based on their diagnosis of the customer's requirements.

Service partnerships

Service partnerships involve highly customised service processes with high customer involvement, dealing in either strangers or repeaters. The key decision area is around the customer/client–front-office partnership. The theme is very much one of co-development, where the service provider is intimately involved with the client. An example is provided by the sort of consultant who works with a management team in the process of strategy development, where there is an expectation that part of the service outcome is that the consultant will mentor management team members as part of their personal development. In this case, the customer is an integral part of the service process.

Because customer and service provider are so directly linked, the effectiveness of this service is often a function of the personal chemistry between the individuals involved. In small consultancies, one of the guiding principles is often that consultants will only work with people they like, on the basis that a good working relationship is fundamental in developing a satisfactory outcome.

The challenge for these organisations is to manage the communication link between front office and back office. The back office often provides administrative support and may be perceived to be of lower status than the 'professionals' in the front office.

A mix of types

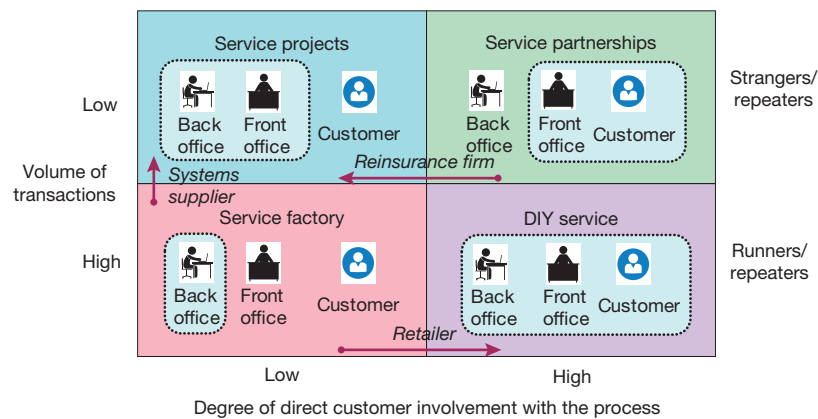
The challenge for larger, complex service organisations is that all four types of key decision areas may be represented in their operations. To take the example of a bank:

- Service factory: retail banking for consumers – high-volume, standard accounts.
- Service projects: business loans for entrepreneurs.
- Service partnership: managing investment portfolios for large corporate clients.
- DIY service: internet and telephone banking.

It is important to recognise and manage this diversity. It is increasingly true that 'one size fits all' is not appropriate. Each operation will require different performance criteria, technology, management style and, ideally, different processes and people.

Changing focus and task allocation

Service operations managers must make the decision as to which tasks are carried out in the front office, back office, or by the customer. As the service concept extends or changes, it is likely that the positioning of the service, as described in the matrix, will also change, as will the allocation of tasks. Figure 11.7 illustrates three examples of task reallocation.

Figure 11.7 Changing task allocation

A **reinsurance firm** operating in the London insurance market has traditionally based its business on cultivating strong personal client relationships, but is under increasing pressure to demonstrate value and to deliver cost reductions, moving from a service partnership approach to a service project environment. The firm realised that the time spent with individual clients was becoming less effective and contributed to the retention of an ever-decreasing number of clients. This shift required a major culture change to reduce the time spent with clients, and to develop standard ways of working. It also required a significant investment in information systems to support this change.

A **retailer** is moving from a high-street presence to becoming an exclusively online retailer. This represents a move from an organisation largely focused on back-office functions, such as purchasing and logistics, to one that must develop the ability to design systems that enable the customer to play an increasing role in the delivery system. These systems require a greater sophistication on the part of the customer, perhaps forcing the service provider to give greater thought to the implementation of new distribution technologies and algorithms that suggest possible purchases to customers.

A **systems supplier** has largely been concerned with the provision of telecommunications hardware. Its operations have been focused on the sourcing and supply of these systems as efficiently as possible in the back office. As product margins have become eroded through competition, the company has recognised the need to provide more customised 'solutions' to its customers. The front-office role has moved from being a sales order-processing activity to providing applications consultancy. The major changes for this organisation involve moving expertise that has traditionally been located in a back-office role (remote from customers) to a front-office activity with significant customer interaction. It is also vital for front office and back office to create more integration in their processes to ensure that greater variation in customer requirements can be dealt with effectively.

High volume, high involvement – crowd management

In Chapter 7, when discussing the customer experience, we identified the special case of service operations that deal directly (as opposed to remotely) with high volumes of 'customers', who constitute a 'crowd'. Studying crowd behaviour (which we did briefly in Chapter 7) and managing crowds is an important part of service operations management because there are many situations where crowds can gather, such as sports events, political gatherings, concerts and festivals, 'spontaneous events' due to social media and peak-time transport hubs. Crowds are unavoidable occurrences in the everyday life of many services; problems in their safe management are not. When things go wrong with crowd management the societal impacts can be huge.

There are four stages in crowd management, three of which should be carried out prior to an event (Figure 11.8 illustrates these stages). They are:

- flow prediction;
- performance analysis;
- planning;
- real-time management.

Flow prediction

At points in time, a crowd may be stationary, but not always. The people who constitute it will have had to assemble, and once assembled could move, say, through a train station, or between stages at a music festival. As a ‘worst-case’ scenario, they may panic in response to a real or perceived threat. To predict flow patterns in any pedestrian space it is necessary to have an understanding of how people might behave given the specific environment, such as where doors and barriers to movement are located. It is also necessary to have a forecast of how many people might be in a crowd at any particular time. Combining information on the physical space and the number of people allows predictions to be made for various scenarios.

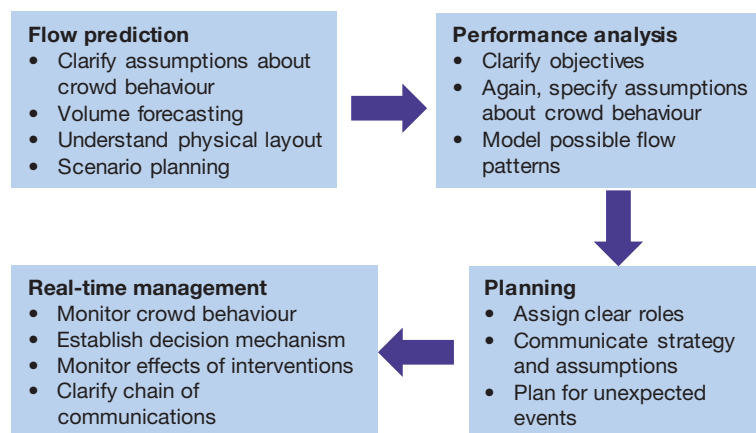
Performance analysis

The next step is to model the likely flow patterns for the various identified scenarios. Professional firms that specialise in crowd behaviour often use simulation models to do this. These models can be very sophisticated, with impressive visuals that help to understand the effects of different layouts and volumes; however, they do depend on the assumptions about individual behaviour that are built into the model. But the way a crowd is managed will (or should) also depend on the objectives being pursued. Clearly, safety is always an important objective, but is particularly important for some occasions – such as mass sporting events or political demonstrations. At other times, the efficient movement through an area is also a key objective – for example, when designing mass transport hubs.

Planning

Once an understanding has been gained of how a crowd might behave under specific circumstances, the next step is to plan for the event itself. This means making sure that everyone who is likely to be involved in managing the event understands the assumptions and results from the first two steps. It means ensuring that everyone understands their role. And it also means putting plans into place for any unforeseen circumstances, such as bottlenecks leading to unexpected crowding, or even an emergency evacuation of the area.

Figure 11.8 Stages in designing crowd management processes



Real-time management

Notwithstanding the previous analysis and planning, unexpected events will almost certainly occur. Some of these will be relatively minor (for example, a slightly increased volume of people in a particular area), some could be potentially more serious (such as part of a crowd acting sufficiently irresponsibly to put others in danger). This is a classic control situation, and like any other control activity it relies on some key actions. First, the state of the crowd must be monitored to be able to detect any significant deviation from what has been planned for. Second, there must be a decision mechanism to decide when an intervention is necessary and what it should be. Third, the effects of any intervention should be monitored to check that crowd behaviour has modified. All these steps rely on the establishment of a clear chain of communications.

Crowd/event marshals

Because crowd behaviour can be sometimes chaotic or unpredictable, many high-volume services use crowd (or event) marshals to help manage their customers. Crowd marshals are people who oversee, direct or control customers in such services or events. They are commonly deployed at sporting events, festivals, tourist sites, concerts, conferences and exhibitions, in fact any place where crowds are likely to be present. They may be volunteers or, increasingly, professionals hired for the occasion. But whether amateur or professional, they can play an important role in smoothing customer flow and ensuring customer safety. Their exact role and set of responsibilities will depend to some extent on the exact nature of the service or event, but usually includes an obligation to protect the well-being and property of customers. This may involve preventing crowds moving into areas where they are in danger (such as on a horse racing track) or where their presence inconveniences other customers (such as at a concert). It may also include responding effectively to incidents or accidents and assisting with evacuation in the case of an emergency.

Less dramatic, but often very useful, responsibilities of crowd marshals could include directing customers, collecting customer feedback, providing a contact point for people needing assistance and reporting to service operations managers on the build-up of queues. Their usefulness is often that they work on what we have previously called the overlap between the operations and customer perspectives. For example, at the Acropolis in Athens, crowding can become severe with visitors both climbing up to see the Parthenon and returning via the same route. In some places, crowds move up and down through the same narrow gateway. Its antiquity and historical importance (obviously) prevent the gateway being widened, but a rail does separate ascending from descending visitors. However, sometimes the difference in volumes of visitors ascending and descending means that marshals need to give priority to one direction or the other. Without their intervention, visitor flows would 'back-up', causing queues and customer frustration.

Case example

Managing the 'platform–train interface' with crowd control

The 'platform–train interface' might seem to be the worst kind of jargon, but it is a significant issue for railway operators. It refers to the way that passengers wait on the platform to board trains when they arrive, while the other passengers depart. The problem is that passengers waiting to board the train crowd around the doors, restricting the flow of those getting off. Also, passengers sometimes hold doors

open, delaying the departure even more. Waiting for passengers to move back from the arriving carriage might only delay a train for less than a minute, but over the course of a journey the delays add up. Moreover, even slight delays can accumulate and cause a train to slip out of its running order and be held at a subsequent station. Even in well-ordered Japan, one recent study by the Japanese Railway Bureau found



Jomic/Shutterstock

that passengers trying to get on board trains after their scheduled departure time accounted for almost 50 per cent of delays.

The problem is not necessarily the inefficiency of operators but the behaviour of passengers. But a combination of active crowd control and technology can help overcome the problem. Professor Plamen Angelov of the University of Lancaster, in the UK, has developed an artificial intelligence-based system that uses images from the CCTV cameras that are already fixed in carriages and on platforms.⁵ The system uses

algorithms that detect potential sources of delay, such as crowded areas, luggage, pushchairs and bicycles, compares their movements and positions relative to train doors, and predicts possible congestion areas. At the same time, cameras in the carriages of approaching trains identify which doors are getting busy when the train approaches a station. With this data from both the carriages and the platform, the system provides warning of where congestion could occur. This allows passengers on the platform to be directed to doors that will be less busy.

11.3 How can managers 'engineer' service processes?

In Chapter 7 we described several tools that can be used to design the customer experience. These are important because they focus on a customer perspective. However, there are several other tools that are essential for designing new service processes and to help assess and improve the design of existing ones, whether for back office or front office. These include process mapping, lean thinking, *kaizen*, Six Sigma and value stream mapping. Many of these tools will be covered in Chapter 15, on driving continuous improvement. Here, we will examine process mapping, which is an important and powerful tool.

Process mapping

Frequently, processes are not so much designed, as redesigned. Often, the task being examined is pre-existing, so some sort of 'process' will be being used, even if it is informal. Most process design involves taking some task and improving how it is being done. Fortunately, there are some well-trying methods for doing this. Process mapping is the most essential. It is the charting of a service process in order to assist in the evaluation, design and development of new or existing processes. The essence of mapping is to record all the activities and their relationships, which normally requires

a team of people who understand the various aspects of the process. It is an activity that can be time-consuming, but it can yield some significant results:

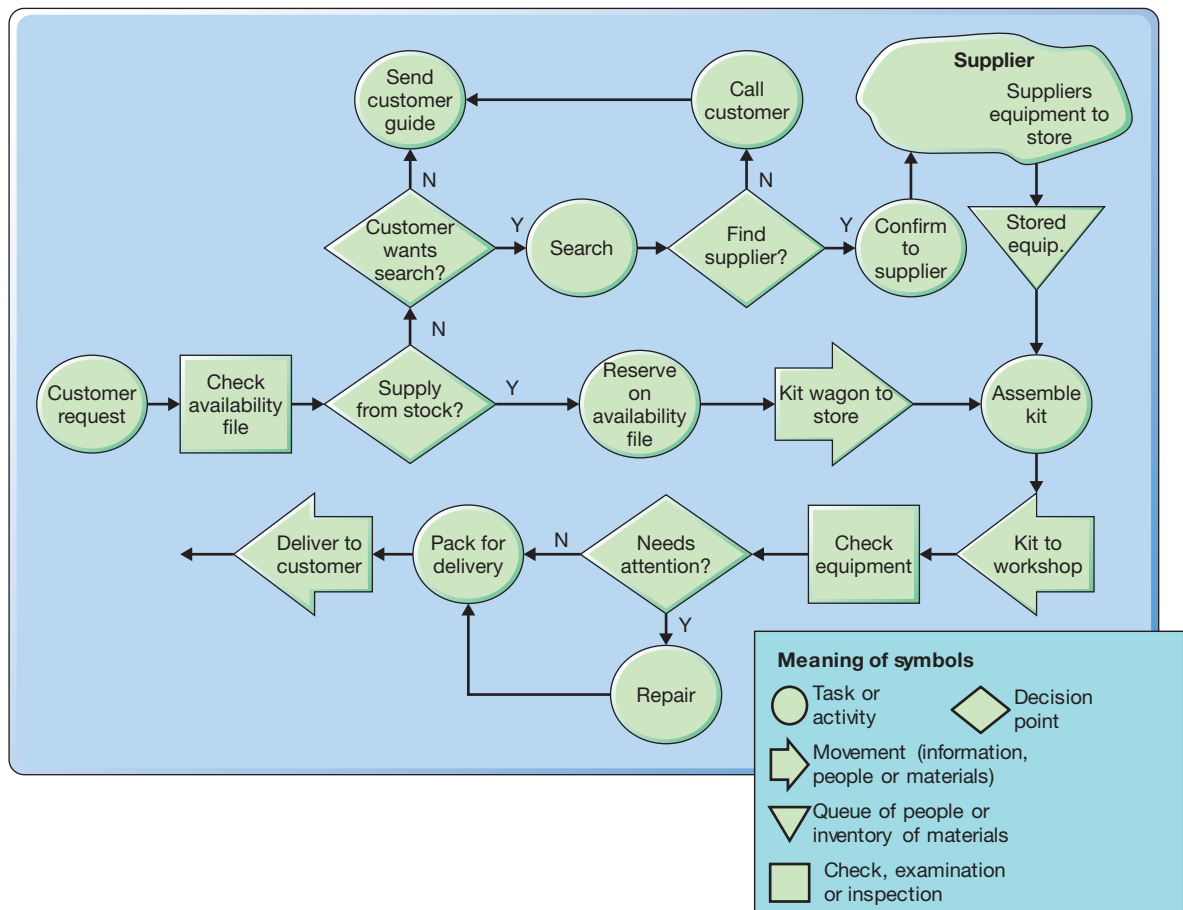
- It allows a critical examination of each and every stage in a process. In particular, it encourages the key question of, 'does this activity really add value?'.
- It is an essential starting-point for process improvement. How can one improve something that is not fully understood?
- It is an ideal opportunity to bring together teams from different parts of an operation to share their perspectives on how things should be done.
- The exercise can, if properly managed, help to create a culture of process ownership and responsibility.
- It gives everyone an overview of a complete process, often for the first time.
- The output is a process map that is a 'picture' – easy to understand and difficult to misinterpret.

The first question to be considered at the start of a mapping activity is the level or degree of detail. Process maps can be used at a macro level, depicting major activities and their relationships, or at a micro level, mapping all the detailed tasks involved in a process or a part of a process, or indeed somewhere in-between. The minimum level depends upon the use to which the maps are to be put, but is usually that which exposes the overall process and where the main elements are visible. More detailed individual maps can be created if and when required.

Often, process maps use an agreed set of mapping symbols. These symbols can be arranged in order, and in series or in parallel, to describe any process. Figure 11.9 shows a process map for

Figure 11.9 Process map for 'enquire-to-delivery' process at stage lighting operation

Source: Slack, N. and Brandon-Jones, A. (2019) *Operations Management*, 9th edition, Pearson, Harlow.



one of the processes used in a company that hires out lighting and stage effects equipment to theatrical companies and event organisers. Customers' calls are routed to the store technician. After discussing their requirements, the technician checks the equipment availability file to see if the equipment can be supplied from the company's own stock on the required dates. If the equipment cannot be supplied in-house, customers may be asked whether they want the company to try to obtain it from other possible suppliers. This offer depends on how busy and how helpful individual technicians are. Sometimes customers decline the offer and a 'Guide to Customers' leaflet is sent to the customer. If the customer does want a search, the technician will call potential suppliers in an attempt to find available equipment. If this is not successful the customer is informed, but if suitable equipment is located it is reserved for delivery to the company's site. If equipment can be supplied from the company's own stores, it is reserved on the equipment availability file and the day before it is required a 'kit wagon' is taken to the store where all the required equipment is assembled, taken back to the workshop and checked, and if any equipment is faulty it is repaired at this point. After that, it is packed in special cases and delivered to the customer.

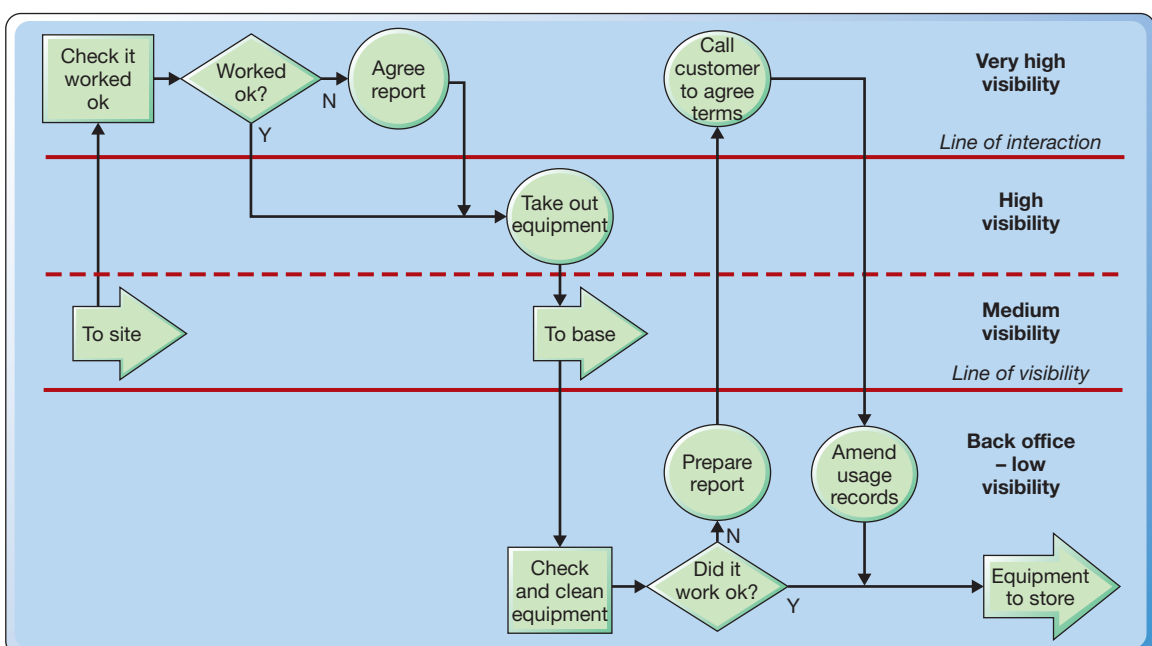
Different symbols may be appropriate to use in other circumstances and may be more visual and meaningful for the people developing the map. The symbols chosen should be appropriate, but should be common and understandable, with a single meaning. Also, the lines on the chart may be coloured to depict flows of different materials – blue for customers and green for information, for example – or to depict different volumes or routings, such as standard processes versus non-standard processes.

Mapping visibility in process design

Mapping processes with varying degrees of customer contact are sometimes mapped in a way that makes the degree of visibility of each part of the process obvious. This allows those parts of the process with high visibility to be designed so that they enhance the customer's perception of the process. Figure 11.10 shows yet another part of the lighting equipment company's operation: the 'collect and check' process. The process is mapped to show the visibility of each activity to the customer. Here four levels of visibility are used. There is no hard and fast rule about this; many processes simply

Figure 11.10 The 'collect and check' process mapped to show different levels of process visibility

Source: Slack, N. and Brandon-Jones, A. (2019) *Operations Management*, 9th edition, Pearson, Harlow.



distinguish between those (front-office) activities that the customer *could* see and those (back-office) that they couldn't. The boundary between these two categories is often called the 'line of visibility'. In Figure 11.10, three main categories of visibility are shown. At the very highest level of visibility, above the 'line of interaction', are those activities that involve direct interaction between the lighting company's staff and the customer. Other activities take place at the customer's site or in the presence of the customer but involve less or no direct interaction. Yet further activities (the two transport activities in this case) have some degree of visibility because they take place away from the company's base and are visible to potential customers, but are not visible to the immediate customer.

Analysis of process maps

There is a danger that process mapping in itself can be a time-consuming task, yet result in little benefit. By itself, a process map is of only limited benefit, but it can help communicate the complexity of a process or help individuals agree or realise the steps involved in a process. Process mapping is essentially a descriptive activity; what is required to derive maximum benefit from a process map is to ask key questions that help turn it into an analytical tool:

- *Does the process support the strategic intentions of the operation?* If the operation is expected to provide, for example, high-quality and speedy service to customers, is the process designed in such a way that decisions are made speedily, that end-to-end process performance is minimal and that quality controls are in place at all points in the process?
- *Does each activity provide added value?* Which elements of the process do not add value? Can they be removed or redesigned?
- *Is the process 'in control'?* For the key elements, or maybe every element in the process, what measures and targets are in place to ensure that particular element is performing as expected? Who is responsible for overseeing, controlling and improving that particular element?
- *Who 'owns' and has responsibility for the process?* How many different individuals and/or departments are responsible for parts of the process? Who in particular, or which group of people, is responsible for the design, delivery and improvement of the whole process?
- *Is the level of visibility appropriate?* The process map can be used to identify those activities that involve and/or are visible to the customer, thus differentiating between back-office and front-office tasks. Should or could any of the activities or tasks be reallocated? Can any of the elements be moved to the back office and away from the customer, which might lead to greater efficiencies? Are there elements that could be made more visible to the customer, which might lead to a greater sense of involvement and ownership and quality?
- *How efficient is the process?* By adding times, distances and resources used, such as numbers of staff, to the various tasks in the process map, the efficiencies of the whole process and various parts of the process can be calculated, and bottlenecks identified and removed.
- *How can the process be improved?* What are the likely or main fail-points in the process? What procedures are in place to deal with these? Does everyone who is involved in the process understand their role in the whole process and the effect of their actions upon it?

Process demand and operating characteristics

Up to this point we have looked at the more conceptual (process types) and descriptive (process mapping) aspects of process design. But it is equally important to also take a more analytical perspective. Not too technical, there are only one or two simple calculations, but they are very necessary. An important calculation is to work out how many items or customers a process should be capable of handling. This is best indicated by the 'output interval' or 'cycle time' that the process is designed to achieve. The 'output interval' of a process is the time between completed items or customers emerging from it. It is a vital factor in process design and should be one of the first things to be calculated. In high-volume processes, it sets the pace or 'drum beat'. However the process is designed, it must be able to meet this figure. And it is also easy to calculate by considering the likely demand for the services over a period and the amount of time available in that period.

For example, if (say) a process needs to check the accuracy of 1,600 customer accounts per week and the time available to process the applications is 40 hours per week:

$$\begin{aligned}\text{The 'output interval' for the process} &= \frac{\text{The time available}}{\text{The number of items to be processed}} \\ &= \frac{40}{1600} = 0.025 \text{ hours} \\ &= 1.5 \text{ minutes}\end{aligned}$$

In other words, the process must be capable of performing the accuracy check once every 1.5 minutes, or 90 times per hour.

The next simple calculation is how much capacity the process needs in order to meet the output interval. To calculate this, a further piece of information is needed – the ‘work content’ of the process task (how long the task takes). The larger the ‘work content’ of the process task and the smaller the required output interval, the more capacity will be necessary.

For the accuracy check, the total work content of all the activities that make up the total task is (say), on average, 6 minutes. So, a process with one person could check an item every 6 minutes. That is, one person would achieve an output interval of 6 minutes. Two people would achieve an output interval of $6/2 = 3$ minutes, and so on.

So the general relationship between the number of people in the process (its capacity in this simple case) and the output interval of the process is:

$$\frac{\text{The work content of the process task}}{\text{The number of people in the process}} = \text{The output interval}$$

$$\text{The number of people in the process} = \frac{\text{The work content of the process task}}{\text{The output interval}}$$

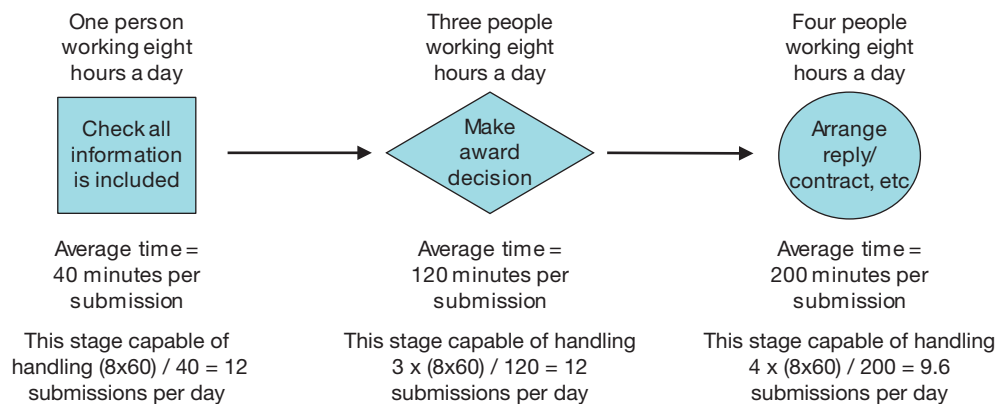
$$\text{In this case, The number of people in the process} = \frac{6}{1.5} = 4 \text{ people}$$

So, the capacity that this process needs if it is to meet demand is 4 people.

Process bottlenecks

A bottleneck in a process is the activity or stage where congestion occurs because the workload placed is greater than the capacity to cope with it. In other words, it is the most overloaded part of a process. They are the curse of processes because they hold up the flow in the process and limit its capability. Because the output rate of the whole process is limited by the longest allocation of activity times to an individual stage in the process, the more equally work is allocated, the less time will be ‘wasted’ at the other stages in the process. However, it is nearly always impossible to achieve an absolutely perfect equal allocation of work, so some degree of imbalance will always occur. The objective is to minimise it. For example, a research funding council has a scheme that encourages researchers in universities and research establishments to submit applications for small awards to go towards the cost of specialist equipment. The process that the funding council uses to assess the submissions consists of three stages (see Figure 11.11):

- Stage 1 checks the online submissions and makes sure that all the necessary information has been included. This stage has one person who spends eight hours a day performing the task, which on average takes 40 minutes per submission.
- Stage 2 considers the submissions and makes a decision based on the research council’s criteria. This stage has three people who spend eight hours a day performing the task, which on average takes 120 minutes per submission.
- Stage 3 completes the administrative procedures by informing the researchers of the decision, arranging contracts and payments as appropriate. This stage has four people who spend eight hours a day performing the task, which on average takes 200 minutes per submission.

Figure 11.11 The three stages in the research awards submission process

There are two approaches to finding bottlenecks. Look where they should be, and look where they appear to be. Sometimes these are the same. Where bottlenecks should be is where the loading on a part of the process is greater than its capacity. For example, in the award submission process, one can calculate how many submissions each stage is capable of handling each day. So, in the first stage there is one person working eight hours (480 minutes) and each submission takes 40 minutes. Therefore the stage is capable of handling $480 / 40 = 12$ submissions per day. The second stage has three people working 480 minutes a day, but each submission takes 120 minutes to process. This means that, again, the stage can handle 12 submissions per day. However, repeating the calculation for the third stage reveals that it can only handle 9.6 submissions per day. In other words, it is the bottleneck in the process. However, if the staffing level at this stage is increased by one person, it too could handle 12 submissions per day.

But it is also wise to look for where bottlenecks appear to be. Sometimes, excessive inboxes, backlogged work, long waiting times or even paper accumulating in an in-tray, are all symptoms of a bottleneck. Similarly, high stress levels among staff, frequent absences, a reluctance to devote time to other work and so on, can be a result of overloading.

Curing bottlenecks

Essentially, there are two ways of ‘unblocking’ a bottleneck: either improve the effective capacity of the bottleneck stage, or reduce the loading on the stage. At its simplest, improving the capacity of the bottleneck could mean putting more resource into that stage. But this is not necessarily the best long-term solution. For one thing, it provides an incentive to become overloaded. More importantly, it misses the opportunity to learn from why overloading is happening. What has changed? Are the process activities no longer fit for purpose, or are they not being followed? Which leads to the other way of tackling bottlenecks: to reduce the loading on the stage by increasing efficiency at the bottleneck. This can be done using standard improvement methods and approaches. Or, to put it another way, if you want to know where to start your improvement activities, starting with bottleneck activities is a sensible initial step.

Servicescapes as part of process design

In Chapter 7, on the customer experience, we explained how the ‘servicescape’ of a process had an impact on how customers perceived the service. We defined ‘servicescape’ as the physical surroundings of the service, including both the physical and informational environment in which a service is created and provided. It is clearly an important influence from a customer perspective, but it is also important from an operations perspective because it affects the work experience of service staff.

Counterpoint

Can a servicescape really have a significant effect on staff? The question of how much difference the aesthetics and components of the working environment make in a service setting is not uncontentious. Some believe that the fashion for open environments, beanbags and similar, is simply diverting management from what is important. In fact, according to Thomas Davenport, an expert in knowledge working, there is little evidence that anyone worked more productively because of these features, because there is no clear relationship between knowledge worker performance and various appealing features of the work

environment, though they may help slightly with recruiting and morale. There is also some evidence that open-plan workplaces, casual meeting rooms and more 'living-room-like spaces' are not universally popular with staff. Gensler, a design firm, surveyed more than 90,000 people across ten industries about their views on 'fluid', 'open-plan' working. It found a surprising amount of opposition, with many staff claiming that open-plan offices, in particular, make it difficult to concentrate because of excessive noise. What they actually valued were as few distractions as possible so that they could focus on their jobs.⁶

Some aspects of a servicescape will have an obvious impact on staff. For example, is the work environment warm enough? Too warm? Sufficiently well-lit to see adequately? Not too noisy? Clearly, staff who are cold, or irritated by their noisy environment, or straining to see what they are doing, will probably not be feeling, or working, particularly well. But there are other factors associated with the servicescape that could affect staff attitudes, motivation and behaviour. Which is why, in recent years, many companies have devoted resources to designing the servicescape from their staff's perspective. Increasingly, special meeting zones, cappuccino bars, fish tanks, relaxing bean bags, games consoles, hammocks, ping pong tables and other such features have been integrated into workspaces.

The main argument for using these design features is that the aesthetics of the workplace also reflect the culture of the organisation. Therefore, they argue, the appearance of a workplace should reflect the organisation's culture. The key questions being, 'what does that workplace say about our culture?' and 'how can we create an environment that further promotes our culture?'. What works for one company may be counter-cultural at another. The Google headquarters in California (known as the Googleplex) is often cited as a good example of a workplace that reflects the company's culture. However, proponents of improving the appearance of the working environment say that the idea is not simply to change the décor and therefore change the culture. Workplace aesthetics is subtler than that. It can encourage desired behaviours, in particular when the workplace reflects the activities and needs of the people working there.

Back-office facilities and the Allen Curve

In a back-office setting, an important aspect of how the facilities in any workplace are arranged is how physically close staff are to each other. And this, in turn, influences the likelihood of communication between individuals. So, what effect does placing individuals close together or far apart have on how they interact? The work of Thomas J. Allen at the Massachusetts Institute of Technology first established how communication dropped off with distance. In his book, *Managing the Flow of Technology*, he presented what has become known as the 'Allen Curve'. It showed a powerful negative correlation between the physical distance between colleagues and their frequency of communication. The Allen curve estimated that we are four times as likely to communicate regularly with a colleague sitting two metres away from us than with someone 20 metres away, and beyond 50 metres (for example, separate floors) there is virtually no direct exchange of certain types of technical information. However, the office is no longer just a physical place; email, remote

conferencing and collaboration tools mean that colleagues can communicate without ever seeing each other. Nevertheless, one study⁷ shows that so-called distance-shrinking technology actually makes close proximity more important, with both face-to-face and digital communications following the Allen Curve. Apparently, people who share a physical office are 20 per cent more likely to stay in touch digitally than those who work elsewhere. Also, when they need to collaborate closely, nearby colleagues email each other four times as frequently as colleagues in different locations.

11.4 Repositioning service processes

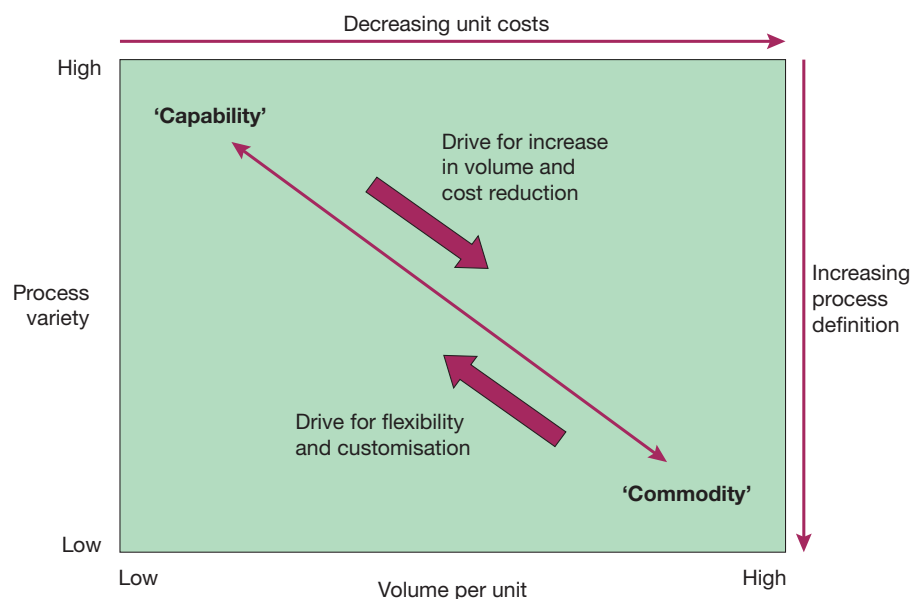
When a service operation changes its position on the volume–variety spectrum, its processes also need to change. And many service processes are under pressure to change. High-variety/low-volume capability operations dealing with ‘strangers’ may be under pressure to increase volumes and/or drive down the high costs of operating such processes. Low-variety/high-volume commodity-type processes dealing primarily with ‘runners’ may be under pressure to become more flexible and customise their service for customers (see Figure 11.12).

Moving from capability towards commodity

It is a common objective for many (especially innovative) organisations to grow. For example, a small firm of consultants that has built up a local or national practice may seek to become internationally recognised. Within a global company, it may be that an innovative solution developed for an individual customer can be ‘packaged’ and sold to a much wider range of clients internationally. To do this, a number of issues must be addressed:

- Customers may require greater levels of consistency across service transactions carried out by different providers across locations. For example, a technical consultancy working for a multinational customer must be able to provide the same solution in all locations, probably at the same or similar price.

Figure 11.12 Both capability and commodity operations can come under pressures to change



- Larger organisations tend to be extremely conscious of their image, which may entail setting stricter guidelines for their staff as to the scope and style of work carried out.
- The ‘capability’ of the organisation, previously reliant on the skills and knowledge of specific individuals, must be replicated through more specialised resources, tighter process management and specific training if the organisation’s growth is not to be limited by scarce resources.
- To sustain growth, it is likely that the organisation may have to develop more competitive sales and marketing activities. In some sectors, this might take the organisation into previously non-experienced cost competition.

One of the most significant aspects of this type of transition is the impact on the individual service staff. Many of the individuals in capability organisations will have joined for the professional autonomy on offer. It is common for these individuals to enjoy the creativity that frequently is part of their role. As the organisation grows, however, these individuals may not be as motivated to turn their creativity into developing consistent and efficient processes. At the same time, the management task will be changing to become rather more positive in providing direction for the organisation as a whole and for its employees.

Case example

The Queen Mother Hospital for Animals⁸

The Queen Mother Hospital for Animals (QMHA) is the largest veterinary referral hospital in Europe and takes cases from across the UK. It is a world-recognised teaching and referral hospital, with state-of-the-art facilities and a committed and enthusiastic team that has made the hospital into one of the most respected in the world. Situated on the RVC’s (Royal Veterinary College) campus about 27 kilometres north of London, it provides full hospitalisation, diagnostic and surgical facilities for individual animals, in addition to a working farm, a clinical skills centre and an equine hospital. With a team of over 200 dedicated and professional staff, the hospital offers a supportive and responsive service for referring vets and pet owners. It also has an important role in specialist veterinary training. However, the hospital’s multidisciplinary approach to patient care involves consultation across all specialities. Each clinical team is led by registered specialist veterinary surgeons, supported by specialists-in-training. They discuss each case in detail with the referring vet, pet owner and specialist nursing teams, which are supported by patient care assistants to deliver exceptional care.

Like most very large hospitals of its type, the QMHA demonstrates the increasing pressure for a

move from generalist to specialist that comes with increasing volume. Such hospitals challenge the traditional idea of the local vet dealing infrequently with a wide variety of tasks and yet building strong client relationships with pet owners. The vet specialist is increasingly the model being adopted, as veterinary science follows its human equivalent. Young vets are fast acquiring specialist qualifications, and older vets are being encouraged back to college to learn new skills. However, increasing specialisation can, if not carefully managed, make the tasks of skilled professionals such as veterinarians seem routine. What prevents this happening is the emphasis that specialists put on research and education, together with the multidisciplinary approach that such hospitals embrace.

Nor, despite the ‘high-tech’ nature of the facilities in large veterinary hospitals, have the concerns of pet owners been forgotten in their design. In many, glass partitions give visibility for visitors to see what is going on, allaying fears that their pets may not be humanely treated once out of sight of their owners. Consulting rooms can be provided where owners can be briefed on how best to care for their pets post-operatively. There may even be a ‘grieving room’ for distraught owners who wish to be with their pets when they are put to sleep.

Moving from commodity towards capability

Examples of this type of shift may be found in high-volume consumer services. To avoid the trap of becoming a commodity service competing on price alone, these organisations may extend the range of services on offer – perhaps providing a degree of customisation for individual customers.

Of course, it may be possible to design a service delivery process that delivers a wide range of commodity services without increasing the complexity of the operations task, thus allowing the organisation to move in the direction of the top right-hand corner of Figure 11.12. This is similar to the manufacturing idea of ‘mass customisation’, incorporating the following two principles:

- *Develop standard ‘modules’.* Companies may develop ‘menus’ of standard services, which may then be arranged in appropriate combinations to provide a degree of customisation for individual customers. The customisation therefore lies in the management of the combination rather than in the development of new services. An example of this type of mass customisation is provided by holiday resorts that allow customers to choose a limited number of activities from a predetermined list.
- *Postpone customisation until the latest possible stage.* In this approach, the delivery process is standardised for all stages until the last. This allows the service operation to gain all the efficiency and consistency benefits of a high-volume/low-variety process. Courier services are adopting this approach by using their basic distribution networks for all customers but using different mechanisms to deliver the package to its final destination.

A major transition occurs when the number of service delivery processes increases significantly. This transition takes the process mix from a few runners to several repeaters. Significant changes in the operations task frequently include the following:

- Shifting the focus of the operation from managing back-office operations consistently and for maximum efficiency towards building front-office flexibility.
- Requiring customer-facing staff to give informed advice as to the best service for an individual customer. Moreover, it has become unacceptable for front-line staff in these organisations to act merely as a ‘post box’, taking requests from customers for advice but being unable themselves to give an immediate response.
- ‘Upskilling’ the front line through a combination of greater staff training and the provision of information systems that allow the service provider to act as an ‘expert’.
- Making processes more flexible, often allowing greater discretion on the part of the employee to make choices as to which service commodity will be most appropriate for the customer.

As with the previous case, there are major implications for the service provider and for the role of management. There is far greater onus on front-line staff to possess both technical and interpersonal skills. The service transactions are likely to be longer and more intense in nature. If the customer transaction includes a high degree of diagnosis of customer requirements, and the various services on offer are to match these expectations, the front-line employee will require excellent listening and consultative skills.

The second major area for change might be that ‘specialist’ employees who hitherto had been distanced from the customer, and were able to work in back-office functions, now may have direct contact with customers. This is particularly true in call centre or helpdesk situations where the customer wishes to deal directly with someone who has the expertise and authority to give a decision or advice on complex issues. This may be less of an issue when more transactions take place electronically through the internet or through television-based applications. Of course, not all technical experts have customer-handling skills.

The role of management changes from being the ‘enforcer’ of the service concept and process owner to ensuring that the service employees are developed and retained. Many jobs in commodity organisations are low-paid and need very little training, often just a few days or weeks. Commodity organisations that are seeking to become more flexible may find that they need to invest several months’ training in front-line staff, meaning that employee retention becomes a major focus for management attention.

11.5 Technology in service process design

At one time, the key differentiating factor between managing service and managing manufacturing businesses was the importance of technology in their operations. But no longer. In fact, one of the most notable things about the increased dominance of technological issues in business in general is the way in which many services have been transformed by new technology. And there is a lot of new technology around. There can be few, if any, service operations that have not been affected by advances in process technology. Nor does it seem that the pace of technological development is slowing down. Which has important implications for service operations managers, because almost all services could be significantly impacted by developments in technology in some way, and at some time – which is the problem when discussing the effect of technology on process design. There are technologies that have not yet been developed that could profoundly change many service operations and, even more likely, there are applications of existing technology that could do likewise.

This is why our discussion here will not be about specific technologies; there are too many of them, and they are changing too fast. Rather, it is concerned with how to understand the nature of new technologies as they emerge, not in terms of their technical detail, but rather in terms of their general capabilities. More importantly, it is concerned with how to evaluate their potential impact on process performance.

Case example

Service technology also influences professional services

There is a tendency to think of service technologies as having an impact mainly in mass services, where labour substitution effects are most evident. But, increasingly, technology is becoming an important part of professional services. Here are two examples.

Medical diagnosis relies on clinicians spotting and interpreting symptoms as presented by a patient. However, the combination of symptoms that indicate some conditions can take time before they become evident, by which time the condition may have become more difficult to treat. Under these circumstances, artificial intelligence (AI) that is able to sift through large amounts of data quickly can play a role in finding meaningful patterns that help early diagnosis. Now AI is being deployed as a way to aid speedy diagnosis of several conditions, from breast cancer to diabetic retinopathy. In many cases, it can provide significantly faster and more accurate diagnosis than human experts acting alone. This allows clinicians to treat patients



Adolphe Pierre-Louis/Albuquerque Journal/ZUMA Wire/Alamy Stock Photo

before they deteriorate further. A typical example is the case of acute kidney injury (AKI), which affects up to one in five patients admitted to hospitals, and is responsible for many deaths every year. AKI is a common hospital complication resulting from anything from surgery to infection. With such kidney failure, patients cannot process and remove waste

effectively. It is a notoriously difficult condition to diagnose accurately, but a failure to do so can mean patients dying, or needing kidney transplants. The condition is traditionally identified two or three days after the kidney starts deteriorating, but with AI, some experts believe that up to 30 per cent of cases could be prevented if a doctor intervened early enough.

Similarly, AI, algorithms and big data are entering the legal world – for example, in the field of ‘alternative dispute resolution’. Alternative dispute resolution (ADR) refers to ways of resolving disputes between parties, such as consumers and traders, that avoid going to court. ADR includes ‘mediation’, where an independent third party helps the disputing parties to come to a mutually acceptable outcome, and ‘arbitration’, where an independent third party considers the facts and takes a decision that’s often binding on one or both parties. Some governments (including the UK government) encourage the development of ADR because it avoids overloading the court system and makes it easier to access dispute resolution. The use of AI achieved a breakthrough in 2019, when it was reported that Canadian electronic negotiation specialists iCan Systems had become the first company to resolve a dispute in

a public court in England and Wales using a ‘robot mediator’.⁹ The AI tool was posed with a dispute involving a £2,000 unpaid bill for a personal counselling course. Replacing the conventional human mediator and using a ‘blind-bid mechanism’, it settled the three-month dispute in less than an hour by building on basic negotiation concepts until it found the area of settlement for both parties. The approach exploits AI’s ability to analyse large amounts of data and prioritise key documents through the use of technology-assisted review software. However, some lawyers argue that while such technology may be suitable for helping deal with small financial claims, it will always be inadequate when dealing with the kind of very high-value mediations and arbitrations that leading law firms are concerned with. They make the point that, in the case of high-value disputes, the skills of an experienced negotiator are needed to persuade clients to accept things they don’t want to do. A skilled mediator can interpret the feelings and motivations of all the people involved in a dispute, they can understand their anxieties and use their insights to shape the eventual settlement. However, an increasing number of legal professionals do accept that technology can play some role in alternative dispute resolution.

What do new technologies do?

To understand the possible impact of a technology, it is necessary to understand its ‘primary capability’ – that is, what it is better at doing than what it may replace. For example, most technologies that are relevant to service operations have capabilities that are some mix of:

- the ability to think, or reason;
- the ability to see, or sense;
- the ability to communicate or connect;
- the ability to move or manage people or objects.

Technologies that can think, or reason

The best-known class of technology that attempts to replicate (and even surpass) human thinking is artificial intelligence (AI). This is a technology that works towards the creation of more intelligent machines that work and react like humans. Some technologies with artificial intelligence include capabilities such as speech recognition, learning, planning and problem solving. Somewhat less sophisticated, but more widely used (currently) in operations management, is algorithmic decision making. An algorithm is a predefined sequence of instructions, or rules. Algorithmic decision making may be combined with large data sets (often called ‘big data’). Big data is a large volume of both structured and unstructured data whose analysis can reveal hidden patterns, correlations and other insights. Looking for relevant or pertinent information in big data sets is called data mining.

Technologies that can see, or sense

Some technologies exploit their ability to manipulate computer-generated or computer-augmented visual information. For example, augmented reality technologies show an enhanced version of reality, where live views of physical real-world environments are augmented with overlaid computer-generated images, thus supplementing one's perception of reality. Virtual reality goes further by using entirely computer-generated simulations, with which humans can interact in a seemingly real manner using special helmets and gloves fitted with sensors. Although both augmented and virtual reality technologies are used in entertainment operations, they are also valuable in surgery training, maintenance planning and process design. Both of these involve people using technology to view objects. Face recognition is the reverse of this. It uses images of a scene to identify or verify one or more individuals using a stored database of faces, so that those people can be identified for (say) automatic charging for a service, or (more controversially) for security or advertising purposes. Condition sensor technologies (such as fitness monitors) are more intimate: they can sense and monitor a person's physical state.

Technologies that can communicate or connect

Arguably, the most significant capability that is increasingly built into many process technologies is the ability to network, connect or communicate with other elements in an operations process. For example, cloud computing applications allow dispersed groups of people to collaborate virtually, using shared information (in real time) and shared storage of information. Blockchain technology also relies on connected networks, but rather than 'share', it uses distributed databases in such a way that they maintain a shared list of records (called blocks), where each encrypted block of code contains the history of every block that came before it, with each transaction 'timestamped'. There is transparency within the network, but no single point where records could be hacked or corrupted. At a more technical level, communication between physical objects has been made significantly more effective through the use of radio frequency identification (RFID) technologies that can automatically identify objects, collect data about them and communicate it into information systems.

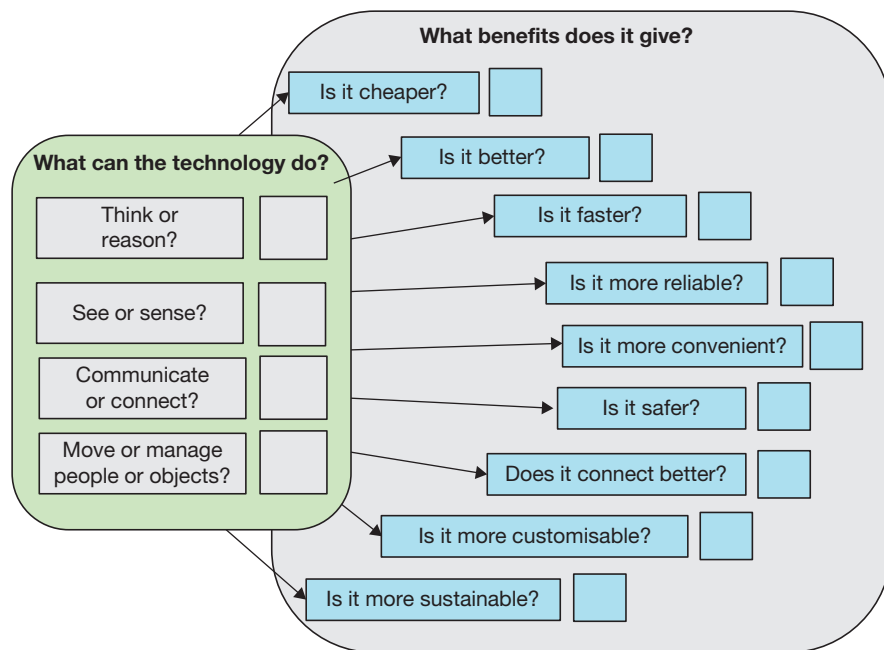
Technologies that can move or manage people or physical objects

Vending machines are an established and simple form of this ability: they store and dispense objects such as food or drink. Robots are extensively used for handling materials in, for example, automated warehouse or distribution facilities. A close relation of a robot is an automated guided vehicle (AGV) that is programmed to move between different stations (for example, in a warehouse setting) without a driver. Transportation technologies, such as automatic mass rapid transport systems or autonomous vehicles, move people around. While on a more airborne level, aerial drones, both guided and autonomous, are increasingly used in service applications. Non-military uses include safety and quality inspections, filming and journalism, search and rescue, precision agriculture and short-haul delivery.

The potential benefits of service technologies

The increased use of new technologies in service operations is, at least partly, due to the availability of the technologies themselves. But this would count for little if these technologies did not bring substantial benefits. So, what are these benefits? A fully comprehensive list of potential benefits would probably be too long, but some commonly experienced benefits are listed (and shown in Figure 11.13):

- *Is the technology cheaper?* One of the main benefits of several new technologies is that they are less expensive than what they replace (often people). For example, payment apps allow banking customers to take over the part of the payment process that involves instructing how much and to whom a payment should be made, and automates the rest. Both of these capabilities make the process less expensive than the labour-intensive process they replaced.

Figure 11.13 What can service technology do, and what benefits does it give?

- *Is the technology better?* Some technologies can perform tasks better than the humans they replace (or augment). In other words, they are capable of doing things in an error-free manner. For example, artificial intelligence-driven diagnostic scanners can, on average, detect potential symptoms of disease in X-rays better than most clinicians. This does not necessarily mean that the technology replaces the human, but it can complement the clinician's skill to provide a better service overall.
- *Is the technology faster?* The main benefit of some technologies is that they are capable of doing things more rapidly. For example, aerial drones can be used to deliver medicines in difficult or dangerous terrain. It is not that conventional delivery transport cannot do the same task but that, given the conditions, drones can do it faster (and possibly more reliably).
- *Does the technology give a more reliable service?* Some technology developments are capable of doing things with greater dependability (or perceived reliability). For example, 'track and trace' systems used by parcel delivery services offer the capability not only to inform customers exactly when a delivery is to be made, but also allow customers to suggest where parcels could be left if they are not at home.
- *Does the technology give a more convenient service?* Can it allow the service to be delivered where the customer wants it? There are many technologies that do this, from vending machines and ATMs to any technology that is more portable than its predecessors. For example, some medical testing technologies are sufficiently portable to allow them to be brought to the patient, rather than the other way around.
- *Is the technology safer?* Can it perform tasks that might otherwise harm people? For example, robots are used extensively to inspect conditions in difficult or dangerous locations, or to help with the decommissioning of old nuclear power stations, or in bomb disposal work, and so on. In addition, is the technology secure? Is it vulnerable to interference or hacking?
- *Does the technology connect or communicate better with customers or other operations processes, or other technologies?* The classic example of a technology that provides this type of benefit is the internet of things (IoT). It exploits the potential of RFID technology and creates a world where physical objects are seamlessly integrated into an information network to become active participants in business processes. Services can then interact with these 'smart objects' over the internet, query and change their state and any information associated with them.

- *Does the technology allow for more customising and personalising of a service?* Big data analysis systems, such as supermarket loyalty cards, use technology to build-up a database of customer preferences. As a result, they are able to target promotions to particular customer groups. In addition, through the information about buying patterns, supermarkets are able to adapt the mix of products sold in each store to the needs of the area.
- *Does the technology contribute to sustainability, in that it has a positive environmental impact?* For example, anaerobic digestion (AD) technology is now deployed to convert organic matter such as animal or food waste into biogas energy and biofertiliser. It allows waste companies to collect material from supermarkets and hospitality services that would otherwise go into landfill.

Case example

Robot receptionists? Robot carers?¹⁰

Although robots have been used for decades in factories for materials handling and processing, and in distribution for goods handling, their use in direct customer-facing services is less well developed. Yet many robotics experts and developers see robots with 'human-like' features as the way of the future in some high-customer-contact operations. Here are two examples.

How would a robotic hotel receptionist be received by guests? It has been tried at the Henn na Hotel in the Akasaka district of Tokyo in Japan, which claimed to be the world's first robot-staffed hotel. In fact, the automation, if not the full robotisation, of hotel service goes back much further. In the 1980s, Accor, the French hotel group, designed its famous Formule 1 budget chain of hotels. The hotels employed very few staff, with technology substituting in several areas. Guests let themselves in, and paid for their stay, with a credit card, and helped themselves to meals from vending machines in the reception area. The hotel's toilets and bathrooms were also self-cleaning. More sophisticated robots with far more functionality could, some industry forecasters believe, be a big trend in hotel design. However, others think that they are simply a gimmick. After all, many of the stages in hotel processes can be carried out by customers themselves through mobile phone apps, or a machine in the reception area, from checking in and out to receiving door codes and paying the bill. Even the information provided by a hotel's concierge service is a Google search away.



Oleksandr Rupeta/NurPhoto/Getty Images

Certainly, the early attempts to introduce sophisticated robots faced several problems. The Henn na Hotel reportedly stood down more than half of its 243 robots because they didn't work properly. One guest complained that he was repeatedly woken by the digital assistant in his bedroom asking him to repeat his request (apparently it was being triggered by his snoring). After only four years, it is replacing many of its robots with human staff. Another hotel that used robots to deliver food, drink and toiletries to rooms found that guests were ordering toiletries they didn't need just for the fun of it.

It was no accident that the first robot hotel was in Japan. Not only is the country a leader in using robots, its ageing population and restricted immigration created a shortage of suitable staff, including staff to care for the elderly, which has prompted the question, 'how can service technology be used to improve the quality of life as people get older?'

It is an important question, especially in Japan, where over a quarter of its population are over 65 – the highest proportion of any country in the OECD (an economic organisation of mainly rich nations). Care workers are in very short supply, so why not imitate industrial practice and substitute robots for carers? What are sometimes called ‘companion robots’ are intended to interact with people for social and therapeutic purposes, including dementia patients. They are not intended to replace human carers. Robots cannot (yet) interpret non-verbal signals or perform many caring tasks, but they can provide emotional support to some patients. They are being used to remind elderly patients to take their medication, for entertainment by relating stories, providing memory exercises that can delay cognitive decline and encouraging safety and security by indicating

if the user shows any unusual behaviour. Some Japanese therapists believe that using robots has encouraged over one-third of care home residents to become more active and autonomous by helping to alleviate loneliness and moderate the effects of dementia. They will also make it easier to look after people in nursing homes. The Alzheimer’s Society believes that robots can help combat the isolation that affects many seniors coping with dementia.¹¹ A robot that looks like a Japanese baby seal has been shown to help calm anxiety in people with dementia, while keeping them company and becoming a virtual pet. And, as demographic change speeds up, this type of service robot could become even more important. Eventually, researchers in the area hope the robots will allow old people to live longer in their own homes and stay mobile for longer.

11.6 Summary

What is service process design? – A ‘process’ is how you do things, it is simply a framework around which you can think about who should do what, and when. Processes are the building blocks of all operations. Service processes have to be designed to be both efficient and deliver the right experience, as required by the service concept. Excellent service – which satisfies the customer and meets the strategic intentions of the organisation – is usually the result of careful design and delivery of a whole set of interrelated processes. Service process design is influenced by the IHIP of intangibility, heterogeneity, inseparability and perishability, all of which can have implications for the design. The service process is the ‘glue’ that holds the rest – the customers, staff, equipment and materials – together and is the mechanism that delivers the service concept, creating the customer’s experience and delivering the service outcomes.

What are the main types of service process? – It is a mistake to take the same approach to designing service processes irrespective of their purpose; some way to distinguish between different types of process is needed. Three methods of distinguishing between service process are:

- *By the volume of services that have to be processed.* Service processes with different volume positions are likely to need configuring in different ways, and will need different types of resources.
- *The variety of different services that have to be processed.* Sometimes processes with different levels of variety are termed (in increasing levels of variety) ‘runners’, ‘repeaters’ and ‘strangers’.
- *The degree to which the process requires customer involvement.* The difference between customer contact and customer involvement is that customer contact means the extent that customers have some type of communication with a process, whereas customer involvement is the extent to which the customer is an intrinsic part of the service delivery process.

These ways of distinguishing between service processes can be combined. So, for example, volume and variety can be combined to give what are known as ‘capability’ processes (low volume and high variety) and ‘commodity’ processes (high volume and low variety). Similarly, one method of combining variety with the degree of customer involvement is the key decision area matrix (KDAM). The matrix helps to understand where the prime value is added in a process. A special

case of service operations is those that deal directly with high volumes of ‘customers’, who constitute a ‘crowd’. There are many situations where crowds can gather, such as sports events, political gatherings, concerts and festivals, ‘spontaneous events’ due to social media and peak-time transport hubs.

How can managers ‘engineer’ service processes? – Process mapping is an important and powerful tool. It is the charting of a service process in order to assist in the evaluation, design and development of new or existing processes. Often, process maps use an agreed set of mapping symbols. These symbols can be arranged in order, and in series or in parallel, to describe any process. Processes with varying degrees of customer contact are sometimes mapped in a way that makes the degree of visibility of each part of the process obvious. An important part of service process design is the calculation of a process’s operating characteristics. One calculation is how many items or customers a process should be capable of handling. This is best indicated by the ‘output interval’ or ‘cycle time’, that the process is designed to achieve. Cycle time is the time between completed items (or customers) emerging from the process. Another simple calculation is how much capacity is needed in order to meet the output interval, but this needs the ‘work content’ of the process task (how long the task takes). With these maps and calculations, one can find any bottlenecks – the activity or stage where congestion occurs, because the workload placed is greater than the capacity to cope with it. Another issue of process design is the ‘servicescape’. Chapter 7 defined this as the physical surroundings of the service. Not only is it an important influence from a customer perspective, it is also important from an operations perspective because it affects the work experience of service staff.

How can service processes be repositioned? – When a service operation changes its position on the volume–variety spectrum, its processes also need to change. Moving from capability towards commodity is a common objective for many organisations. To do this, customers may require greater levels of consistency across service transactions carried out by different providers across locations, and the ‘capability’ of the organisation, previously reliant on the skills and knowledge of specific individuals, must be replicated through more specialised resources. Moving from commodity towards capability could involve a number of actions – for example, shifting the focus of the operation from managing back-office operations for consistent and maximum efficiency, towards building front-office flexibility. This may require customer-facing staff to give informed advice as to the best service for individual customers, upskilling the front line through greater staff training and the provision of information systems.

What is the role of technology in service process design? – One of the most notable things about the increased dominance of technological issues in business is the way in which services have been transformed by new technology, nor is the pace of technological development slowing down. There are technologies that have not yet been developed that could change many service operations. The issues, therefore, are how to understand the nature of the general capabilities of new technologies as they emerge, and how to evaluate their potential impact on process performance. The ‘primary capability’ of a technology is what it is better at doing than what it may replace. Usually this is some mix of the ability to think or reason, the ability to see or sense, the ability to communicate or connect and the ability to move or manage people or objects. The benefits of such technologies (and what they should be evaluated against) include such factors as cost, technical performance, speed, reliability, convenience, safety and sustainability.

Discussion questions and exercises



1. When the management thinker and writer Charles Handy suffered a stroke, he had to spend time in hospital as he learned to walk, talk and even swallow again. He said that the experience taught him a valuable lesson about process objectives. As far as Mr Handy was concerned, the point of his hospital stay was to allow him to recover as fully as possible. That meant he needed to be up and about. In the

view of the nurses, that was a potential problem; he might fall and hurt himself. Their priority was to keep him safe. In practice, that required him to stay in bed and keep out of trouble. He called this the 'curse of efficiency' – organisations focus so much on efficiency that they fail to be effective. Instead of concentrating on their core goal, they pay attention to narrower measures such as cutting costs, or reducing the inconvenience suffered by their staff. (a) What other examples of this phenomenon can you identify? (b) How might it be avoided?

2. Reread the case example on the Shouldice hospital. (a) Illustrate how hernia surgery has moved on from the time it was seen as difficult. (b) List some of the advantages of the move.
3. In the case example 'Robot receptionists? Robot carers?', technology was used as a substitute for service people. What other advantages might such technologies bring?
4. There have been a number of changes in medical process technology that have had a huge impact on the way healthcare operations manage themselves. In particular, telemedicine has challenged one of the most fundamental assumptions of medical treatment – that medical staff need to be physically present to examine and diagnose a patient. No longer. Web-connected devices are now able to monitor an individual's health-related data and communicate the information to healthcare professionals located anywhere in the world. By doing this, medical staff can be alerted to changing conditions as they occur, providing a status report of a person's health so that the appropriate care can be administered. Telemedicine generally refers to the use of communications

and information technologies for the delivery of clinical care. Formally, telemedicine is the ability to provide interactive healthcare utilising modern technology and telecommunications. It allows patients to virtually 'visit' with physicians, sometimes live, maybe using video links, sometimes automatically in the case of an emergency, sometimes where patient data is stored and sent to physicians for diagnosis and follow-up treatment at a later time. What do you think are the implications of telemedicine on how healthcare operations can be managed?

5. The headquarters of a major creative agency offered a service to all its global subsidiaries, which included the preparation of a budget estimate that was submitted to potential clients when making a 'pitch' for new work. This service had been offered previously only to a few of the group's subsidiary companies. Now that it was to be offered world-wide, it was deemed appropriate to organise the process of compiling budget estimates on a more systematic basis. It was estimated that the world-wide demand for this service would be around 20 budget estimates per week, and that, on average, the staff who would put together these estimates would be working a 35-hour week. The elements within the total task of compiling a budget estimate are shown in Table 11.4. (a) What is the required cycle time for this process? (b) How many people will the process require to meet the anticipated demand of 20 estimates per week?
6. The Edinburgh Fringe, more accurately known as the Edinburgh Festival Fringe, is the world's largest arts festival, lasting 25 days and featuring more

Table 11.4 The elements within the total task of compiling a budget estimate

Element	Time (mins)	What element(s) must be completed prior to this one?
A – obtain time estimate from creatives	20	None
B – obtain account handler's deadlines	15	None
C – obtain production artwork estimate	80	None
D – preliminary budget calculations	65	A, B, and C
E – check on client budget	20	D
F – check on resource availability and adjust estimate	80	D
G – complete final budget estimate	80	E and F

than 55,000 performances of over 3,000 different shows across 317 venues. The scale of the festival poses a problem for the serious news outlets (websites, apps and newspapers) that aim to review the shows. Around 3,000 shows have to be reviewed during the preview week and the first 'proper' week of the festival. In the preview week, reviewers can only get to see about one event per day, but in the first week of the festival proper, they could see three shows per day on average. Most reviews must be done by the end of the first

week of the festival, so, with the preview week, two weeks are available. The festival operates on a one-hour cycle for each event (like tracks at a conference), but there are gaps, so this usually allows 15 minutes for walking between venues. There are also plenty of professional 'queue managers' and guides around the venues to guide visitors to events. If it takes roughly one hour for a reviewer to write and post a review, and reviewers work 12-hour days, how many reviewers will be needed if all shows are to be seen?

Case exercise

The GDP Central Estimation Service

The problem was that the cost and time estimates that we gave to clients just were not consistent. We won some jobs and then failed to make any profit on them, but we also lost some jobs because competitors undercut us on price. We firmly believed that we had some of the best engineers in the business, but unless we could get a grip on our estimation processes, we were wasting our potential. That is why we established the Central Estimation Service (CES).

(Jayne Sessions, VP Central Services, GDP)

Jayne was speaking only one month after the CES was established in an open-plan office in the centre of London. Its task was to offer a common service to all of GDP's offices and subsidiaries in Europe, North America and Asia. Under the new procedure, each office was required to submit details of the nature of all jobs that they wanted to bid for (called 'request for approvals', RFAs), together with a brief business case identifying the resources they would be using and how the job would fit into their existing schedule of commitments. The responsibility of the CES was to check the feasibility, profitability and risks associated with each RFA and provide a set of standardised proposal documents that could be formally submitted to clients. This service had been offered previously only to a few of the group's subsidiary companies; now it was to be offered to all parts of the firm, worldwide. Previously, the CES had dealt with only 10 RFAs per week; now it had to cope

with 10 times that number. Moreover, many of the cases that were being submitted were of far higher value. Previously, hardly any were for jobs of a value greater than \$10 million; now around 8 per cent of submissions were for jobs exceeding \$10 million.

Now that the service was being offered worldwide, it was deemed appropriate to organise the process of completing all engineering, legal and financial checks on a more systematic basis. Consequently, a system was designed as a four-stage process. When a GDP office submitted an RFA (using a secure link) it was first checked by the submissions team. This team of four clerical officers checked to make sure that all the required fields of information had been included in the submission. They also classified the submission by value. Jobs over \$10 million in value were deemed generally to be of greater complexity and were given a code number that indicated that they were likely to need more resources, to be allocated later in the checking process. Once checked, the RFAs were sent simultaneously to the three professional teams – the engineering, legal and financial teams.

In the submissions team, we do a largely routine task, and so far we are coping well, but it is nevertheless important. If a submission gets through to one of the professional teams with information missing, it just wastes their time. When we first set up the process we had to send around 8 per cent of all RFAs back to the office that had sent them, so they could supply missing information. Some

offices were upset when this happened, but they soon learned. Within a few weeks, the number of RFAs needing to be returned had fallen to less than 4 per cent.

(Carole Small, Supervisor, Submissions Team)

The engineering team

The role of the engineering team was to look at the technical feasibility of the job, make an assessment of any technical risks involved, check that the office involved had sufficient resources to do the job if their bid was successful (both in terms of the number and expertise of the staff involved), make independent estimates of times and costs to compare with the office's estimates, and make a technical recommendation for the strategy team to consider. The team had 12 professional engineers, who divided the jobs between them. Each engineer was totally responsible for a single job, but would consult others in the team if in doubt over a technical issue. The higher-value jobs tended to be dealt with by the more experienced engineers; however, the team had a policy of sometimes allocating complex RFAs to the more junior engineers in order to promote their development.

The amount of time taken by each RFA can vary a lot. Some of the low-value jobs can be cleared in a couple of hours, while the very complex high-value jobs can take a couple of days to check. For planning purposes we allow, on average, around 4 to 5 hours for most normal jobs, and 10 hours for high-value jobs. That is an approximation, but I don't think it's far off. Having said that, we are already falling behind as the work has built up. I will be asking for another engineer as soon as possible.

(Hans-Ulrich Wolf, Chief Engineer, CES)

The legal team

The legal team performed a similar task to the engineering team inasmuch as they were responsible for checking the legal and ethical risks and implications of all contractual arrangements. GDP at an executive level had tightened up following a major contractual dispute over an assignment in the US. Although GDP had won the legal case, it had generated a great deal of publicity and the company felt

that they had suffered some reputational damage. Consequently, the legal team in the CES had been tasked with keeping a close watch on all contractual arrangements, particularly in the more litigious regions in which GDP operated. However, within two months of CES operating fully, there had already been complaints from some of the offices.

Some of our internal customers have complained that we are being too risk-averse in our judgements. But that is not true. We have to be more careful, admittedly, but we do try to make balanced decisions. The real problem is that very often the offices don't provide all the information that we need. Last week, for example, of the 92 cases we received we had to ask for either clarifications or more information on 12 of them, and that's typical. Sometimes an office will get back to us with the information we want within a few hours, in which case we can progress things immediately. At other times it can be two weeks before they get back to us. Once we have all the information, most jobs can be cleared by us relatively quickly. Generally, our checks only take between one and two hours. Of course, given the new policy of taking fewer risks, sometimes we have to recommend that an office should not bid for a job, but that is only in about 10 per cent of cases.

(Nitin Agrawal, Legal Team Leader, CES)

The financial team

The financial team at the CES had two main roles. One was to keep a check on the financial nature of the jobs that were being bid for so that the information could be incorporated into the firm's financial forecasts. The second was to ensure that each potential job was both sufficiently profitable and within acceptable risk parameters. It was this last check that was usually the most problematic. The financial strength and creditworthiness of both clients and subcontractors had to be independently checked in about half of RFAs. This often involved the financial team using outside credit-checking agencies and specialist research companies. These could take up to two weeks to confirm a client or subcontractor's financial circumstances. The actual work required from the team's experts was usually less than four hours, but because of their extensive 'pending' files, waiting for reports from outside

agencies, decisions took, on average, slightly over a week.

The review committee

The review committee was responsible for considering the individual reports from the engineering, legal and financial teams. It consisted of the heads of the three teams together with Jayne Sessions, who had overall responsibility for the CES, and met twice a week, on Wednesday and Friday mornings. Before an office could put in a bid it had to be approved by the committee. They considered the reports from each team by exception (spending time only on those that expressed some reservations) in order of their internal job number, which reflected the date on which they arrived at the CES. Technically, the review committee could request further information from the submitting office. However, because the engineering, legal and financial teams would usually have done this already, it was unusual for the review committee to have to do it. Only 2 per cent of RFAs were delayed

for further information at this stage. Nor were many RFAs declined by the committee. All but 9 per cent were approved at the first committee meeting where they were submitted, and all but 3 per cent approved eventually.

The only reason we don't always come to a decision immediately is that some RFAs do need thinking about, or we need a bit of clarification from one of the teams. That is why it is useful to have the team leaders on the committee.

(Jayne Sessions, VP Central Services, GDP)

The completions team

After the review committee had made a decision, the RFA was passed through to the completions team, who performed a number of largely data-entry and coordination tasks that made sure that all documentation was in the new standard formats and that the relevant offices were formally told of the outcome to their RFA. It rarely took longer than two hours for

Table 11.5 Summary of the process characteristics for each part of the CES process

Team	Number of staff ¹	Number of RFAs completed	Average time per RFA and approximate range (hrs)	% sent back for more information/clarification	Number of RFAs pending/waiting for attention ²
Submissions team	4	1140	1.5 (1.0–2.0)	4% ³	56
Engineering team	12	1127	5.1 (0.5–18.0)	5%	76
Legal team	6	1108	1.6 (1.0–2.2)	11%	25
Financial team	9	1075	3.0 (2.0–4.0)	4%	102
Review committee	None exclusively	1037	NA	2%	38
Completions team	3	1035	1.2 (1.0–2.0)	0	0
					297

1. Full-time equivalents

2. Includes RFAs 'out for clarification', awaiting further information and work in progress/queueing

3. At 12-week point

one of the three completions team's clerical staff to complete all these activities for each RFA.

The position after the first quarter

After the new process had been operating for a full quarter (in fact, 14 weeks of full operation), Jayne met with her team leaders to review how the CES was doing.

In many ways I'm happy with the way things have gone', she said to her senior staff, 'we have increased our capacity by a factor of 10, which is no mean achievement, and we have done it while implementing company policy over such issues as risk and the standardisation of documentation. However, I think that we need to think about two issues. The first is that our customers out there in the offices are not always happy with the service that they are getting. Some of this is just that they don't like that GDP have tightened up the rules of what type of jobs they should be bidding for. That isn't our problem. I keep telling them, 'don't shoot the messenger if you don't like the message, take it up with your regional CEO'. But the other issue really is our problem. There are too many complaints that it is taking too long to get approval (or otherwise). Not all jobs require a fast response of course, but some do, and there have apparently been instances

where an office has been prevented from bidding in time because we have taken too long to approve their RFA. I only have the offices' word for this, and I'm checking up on it. I can't see why it is taking too long (if it really is). We have staffed each part of our process to try to make sure that RFAs should not be held up. Except for some very complex or controversial RFAs, I don't see why we should be taking any longer than a week to get through the total process. I need to investigate further. I might put a trace on a representative sample of submissions and track their progress through the process.

Jayne's assistant spent two weeks talking to each team and consulting their records. He uncovered the information for the previous 12 weeks of CES's operation, which is included in Table 11.5.

Questions

1. What are the objectives of the CES process?
2. Where is the bottleneck (if any) in the process?
3. Do you think that the current process can achieve a service that provides a one-week turnaround to its customers?
4. How would you change the process to improve it?

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Notes



- 1 A classification first used by Lucas Industries in the 1980s.
- 2 This hospital was the subject of a famous case study, by Heskett, J.L. (2003) 'Shouldice Hospital Limited', Harvard Business Publishing, Case 9-683-068
- 3 Hart, C.W.L. (1995) 'Mass customization: conceptual underpinnings, opportunities and limits', *International Journal of Service Industry Management*, 6 (2), 36–45; Pine, B.J. (1993) *Mass Customization*, Harvard Business School Press, Boston, MA
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Chapter 12

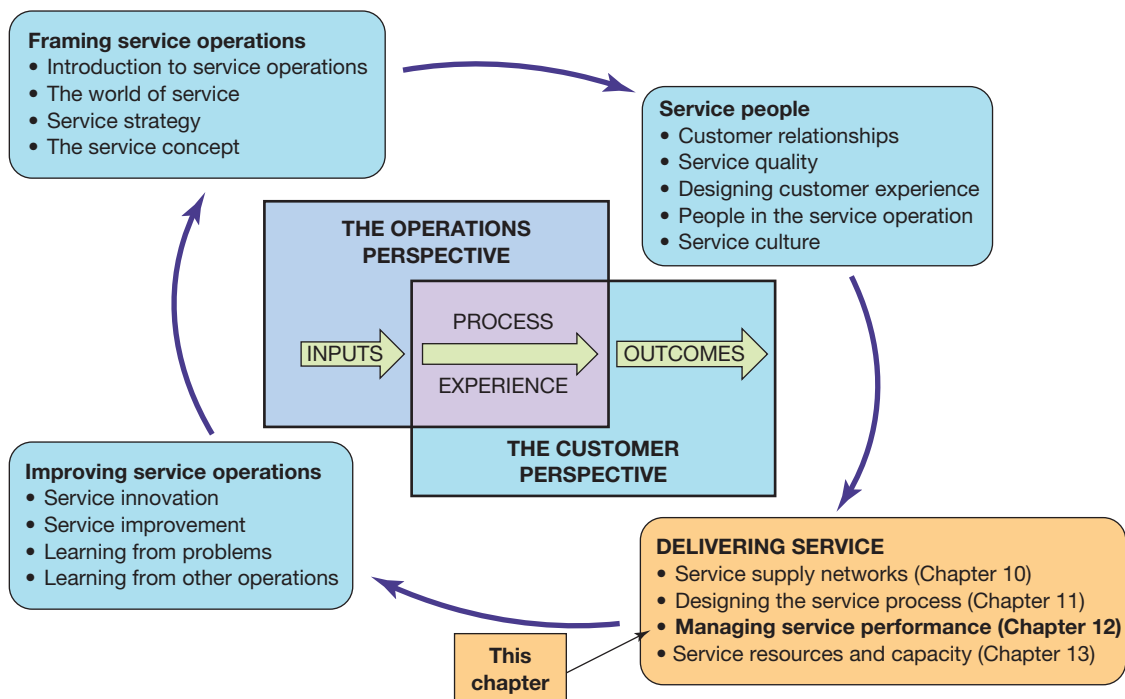
Managing service performance



The chapter begins by looking at the particular challenges of managing performance in the service sector, and in so doing tries to draw out the differences between service performance management and more general operations, and strategic performance management. A large part of the chapter concerns measurement, as measurement and measures are an important underpinning of any management control system. Another issue that receives attention in this chapter is the design of performance management systems. Figure 12.1 shows where this topic fits in our model of service operations management.

Learning objectives

- To define what is meant by 'performance' in service operations
- To define service performance management at strategic and operational levels
- To understand the challenges of performance management and measurement
- To be able to explain the evolution of performance management systems
- To explain the design of 'balanced' performance management systems
- To understand the methods of measure selection
- To appreciate how managers can measure the customer's perspective
- To understand the principles of target setting and measure reporting

Figure 12.1 This chapter looks at managing service performance

Introduction

It is difficult to make any operation work better if you don't know how well you are doing, which is why the whole idea of 'performance' has attracted such interest ever since the concept of formal organisations emerged. Some kind of performance management is a prerequisite for judging whether an operation is good, bad or indifferent. Without performance measurement, it is impossible to exert any control over an operation on an ongoing basis, or to judge whether any improvement is being made. Even back in 1750 BCE, the ancient Code of Hammurabi from Babylon established a range of measures and targets for wages, training obligations, quality standards for builders and healthcare obligations (for owners of slaves, admittedly). By the early 1990s there came rapid growth both in the study of performance management by academics and also in consulting practice. Performance management has since been a key issue for the many consulting firms willing to help build performance management systems and sell the software on which such systems can run. Reasons for the growth in 'performance' at an operational level include the ubiquity of computer-based systems resulting in data becoming easier to manage, an increased pressure on organisations to deliver 'value for money' and the popularity of business award schemes such as the European Foundation for Quality Management Excellence Award, Investors in People and so on, all of which explicitly encourage measurement.

It could also be argued that the more sophisticated approaches to assessing and managing performance that were developed in the 1990s, such as the Balanced Scorecard, encouraged organisations to take explicit consideration of more subtle measures and reporting methods, and were better suited to use in service organisations (we deal with the Balanced Scorecard later in this chapter). Similarly, the needs of public sector services prompted increased focus on performance management. In many respects, the demands on the public sector for effective performance management is greater than in the private sector. The public sector routinely has to deal with 'imposed' measures – for

example, a government department might choose to pay attention to a given suite of measures, but then has to consider any other additional measures of political interest. In turn, politicians have to respond to the media and the public, who put pressure on specific operational measures. The result is ‘measure inflation’ and therefore a need for systems and processes to cope.

12.1 What is ‘performance management’?

Performance measurement, as we use the term here, is the process of collecting and analysing data and communicating information about the properties of organisational processes, activities or groups of people.¹ This performance management process is achieved through the use of a variety of mechanisms such as performance indicators, performance measurement, performance targets and performance reporting. For example, a performance indicator (or several of them) can be used to gather and analyse data, and communicate information on the cost, quality or effects of a specific process, such as a customer complaint handling process. Sometimes, performance indicators are specific examples, such as case studies that can be used to communicate information about the benefits derived by a group of customers.

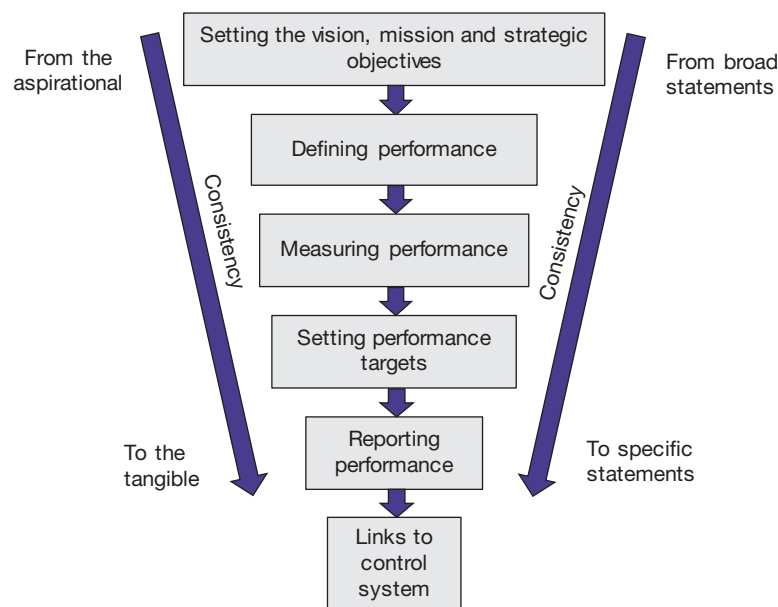
There is, however, some ambiguity regarding the term ‘performance management’. In some contexts, the term can be used to refer to human resource practices at the level of the individual, such as performance appraisals. The aim of these practices is usually to maintain and improve employee performance in line with an organisation’s objectives, in order to make sure that staff contribute to business objectives. Ideally, performance should be managed holistically, throughout the range of HR activities and processes. The motive for performance management, when the term is used in this way, is to ensure that staff understand what is expected of them, and have the necessary skills, resources and support to achieve their goals. Related issues include performance-related pay, individual objective setting, performance ratings, individual staff feedback and performance appraisals.

In this text, we do not use the term in this human resource-related way, although clearly these individual-level practices are related. Rather, we treat performance management as the practices that are intended to capture performance across the entire organisation. In this broader view of performance management, we will treat a wider variety of ideas and mechanisms, including both internally and externally developed ones, whereas performance appraisals tend to be internally developed.

Performance management comprises several elements

The next cause of terminological confusion over performance management is its scope. Where does performance management end? What exactly is *not* performance management? After all, everything in this text, in fact everything in any management writing, is concerned with managing performance. Certainly operations management is: its purpose is to improve the performance of service operations through the management of its resources and processes. Yet, at a more focused level, there are specific activities that relate directly to the process of making sure that all the operations management (and other) activities are coherent and reflect the organisation’s vision and objectives. This is what we shall address in this chapter – the various elements that all service organisations need to adopt if their efforts are to reflect their intentions. These elements are illustrated in Figure 12.2. They are:

- Setting the vision, mission and strategic objectives for the organisation.
- Defining what is meant by ‘performance’.
- Measuring performance.
- Setting performance targets.
- Reporting performance.
- Linking to the control systems.

Figure 12.2 The elements of performance management

Each of these elements is important. Together they represent a progressive movement from the consideration of broad, sometimes abstract and aspirational issues, via intentions, to more specific, concrete and tangible activities. But while working through these activities, it should never be forgotten that the objective is to achieve consistency. Whatever performance is reported should be set against the targets that have been set for whatever performance measures have been selected, which themselves are appropriate for how ‘performance’ has been defined, which again is consistent with the organisation’s strategic intention.

This chapter provides some simple but powerful tools and frameworks, which have been used to great effect in many service organisations, to design, assess and develop performance measures and systems that help control operations and drive operational and organisational improvement.

Why is performance management important?

Performance management is essential to ensure that the operation is doing what it is meant to be doing and that it is improving its activities. Try posing the question of why performance management is important in reverse. What would be the consequences of not managing performance? The first and obvious answer is that, without some effort put into the performance of an organisation, it would not be possible to know how it is doing. Is the organisation good, bad or somewhere in between? Is it fulfilling the purpose for which it was set up? But there are more specific benefits too (some of which overlap).

Performance management connects strategic and operational decisions. There is a tension in all service operations management between the strategic decision making that sets the resources and objectives of the operation, and the more day-to-day operational decisions that run its processes. Much of what makes a successful service operations manager derives from the ability to marry strategic and operational perspectives. Referring back to Figure 12.2, that is what performance management is concerned with – making sure that the strategic vision, mission and objectives are aligned with how operations resources and processes are controlled. Without it, operational decision making can easily come adrift from the long-term intentions of the organisation. A performance management system permits the deployment and implementation of strategy on a continuous basis. With it, service operations managers can get feedback needed to guide the planning efforts. Without the feedback provided from performance management, the organisation is ‘flying blind’.

Performance management is the basis for operations improvement. One of the basic requirements of performance improvement is that one needs to know which aspects of performance need improving, and in what order. There are obvious advantages in directing improvement efforts into those aspects of performance that have been measured as inadequate. Moreover, most approaches to operations improvement are based on evidence-based problem solving that emphasises the collection of performance data. In addition, the amount of variation in performance is seen as central to checking that the process is, in itself, acceptable (called ‘being capable’, see later in the chapter). Performance data can also be used to check if process performance is changing over time, and to check on the extent of the variation in process performance. Also, it may be a cliché, but what gets measured gets done. Further, by linking measures with rewards (such as bonuses) and/or sanctions, individuals can be motivated to improve their personal performance – assuming they have control over what is being measured (which is not always the case). Information about what pushes the process on or off target can also help individuals and organisations learn how better to manage the process involved.

Performance management aids communication. This is achieved by measuring those things the organisation is saying are important and need to be controlled and/or improved. Conversely, by measuring everything (or lots of things), there is the implication that nothing is important (amending the saying to ‘what gets measured just gets measured’). A measure, or a set of measures, therefore informs employees as to what the organisation requires them to strive for and indeed what they as an individual or a department may be accountable for. A measure is also an important means of communicating and implementing strategy and, to some extent, culture. For example, by measuring speed of response in answering telephone calls, an organisation is saying this is important, and it is implied that employees are expected to strive to meet targets or improve the speed of answering. Most importantly, transparent performance management can also contribute to a common understanding of both where performance is below acceptable levels and where the organisation is doing well. See the case example ‘DPD uses visual performance systems in its depot’ for an example of how performance information aids communication at an operational level.

Performance management can motivate appropriate behaviour. The set of measures used by an organisation creates a particular mindset that influences employees’ behaviour. If speed of response is measured but not the quality of the interaction, employees may find themselves, albeit subconsciously, compromising quality for speed. It is important, therefore, to have the right mix or balance of measures and also a set that supports the strategic intentions of the organisation. An important underpinning of performance management is the idea that establishing performance targets, particularly stretch targets, attracts people’s attention. Then the measurement of progress towards the targets provides useful feedback, concentrating their efforts on reaching them.

Case example

DPD uses visual performance systems in its depot²

The DPD group is an international parcel delivery service that operates mainly in the express road-based market and delivers over five million parcels worldwide every day. In the UK, it is one of the market’s leading ‘time-critical’ carriers, providing a seamless service for its customers. But this seamless service depends on all parts of its network operating at peak performance. This includes DPD’s new ‘Superhub’ in Hinckley, near Leicester, which is built on a 33-acre site and has the capacity to handle an astonishing 72,000 parcels per hour. The Superhub

wanted to make sure that a clear indication of its performance would drive its communication and improvement efforts. A key component of this was its use of visual management. Visual management is the visual display of performance information in a way that improves the effectiveness of communication. Generally, visuals can convey messages quicker and encourage more interest than written information.

However, to be effective, visual management involves careful design if it is to achieve its full

impact. DPD called in specialist help from Clarity Visual Management, who supply and advise on how best to use visual tools and equipment. In contrast to many of Clarity's visual management projects, DPD's requirements were very specific. DPD knew exactly what it was trying to achieve and understood the principles that lay behind its requirements. To be effective, as well as conveying useful information, visual displays had to be near to each of the Superhub teams' centres of operation. It was also important the displays would not physically be an obstruction to workers, would meet DPD's health and safety requirements and, importantly, be robust enough to withstand the demands of an extremely busy, 24-hour parcel depot.

The Superhub works on the principle of having teams, each of which have responsibility for a number of 'inlets' (incoming parcel feeds) and 'outlets' (outgoing parcel feeds). At the beginning of each shift, each team has a team meeting centred around the visual management presentation, where the key performance indicators (KPIs), together with targets and so on, are discussed. DPD needed a display that would enable the visual management board to be lowered during the 'start-of-shift' team meeting, so that it could be easily updated and presented to the team by the team leader. During the remainder of the shift, it needed to be a visible reminder but not be a physical obstacle or a health-and-safety hazard to workers. In addition, as this was a brand new flagship site and likely to be the focus of much public attention, the visual display



DPD

had to be aesthetically pleasing. Specifically, colour coding was to be utilised to segregate the different teams.

After much consideration, on-site discussions and the development of prototypes, Clarity Visual Management devised a solution, which quickly spread to other DPD depots. It consisted of a sturdy mobile 'arm' to which was attached a magnetic receptive board, which was covered with printed magnetic overlays. This meant that, as the programme developed, the overlay could simply be peeled off and replaced without any need to disturb the mechanism. The system worked perfectly, with the arm holding performance information that was clearly visible yet above the heads of the workers, until a meeting was scheduled – when it was lowered to become the central point for the team discussion.

The cost of performance management

Performance management is not cost free, yet few organisations calculate just how much time and energy they spend on measuring performance. Even fewer assess the degree to which their systems, procedures and person-hours spent on performance measurement and management provide value for money. Indeed, many organisations have turned performance measurement into an industry, which provides little benefit in terms of controlling or improving performance. Furthermore, inappropriate measurement can be detrimental to the organisation. For example, by measuring the speed of dealing with applications for a job in a government department, the staff may not give the detailed attention that is needed to identify the best candidates. In universities, focusing on the research output of academics may cause them to spend less time on their teaching quality. Therefore, one needs to take care to select the right measures and have simple and effective systems to control and improve our service operations.

One of the most common but perhaps unsurprising challenges in performance management and measurement is in generating agreement about, and ownership of, both the system and the

measures within it by large and disparate groups of people. This challenge is unsurprising because a performance management system is one of the most public or open articulations of an organisation's real strategy. Performance management systems lay out the path, from strategy all the way down to the activities and decisions of service operations managers at the 'shop floor'. The systems 'end' with a suite of measures that can have a profound impact on both the organisation and the service operations managers and staff responsible for delivery. For example, a performance measure that is designed to track the achievement of an outcome will affect perceptions of the unit responsible for achieving that outcome in respect of stature, resource allocation, bonuses, promotion prospects and so on.

Performance management system design can involve managers from across the globe; from every region and every country in which the service organisation operates. With such large groups consisting of powerful and strong-headed managers, the idea of getting agreement on every aspect of the system is perhaps unrealistic. Sometimes all you can hope for is a degree of consensus ... 'mostly we agree, and on some aspects we agree to disagree'.

Such attention, consensus and buy-in cannot be achieved if measures and measurement systems are imposed on an organisation. Clearly the executive and their managers have to lead, but today, and especially in the context of service operations, a pure 'command and control' approach has its limitations. Performance management systems therefore have to be designed very carefully so that they respect the intentions of the executive, but also are practical and actionable for service managers and workers.

12.2 Setting the vision, mission and strategic objectives

Any attempt to structure performance management must start with an understanding of what an organisation is trying to achieve. This involves articulating three statements that are often confused and sometimes (mistakenly) used interchangeably – they are 'vision', 'mission' and 'strategy'.

Vision and mission statements

A vision statement is the starting point for any performance management system. It provides the framework for subsequent performance management, sets the direction for and articulates the broad aspirations of the organisation. A vision statement describes where an organisation eventually wants to be. It exposes where the organisation sees itself in the context of its market or the community it serves. Most vision statements are short and to the point: for example, a foodbank charity might use the statement 'help the food-deprived in times of need'; a theme park could have, 'entertaining the whole family'; and a family restaurant chain's vision statement might be, 'providing a fun dining experience'. None are long essays; vision statements work best when they are concise. To be effective, a vision statement is best when it is:

- relatively short and clear;
- focused on the future;
- based on core values;
- a 'directional' guide;
- challenging;
- inspirational and memorable.

A mission statement is not the same as a vision statement, but it takes us further into performance management because it is more action-oriented. It describes what the organisation does, not just what it wants to achieve in the long term. So, for example, whereas the foodbank charity that we stated earlier was to 'help the food-deprived in times of need', its mission statement could be 'to

establish an effective food distribution network covering the whole country'. It is what it actually does, not just what it aspires to do. While still being concise, it should flesh out and clarify the 'what,' the 'who,' and the 'why' of the organisation. It is sometimes called the 'roadmap' for the company's vision statement. Or, put another way, whereas the vision statement is for 'someday', the mission statement is for 'everyday'.

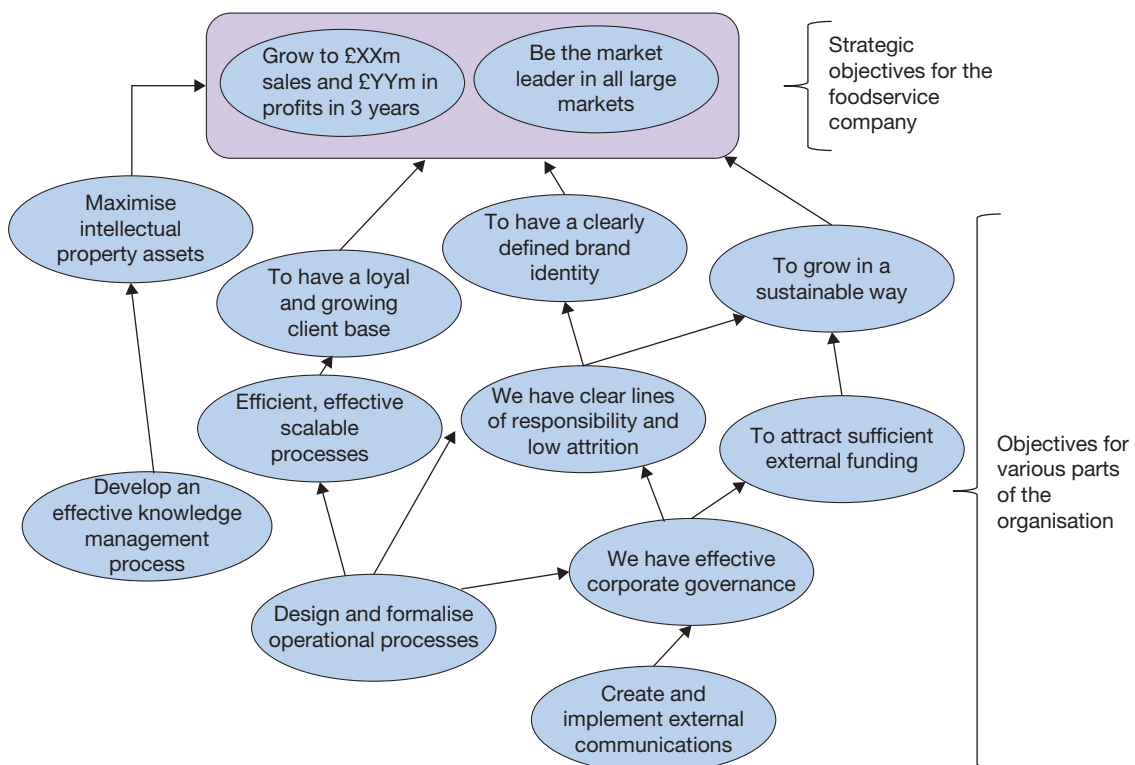
Strategic objectives in performance management

Moving from considering vision and mission statements to setting strategic performance objectives is a further step towards the practical end of performance management. Setting strategic objectives is a particularly important stage in performance management because it helps to make sure there is a logical connection between day-to-day operations and the strategic intention of the organisation. There are many reasons for ensuring such links and consistency. Generally, organisations that can translate their strategy into their performance management system are well placed to execute their strategy because:

- They can effectively communicate their objectives and their targets.
- They create a shared understanding of the organisation's strategic intentions.
- Managers and employees can focus on the critical drivers of success.
- Investment, initiatives and actions are aligned with strategic goals.
- Operations managers can communicate with, and influence, strategic decision makers.

One of the most useful frameworks for articulating how strategic objectives can link to other elements in performance management involves logically connecting the objectives, including objectives

Figure 12.3 A simplified strategic linkage model for a foodservice company



in various parts of the organisation. This framework is called a strategic linkage model. The strategic linkage model represents management assumptions about what is needed to achieve strategic objectives. As such, the strategic linkage model is a set of assumptions about causality. It is, in effect, a hypothesis – a testable theory of how the business will perform. Figure 12.3 shows the strategic linkage model for a foodservice company.

The use of strategic linkage models is an attempt to ensure that the objectives of all the different parts of an organisation support higher-level objectives, which in turn support the organisation's overall strategy, leaving managers in the various parts of the organisation to develop their own appropriate measures and targets to ensure they deliver their objectives. This approach not only helps to align all organisational and operational activities with strategy, but also reduces the amount of unnecessary measurement and reporting. The strategic linkage model is very similar to what is called a 'strategy map' – an idea we will return to later in this chapter.

12.3 What is 'performance' in service operations?

It is a mistake to assume that the idea of 'performance' is straightforward as there are various definitions of what 'performance' means. Some definitions stress performance as a result or outcome of an action, the effect of a completed act. For example, 'we have treated 99 per cent of all requests within an hour', or 'overall customer satisfaction has improved substantially'. This view of performance does not tell us about how the result was achieved; it focuses on the consequences of whatever process has brought it about. By contrast, other definitions of performance see it as meaning not the consequences of an action, but rather the act itself. They stress how actions are performed. For example, 'our customers always comment on how empathetic our counsellors are', or 'that was an engaging and inspirational lecture'.

Another important distinction in how we might view 'performance' concerns the scope for different stakeholders to interpret it. Some aspects of how we judge performance are relatively objective. They are 'real' in the sense that, if one accepts their relevance and the way they are measured, it is difficult to dispute them. For example, 'the total cost per customer visit for our service engineers is \$100', or 'the sales team secured £200,000 of business this month'. Other aspects of performance, however, are more 'socially constructed' in that they exist in an observer's mind rather than being an objective reality. They are more open to interpretation. Different people could give quite different meanings to performance, depending on their objectives and/or predisposition. For example, 'it really upsets me that whenever I buy from this store they want my postcode and phone number every time' (but most customers do not object), or 'the overall environmental impact of this power station has improved, but living next door to it, it doesn't seem so'.

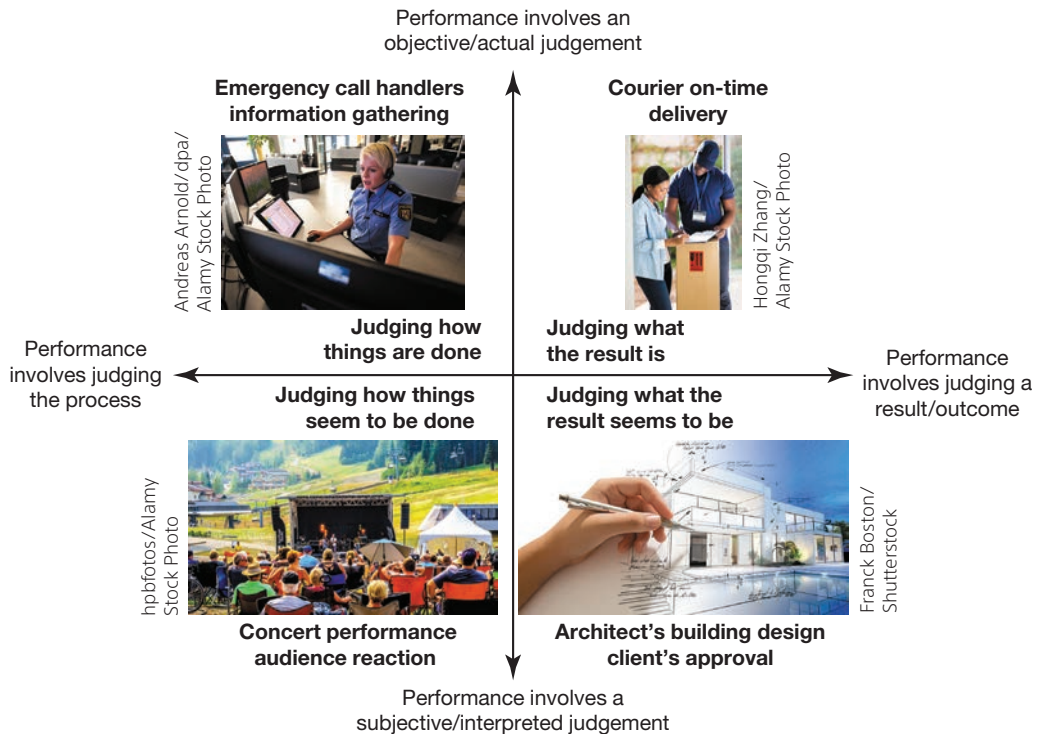
Professor Pietro Micheli of Warwick University holds that the two dimensions of what performance means can be represented as shown in Figure 12.4,³ where performance is seen as either:

- judging a result/outcome or judging a process; and
- an objective/actual judgement or a subjective/interpreted judgement.

In the diagram, the dimensions result in four quadrants:

- The top right-hand quadrant (judging what the result is) covers aspects of performance that focus on actual outcomes. For example, a courier company will track its on-time delivery performance – an outcome measure that is relatively objective if the details of how to measure it are agreed.
- The top left-hand quadrant (judging how things are done) covers those relatively objective aspects of process. For example, in an emergency call-handling centre, it is important that staff are effective in extracting accurate information from (often distressed) callers. The degree to which staff can do this is a process measure, although it will affect the service's response time, which is an output measure.

Figure 12.4 Performance can be seen as either judging outcomes or judging process, and involving either relatively objective or relatively subjective aspects



- The bottom right-hand quadrant (judging what the result seems to be) covers relatively subjective outcomes. For example, the design of a building is the output of an architects' practice, but may be judged in very different ways by different clients, or even different people in one client's organisation.
- The bottom left-hand quadrant (judging how things seem to be done) covers those subjective aspects of process. For example, the enjoyment of a concert is the result of many different factors connected to the process of attending the venue, the supporting acts, the seat location, sound quality and so on. Moreover, judging the main act could be highly subjective, partly depending on how great a fan of the artist one is. This does not mean that judging performance in this quadrant is any less useful, but it does require constant questioning of how any performance measures are interpreted.

It is worth pointing out at this stage that the quadrants in this model are not alternatives. Any operation that confines its view of its own performance to a single quadrant is almost certainly missing out on some important aspects of its performance. For example, Table 12.1 shows some of the aspects of performance used by a logistics service.

How is 'performance' in service operations different?

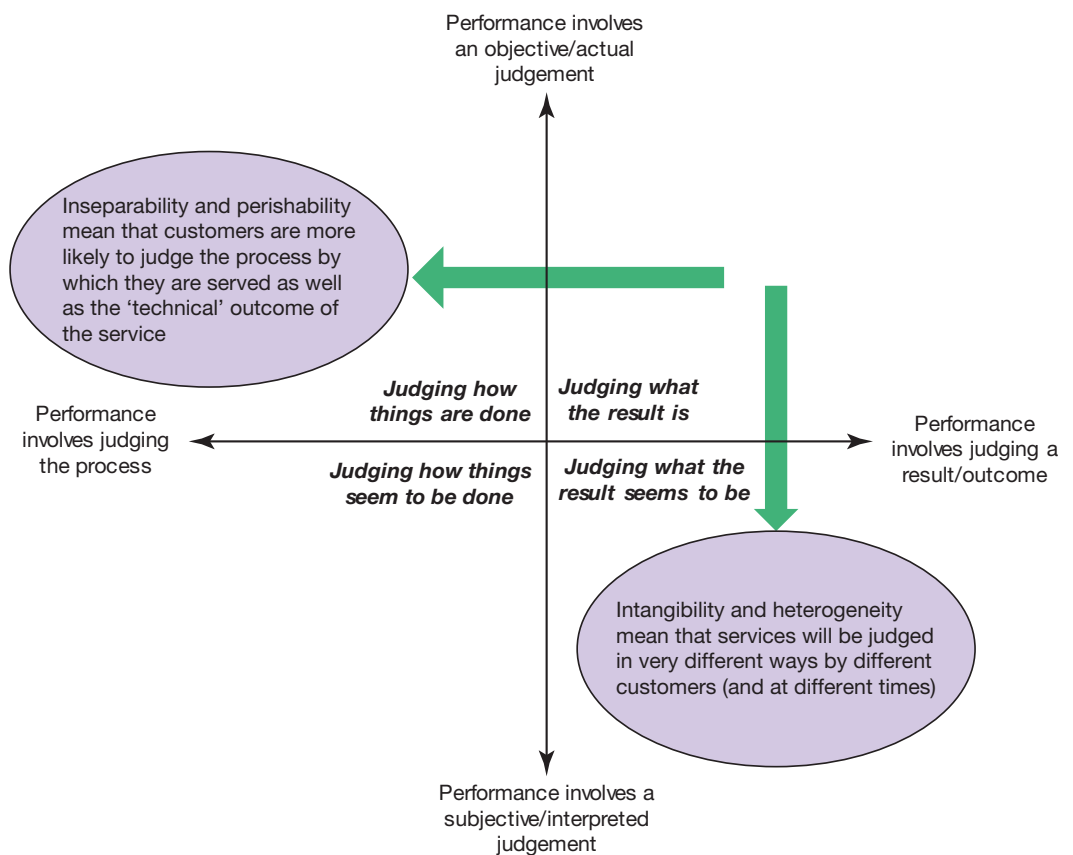
As is usual, answering this question requires us to return to the IHIP characteristics described in Chapter 1. The inseparability that characterises many services means that customers are likely to be physically present during the delivery of a service, so they will therefore be in a position to judge the process of service delivery. The same argument applies to the idea of perishability. An offering that, in effect, disappears after a period is not always easy to judge by its outcomes alone. So, both inseparability and perishability imply that customers (and therefore the operation) are more likely to judge the process by which they are served, in addition to the 'technical' outcome of the service.

The intangibility characteristic means that the ‘boundaries’ of a service (what the service includes) are not always clear. This implies that different customers, depending on their understanding of the service concept, could judge services in very different ways. Heterogeneity similarly implies that the variety of interactions with customers will mean that performance needs interpreting to take differing customer perceptions into account. The impact of the IHIP characteristics is illustrated in Figure 12.5.

Table 12.1 Measures of performance for a logistics services company

	Judging process	Judging outcomes
Objective measures	<i>Judging how things are done</i> Inventory count accuracy Truck utilisation Logistics cost versus budget	<i>Judging what the result is</i> On-time delivery Over/short/damaged orders Order cycle time
Subjective measures	<i>Judging how things seem to be done</i> Demand forecast accuracy Integration with customers’ systems Contact centre friendliness	<i>Judging what the result seems to be</i> Overall customer satisfaction Strength of customer relationship Number of customer complaints

Figure 12.5 Performance can be seen as either judging outcomes or judging process, and involving either relatively objective or relatively subjective aspects



Again, this view of the judgement process does not imply that all service performance should be based on aspects of performance that are either interpreted or process-based, or both. As we showed in Table 12.1, all quadrants should be represented. However, when compared with more manufacturing-like operations, the three quadrants that incorporate these aspects are likely to be more important for service operations.

One issue that makes service performance management different from performance management in manufacturing operations is the problem of consensus and agreement, mentioned earlier. The subjective nature of service and its provision means that there are many views on what needs to be done, and hence greater complexity and nuance in managing and measuring delivery. These differences play out mainly at the level of measures. Service performance management requires measurement of subtle and often intangible aspects of performance such as knowledge and its development, relationship skills, relationship capability at the level of the organisation, service culture, intellectual property and so on. Clearly, these issues are important and often need to be measured in the world of goods manufacture, but they take centre stage in the world of service. As we will see when we get on to the section on performance management system design, the complexity of service performance measures also implies similar challenges in mapping the outcome and activity objectives that are to be monitored and controlled in these ‘softer’ areas.

12.4 Performance measurement

Different authorities have diverse views of what exactly is meant by ‘performance measurement’. Here, performance measurement is simply about appraising the performance of an operation. It is the formal process of obtaining, analysing and expressing information about an aspect of a process, an activity or a person.⁴ Essentially, it is the quantification of an input such as staff hours, or an output such as cost, or the level of activity of an event or process such as number of clients dealt with per day. In principle, the process of performance measurement sounds straightforward; it simply involves going out and collecting the data that is relevant to the business’s objectives. However, to avoid confusion, one needs to be careful in clarifying exactly which aspect of performance is being measured. It is important to specify how the data will be used and how it should be quantified. Without this, data could be collected, analysed and interpreted in different ways, reducing its usefulness or, worse, providing misleading indications.

Performance data comes in a wide variety of forms. The main problem in practice is not that most operations have too little data that could be collected; rather it is that there are too many types and sources of data available. Data on performance from an operations perspective could include costs, resource utilisation, error rates, internal response times, target dates met and so on. From the customers’ perspective, data could be such things as customer satisfaction scores, scores by external rating agencies, frequency of customers returning, the number of compliments on positive service levels and so on. Any of these measures could be qualitative or quantitative, though often the qualitative results are converted into numbers or variables. However, the process of measurement is rarely totally straightforward and we will deal with some of the challenges of measurement later in the chapter.

Although the two terms are sometimes (mistakenly) used interchangeably, it is important to distinguish between performance *management* and performance *measurement*. As we indicated in Figure 12.2, performance management is a far broader, more action-oriented and more complex issue. It is concerned with the actions taken that allow managers to control and improve their operations. But performance management is based on performance measurement and how it is reported within an organisation. However, a frequent criticism of some organisations is that they spend far too much time measuring and reporting performance without devoting sufficient time trying to manage it. There seems little point in measuring something if the organisation is not going to use the measures effectively.

Which are the most important performance measures?

Performance measurement is not an end in itself, and selecting the right measures is not always an easy task. One of the problems of devising a useful performance measurement system is trying to achieve some balance between having a few key measures on the one hand (straightforward and simple, but may not reflect the full range of organisational objectives) or, on the other hand, having many detailed measures (complex and difficult to manage, but capable of conveying many nuances of performance). Indeed, many organisations have (by their judgement) too many inappropriate measures; just because it can be measured doesn't mean it should be measured.

Broadly, a compromise is often reached by making sure that there is a clear link between the operation's overall strategy, the most important (or 'key') performance indicators (often called KPIs) that reflect strategic objectives, and the bundle of detailed measures that are used to provide substance to each key performance indicator. Obviously, unless strategy is well defined then it is difficult to 'target' a narrow range of key performance indicators. There are two useful tests of a performance measure: strategic linkage or appropriateness, and unique utility or focus. An effective design process for a performance management system should ensure the appropriateness of any measure. However, managers often inherit 'legacy' measures, and their utility has to be periodically evaluated. Table 12.2, originally suggested by Professor Andy Neely,⁵ provides a useful checklist of tests that can be used to audit any performance measure.

Systematic measure development

The tests identified in Table 12.2 are useful to check existing measures, but it could be argued that the systematic development of new performance measures is even more important. For example, the following criteria could be used:

The name of the measure. Does the name capture the essence of what is being measured? Will the name easily translate to an understandable concept for every person who has to use the measure? Performance management system meetings require decision-making consensus on a variety of different areas. Achieving this consensus is aided by simple and accessible measure descriptions. Even if the measure is of a technical nature, it is worth trying to make the name make sense in 'everyday' terms.

Table 12.2 A checklist – ten tests of a performance measure

Purpose test	Is there a clear reason for the measure?
System test	Is there a clear system to ensure the results will be acted upon to achieve the purpose?
Truth test	Does it measure what it is meant to measure?
Focus test	Does it measure only what it is meant to measure?
Consistency test	Is it consistent whenever it is measured or whoever measures it?
Access test	Are the results available and easily understood?
Clarity test	Is ambiguity possible in the interpretation of the results?
Timeliness test	Can and will the data be analysed quickly enough for appropriate action to be taken?
Cost test	Is it worth the cost of collecting and analysing the data?
Gaming test	Will the measure encourage any undesirable behaviours?

Purpose. The purpose of the measure – is there a clear relationship between the measure and the associated strategic objective? Does the measure provide a reliable and useful indicator of whether a particular outcome is being achieved, or whether an activity is being carried out as planned? Measures are, at best, partial indicators of the state of phenomena of interest. It may be that to track the state of an activity or outcome, several measures are required. Each should have a transparently observable link to the relevant objective. Such links are a test of the validity and purpose of the measure.

The formula. How is the performance measure calculated? Is the formula used to derive a measure expressed with sufficient precision? Are the terms adequately defined? A formula need not be a complex mathematical device. For example, in a project environment it might be a simple statement in English: ‘milestones achieved versus milestones planned’. Or a retailer might use the number of complaints per day. If a formula is complex, make sure that adequate explanation of its use is provided.

Units. Is the measure expressed in appropriate units? A number by itself is not as useful as a number with a context. So, not ‘revenue’, but ‘revenue per month’, not ‘counts’, but ‘counts per day’ and so on.

Data sources. Has the measure data source been sufficiently specified so as to allow consistent capture and use? Can whoever is the nominated measure reporter find the data quickly and easily? Is the description of the data and means of collection specified to allow consistent collection? Could data capture be automated?

Availability. Is the measure currently available or not? Measure developers need to ensure that any remaining tasks implicit in the answers to this question are specified during measure development. Sometimes the development of a measure is a project in itself! If the measure data is already available, then it might be useful to look at archival data for target-setting purposes.

Who measures. Is the nomination of a particular individual or group as the measure collector appropriate? Is the data available to them? Is the data going to be time-consuming or otherwise costly to collect? Has this expense been budgeted for? Does anyone involved in measure collection require training?

Unintended consequences. Might this measure influence behaviour inappropriately? Can any unwanted behaviours be envisaged from using this measure?

Case example

Measuring if you are happy (or not)⁶

It is a long time ago, but Heikki Väänänen (co-founder with Ville Levaniemi of ‘HappyOrNot’), still remembers the bad customer service at his local computer shop when he was 15. Back in the 1990s, he would go to his local computer shop to buy floppy disks. The reception he got from the man behind the counter was memorable for all the wrong reasons. He was always horrible to the young Heikki, even to the point of totally ignoring him. Over a decade later, it was the memory of that poor customer service that prompted him to set up a company that could help service operations to monitor the level of customer service they provided, as the starting point for service improvement. The idea was to provide terminals close to the point of service, where customers could indicate how happy they were with their experience. The terminals would display a



Patti McConville/Alamy Stock Photo

service-related question, such as how satisfied they were with how long they had to wait, and customers could respond by pressing one of four coloured 'smiley' faces, from very happy (green), to happy, a little unhappy or very unhappy (red). Data from the terminal could then be collected, analysed and reported back to the service.

Surprised that no one had thought of commercialising such a robust method of measuring service performance, Heikki and his co-founder, Ville Levaniemi, founded the company HappyOrNot in 2009.

Its first large customer was one of the big-three supermarket groups in Finland, which wanted to check on what its customers thought of the freshness of its fruit and vegetables. The results from the terminals surprised the retailer. It found that,

even in its top-performing stores, customers were not happy with the fruit and vegetables all through the day. Using the data from the terminals, HappyOrNot was able to tell its client that, for example, it should make sure that there were sufficient fresh bananas available in the evening. Ten years later, HappyOrNot was being used by more than 4,000 service organisations in 134 countries, including airports, retailers, healthcare providers, food outlets, sports venues, hotels and even some universities. HappyOrNot has also been used to assess 'internal customer' satisfaction with human resource services such as internal communications. It allows an HR department to continuously review daily, weekly and monthly satisfaction trends to spot any occurrences of poor satisfaction levels and act immediately on the results.

Performance measurement in service operations

Choosing appropriate performance measures in service operations poses two specific challenges, both related to the nature of service itself. First, the importance of measuring customer views, important in all types of operations, is particularly important in services. Once again, it is useful to refer back to the IHIP characteristics of service that we described in Chapter 1.

The intangibility of many services makes it difficult to measure some aspects of performance because they are not always immediately evident without some further exploration. For example, a hotel may ask its customers to give a general satisfaction score, or even ask for customers' reaction to different aspects of its service, yet without some further in-depth questioning the usefulness of such data can be limited.

The heterogeneity of high-contact services makes the whole concept of an 'average' response largely meaningless. After all, different customers may have very different perceptions of a service. This means that, at the least, a range of customer responses is needed to assess performance. So, if customers at the hotel are asked to rate the empathy of the staff on a 1–10 scale (10 being exceptionally good), which is better: an average score of 6 with a range of 5–7, or an average score of 8 with a range of 2–10?

The inseparability of the creation and consumption of a service poses problems of association. In other words, because both operations and customer-related performance happen together, it may be necessary to look for correlation between operations and customer measures. For example, the hotel may notice that its customer satisfaction scores vary significantly throughout the week. The issue to explore here is not so much the score in itself, but why it is varying. The hotel may want to explore whether there is an association between a factor such as staffing levels and satisfaction.

The perishability of many services poses a different, but related, problem – the difficulty of capturing performance as it happens in 'real time'. This means that there may be a need to both manage and measure performance as it happens. For example, if a customer complains about the quality of a meal in the hotel's restaurant, the actions taken by management to manage the complaint, and the customer's reaction/satisfaction, should be recorded relatively soon after the incident – before other factors can influence perceived quality of service.

Table 12.3 The IHIP characteristics and their impact on performance measurement

Service characteristic	Challenge posed in performance measurement	Implications for performance measurement
Intangibility	Difficult to measure what is not always evident	Need to explore what is happening 'below the surface'
Heterogeneity	Different customers judge the same service differently	Need to measure the range of customer responses
Inseparability	Both operations and customer-related performance happen together	Need to look for correlation between operations and customer measures
Perishability	Difficult to capture performance as it happens in 'real time'	Need to measure (and manage) performance 'as it happens'

These issues are summarised in Table 12.3, but remember what we said about the IHIP characteristics back in Chapter 1 – they do not fully distinguish between service and non-service offerings. Nor do all services exhibit all these characteristics to their full extent. Nevertheless, because services tend to exhibit these characteristics, and because they do have an impact on performance measures, they will give some indication of what performance measurement is like in service operations.

The second issue that makes service performance measurement problematic concerns how service operations tend to compete on a broader range of dimensions, so they need to employ a broad range of measures – not purely financial or, indeed, operational. Also, they tend to have customers and activities that vary widely, and offerings that are highly customisable. So, service organisations need to have a wide mix (or balance) of measures. There is little use in driving an organisation only by knowing what the results (financial and external data) are, because there is no means of knowing what is determining those results. Conversely, driving an organisation by determinants alone (operational and developmental data) gives no understanding of the impact of actions taken. Importantly, both determinants and results are needed to help managers understand the relationships between activity and outcome – what interventions they need to make ('levers to pull') to achieve the desired outcomes. Developing such understanding, in the form of a causal model of the service organisation, can be a profound learning experience for the executives, senior managers and service workers.

The need for balance in measuring service performance is sometimes used to argue for so-called 'balanced performance systems'. The best known of these is the 'four box' framework of the Balanced Scorecard, which was developed initially by Kaplan and Norton. We will discuss this in more detail next.

'Balanced' performance measurement – the Balanced Scorecard approach

Arguably the best-known performance measurement approach, and one used by many organisations, is the 'Balanced Scorecard' devised by Kaplan and Norton.⁷ It originated in the 1980s when a small number of businesses in the US began using performance measurement systems that tried to deal with the deficiencies of earlier, purely financial, approaches. Robert Kaplan (of Harvard Business School) and David Norton (a consultant) documented this work and devised what became known as 'the Balanced Scorecard' in a series of articles published throughout the 1990s.

The Balanced Scorecard retains traditional financial measures. But financial measures alone largely document past events. These may have been adequate for an age when investments in long-term capabilities and customer relationships were not critical for success. However, financial

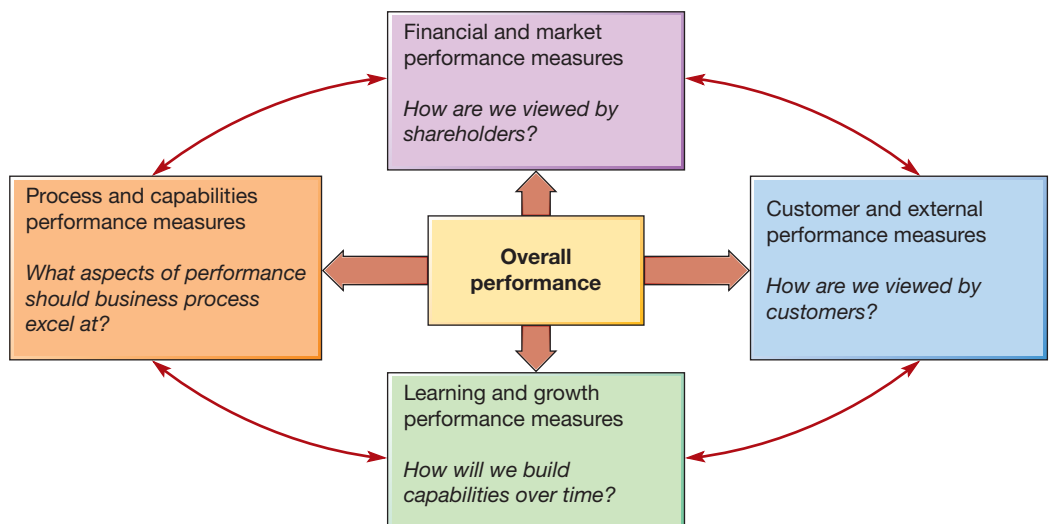
measures alone were deemed inadequate, by the Balanced Scorecard's proponents, for guiding and evaluating the needs of what they referred to as 'information-age companies' that created future value through investment in customers, suppliers, employees, processes, technology and innovation.

The Balanced Scorecard approach uses four main categories of measure, as shown in Figure 12.6. These are 'financial measures', 'customer performance measures', 'learning and growth measures' and 'internal process (or operational) measures'. Financial measures might include such things as total costs, cost per customer, revenue per customer, budget variance, etc., as well as other conventional financial measures. This gives an indication of how the organisation looks from its shareholders' perspective. Customer performance measures include market share, customer satisfaction and customer repurchase intentions. This gives an indication of how the organisation looks from its customers' perspective. Learning and growth measures might include staff satisfaction and staff turnover, the number of service innovations and level of employee engagement in improvement teams, for example. This gives an indication of the effectiveness of the organisation's ability to build its capabilities. Internal process measures could include equipment or staff availability, waiting times, throughput times, the number of customers per day, number of faults or complaints, etc. This gives an indication of the effectiveness of the organisation's internal processes.

Using these four categories of measures, the Balanced Scorecard attempts to bring together most of the elements that reflect a business's strategic position, including service quality measures, service development times, customer complaints, labour productivity and so on. At the same time, it attempts to avoid performance reporting becoming unwieldy, by restricting the number of measures and focusing especially on those seen to be essential. The advantages of the approach are that it presents an overall picture of the organisation's performance in a single report and, by being comprehensive in the measures of performance it uses, encourages companies to take decisions in the interests of the whole organisation, rather than sub-optimising around a narrow suite of measures.

At one level, the Balanced Scorecard merely encouraged managers to go beyond just using financial measures, and instead to use a combination of financial and non-financial performance measures. This holistic approach to measurement would hopefully address the need to fully represent the capability of the organisation – for example, by representing off-balance-sheet assets. In addition, another principle was that the four perspectives should be logically linked. The perspectives and their 'linkage' was meant to represent a generic causality, driven from the top by 'vision and strategy'.

Figure 12.6 The four sets of measures used in the Balanced Scorecard



Having managers select the measures themselves meant that they were more likely to own, and pay attention to, the measures. The problem with a ‘generic causality’, however, is that it results in the selection of generic objectives, and generic measures and targets. If managers were to own a set of measures, then they would not only need to select the measures, but also come to consensus on the underlying causality. Over the decades, since the initial popularisation of the Balanced Scorecard, the design process has evolved, largely to accommodate the need for management ownership of the system.

Designing a balanced performance management system

At their best, Balanced Scorecard systems can help managers select performance measures that are:

- meaningful to those who need to use and respond to the measures;
- useful and effective in managing the whole organisation, and not just financial aspects;
- connected with the business model, and representative of causality;
- representative of the value and capability of the organisation;
- time-efficient in use.

The design process⁸ that has evolved to address these requirements needs to be carried out systematically in three stages, as follows.

Stage 1: Build a ‘destination statement’

It is important to build management consensus around an idea of what success looks like. This is the ‘destination statement’. Figure 12.7 shows an illustration of a destination statement put together by managers in a foodservice company (that delivers pre-prepared food to restaurants, schools, hospitals, etc.). The destination statement is a clear statement of what success looks like at a future time. Creating such a destination statement can help to overcome the problem that strategy documents sometimes have, of being stated in inappropriately vague terms and being difficult to put into practice. The destination statement should not judge or challenge a strategy, but rather look at the consequences of the strategy being realised. The destination statement is written as if one is looking back from some time in the future at what has been achieved.

Figure 12.7 An example of a destination statement for a foodservice company

Financial and market

F&M1 – We have a sales turnover of ...
 F&M2 – We have a net profit of ...
 F&M3 – The company is owned X% by the founders, Y% by staff and Z% by venture capitalists
 F&M4 – Our sales revenue is 75% private sector and 25% public sector
 F&M5 – Our sales revenue is split 70% large, 20% medium and 10% small organisations

Customers and external relationships

CER1 – We are the leading ...
 CER2 – Our customers benefit from our ability to ...
 CER3 – We optimise customers’ use of ...
 CER4 – We are generally seen as a reliable yet innovative supplier because ...
 CER5 – We are perceived as practitioner ‘thought leaders’ in cold-food logistics

Process and capabilities

PC1 – Our use of digital integration allows us to ...
 PC2 – Our extensive network of sources allows us to ...
 PC3 – We use clear ordering processes that are user-friendly and allow customers to ...
 PC4 – Our operations is supported by investment in infrastructure that allows us to ...
 PC5 – Our learning and improvement systems are supported by knowledge management systems

Learning and growth

L&G1 – We foster a ‘can do’ culture that ...
 L&G2 – We have strong intellectual property including ...
 L&G3 – We have a communication programme that allows all our stakeholders to be fully aware of ...
 L&G4 – We have a performance management framework that aligns individuals’ performance with business needs
 L&G5 – We actively recruit the type and number of people we will need in the future

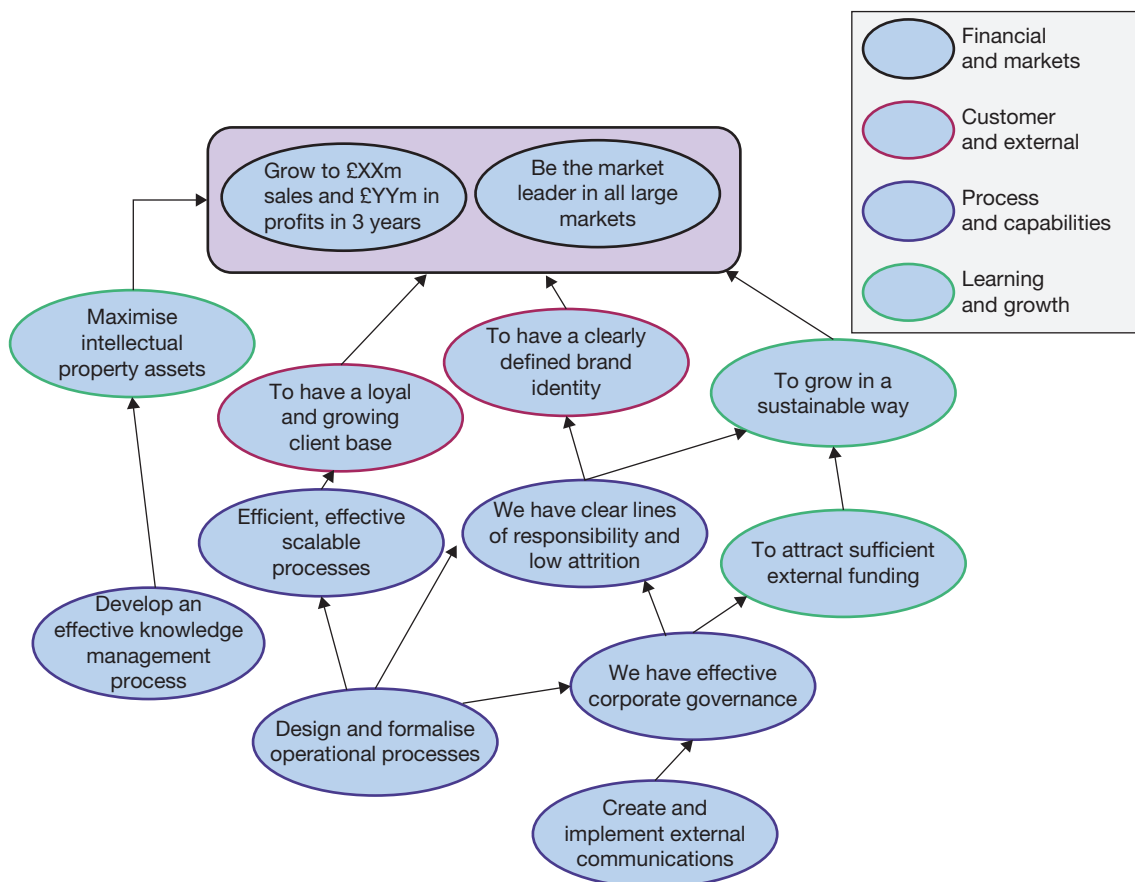
In the example in Figure 12.7, the destination statement has been created for several years ahead of when it was written. When the elements of the destination statement are in place, managers can begin to think about the activities and medium-term outcomes that will get them to the desired end state.

Stage 2: Build a 'strategic linkage model'

We described the 'strategic linkage model' earlier. Here, it is used not only to describe the assumed linkages between performance objectives, but also as a check to make sure that all four of the Balanced Scorecard categories are covered. The strategic linkage model represents management assumptions about what the leadership team need to pay attention to in order to get the results described in the destination statement. Again, remember that the strategic linkage model is a set of assumptions about causality. It is a hypothesis – a testable theory of how the business will perform. Figure 12.8 shows the strategic linkage model for the foodservice company that we showed in Figure 12.3, but with objectives in the four Balanced Scorecard categories marked.

Note that the strategic linkage model does not have to be 'correct', as such. It is simply a clear expression of assumed causality that can be tested, and therefore refined and developed. It is also worth noting that the objectives in the strategic linkage model fall into two categories. Towards the bottom end of the diagram are 'activity objectives'. These are management interventions in the form of process changes, or perhaps new projects that will have an impact upon the 'outcome objectives' towards the top of the model. In the original writing on the Balanced Scorecard, measures associated with activity objectives were referred to as 'lead' measures, and measures associated

Figure 12.8 A simplified strategic linkage model for a foodservice company, with objectives allocated to the four Balanced Scorecard categories



with outcome objectives were called ‘lag’ measures. The move to objective-based strategic linkage models required a change in the language.

Stage 3: Select measures

A strategic linkage model gives a basis for the selection of appropriate measures. However, none of the measures is likely to be ‘complete’ in the sense of being able to track all aspects of the activity or outcome. All measures are ‘partial’, even when two or three are used. Nevertheless, the measures need to be:

- appropriate – they indicate if outcomes have been achieved or activities completed;
- available or easily obtained – collected data is not too expensive or time consuming;
- frequently available – the timing of the data needs to be in line with the speed of management response needed.

Performance measurement from the customers’ perspective

The objective-driven nature of enlightened measure selection hopefully results in measures that capture the customer perspective, but this is not always the case. An interesting question to ask is: looking at the set of measures used by a service operation, would customers measure performance in the same way? Service operations managers, by nature and practice, often develop measures from an internal, operations perspective. As a result, measuring what is important to customers can easily be overlooked. Although operations managers may well measure customer satisfaction, they may ignore, or overlook, detailed measures of performance that are important to their customers and thus concentrate on the more comfortable and familiar operations measures of performance. For example, when Jan Carlzon was chief executive of SAS, he noted that its cargo operations were consistently measuring the wrong things.⁹ The customers of its cargo services wanted prompt and precise cargo delivery, yet they were measuring the volume of cargo moved, and whether the paperwork and packages got separated en route. In fact, a shipment could arrive four days later than promised without being recorded as delayed.

Similarly, an internet service provider measured the number of orders (such as requests for new broadband lines from customers) completed within eight working days. This measure ignored the needs of customers who urgently required additional broadband capacity or, at the other extreme, customers who were not in a hurry because they were moving home three weeks later. The company’s procedure of scheduling jobs on a first-come-first-served basis managed to upset most of its customers. Changing the measure to the percentage of orders completed within two hours of the time agreed with the customer (dependability rather than speed), not only greatly increased customer satisfaction, but it also reduced the number of calls made by the customer to chase up the supply (failure demand). The revised satisfaction measure improved the consistency of performance and increased the operation’s efficiency. Indeed, the company found that the average delivery time agreed and required by customers was two days in excess of its own eight-day target, so the customer advisors had more time available to schedule appointments.

Measuring customer satisfaction

Customer satisfaction is frequently used as an external measure in service organisations, and measure data is usually captured using questionnaires and surveys, or mystery shopper reports.

Questionnaires and surveys can be constructed using, for example, the 18 quality factors that we outlined in Chapter 6 or, more likely, a subset of factors that customers identify as being important in focus groups. Questions are constructed for each quality factor, and customers are asked to rate their answer on a scale. The questions can then be used to assess levels of satisfaction with the various touchpoints in the customer’s journey, as well as overall satisfaction with the service. Surveys can also enquire about emotions felt by customers such as feelings of trust, integrity and loyalty.

SERVQUAL

In academic circles, one of the best-known instruments for assessing customer-perceived service quality is SERVQUAL. SERVQUAL is a concise multiple-item scale questionnaire that organisations can use to assess their customers' expectations and perceptions of their service and obtain a single customer satisfaction score for tracking and comparison. The instrument itself is a skeleton questionnaire that asks questions of customers about their expectations and perceptions of the services of a particular organisation. The instrument uses five consolidated quality factors or dimensions (assurance, empathy, reliability, responsiveness, tangibles), with 22 items for perceptions and 22 for expectations. A gap score (perceptions minus expectations) is then calculated for each pair of perception and expectation statements. The total of the gap scores is the SERVQUAL score. The gap scores can also be weighted by getting customers to add weights to each dimension. Repeated administration allows an understanding as to how customers' perceived service quality for each of the dimensions is changing over time. This instrument provides a direct measure of satisfaction, i.e. perceptions minus expectations (see Chapter 6). While the SERVQUAL instrument and the underlying gap model provide a very useful conceptual tool for understanding service quality, it is notoriously challenging to apply. The instrument is administratively complex, and practical application as a measurement tool involves a degree of simplification and customisation.

Mystery shoppers

Mystery shoppers are used by several organisations, in particular retail organisations, to assess the service that their customers experience. The mystery shoppers can be managers acting incognito, but are usually provided by external agencies and work to an agreed scoring system. The mystery shoppers can call as 'pretend customers' and sometimes surreptitiously listen in on calls and meetings. The problem with the mystery shopper method is that the items, or questions, for scoring are often developed by managers from their internal perspective, rather than covering issues that are important to customers. It is too easy for mystery shopper results to become an operations audit, checking that staff provide the right information and stick to the correct forms of address and scripts, rather than dealing with issues that are more important to customers such as solving their problems and being helpful. A plumbing supply company, for example, used mystery shoppers to check that its service-centre staff called customers by their title (such as Mr Roberts) and whether staff attempted to 'sell' customers the 'product of the week' (such as equipment insurance packages). However, the service-centre staff knew their customers quite well and would be on first-name terms with them. They would know whether the customer had need of insurance packages, or indeed whether they had them already. Calling the customer Joe and not drawing attention to the offer of the week would mean a poor score by an incognito observer overhearing the conversation.

Net Promoter Score

One popular, but conceptually more problematic, method of measuring the underlying levels of customer satisfaction (which can be an important factor in determining revenue) is the 'Net Promoter Score' (NPS). This is computed by surveying customers and asking them how likely they are to recommend a company, service or product (on a scale of 1 to 10, where 1 = not at all likely, and 10 = extremely likely). Customers giving a score of 1 to 6 are called 'detractors', those giving a score of 9 or 10 are called 'promoters' and those giving a score of 7 or 8 are called 'passives'. The NPS is calculated by ignoring passives and subtracting the number of detractors from the number of promoters. So, if 200 customers are surveyed, and 60 are promoters, 110 passives and 30 detractors, the NPS is calculated as follows:

$$\text{NPS} = 60 - 30 = 30$$

What is considered an acceptable NPS varies, depending on the sector and nature of competition, but as a minimum target, a positive (>0) score might be regarded as (just) acceptable. NPS is a simple metric that is quick and easy to calculate, but some see that as its main weakness. It is without

any sophisticated scientific basis, nor does it provide an accurate picture of customer behaviour. For example, if the survey mentioned above had resulted in 115 promoters, 0 passives and 85 detractors, it would still give an NPS of 30. Yet here, customers are far more polarised.

While intuitively compelling, the measure makes assumptions about causal links between satisfaction and loyalty, which might not be real in all contexts. As such, the approach is underpinned by inductive reasoning and is therefore conceptually troubling for those of a logical and scientific bent. However, notwithstanding its failings, using NPS over time can be helpful in detecting possible changes in customer attitudes.

General problems with customer satisfaction measurement

Collecting information about customer satisfaction is something that many organisations now do. However, all too often there are either problems with the instrument or, more importantly, problems in the use of the data. Common problems include the following:

- *Changing questions.* One of the most important benefits of collecting satisfaction data is to track trends over time. However, frequently changing the questions undermines this benefit.
- *Too many questions.* There is often a tendency by researchers and market analysts to ask every conceivable question. While it might be helpful to know about every aspect of the service, long questionnaires usually result in poor returns.
- *Missing the point.* The reason for measuring satisfaction is often to find out the impact of customer satisfaction, yet this is often missed out of satisfaction instruments; for example, will customers return, will they provide positive word of mouth?
- *Qualitative versus quantitative.* While a survey may be able to tell you that a service has scored 4.2, it will not help you understand what to change or how to change it. Likewise, focus groups may give you some ideas about what to do, but it will not be possible to assess the changes without quantitative data. There needs to be a combination of both qualitative and quantitative assessment of customer satisfaction.
- *Survey-weary customers.* Since so many organisations wish to know about our satisfaction, we often feel disinclined to complete surveys, especially if we have no confidence that the organisation will make the changes suggested or deal with the issues identified.
- *Analysis fodder.* In cases where respondents are not asked for any personal views but have to tick a lot of boxes about an organisation and its services, customers feel that they are just being used to feed a data engine, either to keep analysts busy or help the organisation justify doing whatsoever it wishes.
- *Resource hungry.* Many organisations consume large amounts of resource in collecting, coding and analysing satisfaction data, and writing reports with lots of graphs and tables.
- *Little or no impact.* Critically, the measures of customer satisfaction, the analysis and other reports sometimes lead to little or no action. If the data is not actively used to control the operational processes that are meant to deliver satisfaction, or to improve them, there is little point in collecting and analysing the data in the first place.
- *Satisfaction versus success.* High satisfaction scores do not necessarily lead to organisational success. Just because customers say they are very satisfied, it does not mean that they are valuable customers (for example, providing a profitable revenue stream, or support for the organisation, or frequently using the organisation). Indeed, customers can be highly satisfied with an organisation, such as a restaurant, but still choose to go somewhere else next time.
- *Open to manipulation.* When organisations link the satisfaction measures to employee reward systems, staff may manipulate the system to ensure a beneficial result.

In summary, it is easy for customer satisfaction assessment to become a waste of time and effort, particularly if it drives no discernible improvement, consumes valuable organisational resources and wastes customers' time. Yet, of course, we are not claiming that it should be ignored or not treated seriously. But, to be effective, customer satisfaction assessment does require careful planning and a slightly sceptical attitude.

Worked example

Ess Pannanservice (EP)

Ess Pannanservice (EP) was the industrial service division of an industrial heating company, operating throughout Scandinavia.¹⁰ And it had a problem, as its Chief Operations Officer, Ilsa Lund, explained.

Our clients sign up, usually one year at a time, for our 'Total Service' contracts. These cover both routine servicing of their boilers and heating systems, and non-routine 'emergency' repair services. We have always attempted to measure customer satisfaction, but we have always known that there were problems with how we did it. Looking back, we were too obsessed with how quickly our service engineers got to the client. Our assumption was that, when a heating boiler stopped working, the client would always be desperate to get it 'up and running' as fast as possible. It transpired that we were making two assumptions that turned out to be gross simplifications. The first was that a call from a client always meant that the boiler was not working. The second was that a non-scheduled callout (what we mistakenly called an 'emergency' callout) should always take priority over a scheduled 'routine' service visit.

Every time a service engineer visited a client, EP sent an email to the named contact within the client firm, asking them to rate their satisfaction with the service received. The email simply asked clients to rate the service on a five-point scale and asked if they had any suggestions for improving the service received. However, the response rate from clients, always disappointing, started to go down further (never higher than 20 per cent, it had declined to 12 per cent). Also, the average satisfaction score had reduced from 4.1 to 3.7 over a one-year period.

What EP did

The paradox was that, because the response rate was so low, we kind of excused the relatively poor satisfaction score. Crazy, with hindsight, I know. The stimulus for us doing something about it was the loss of two large multi-site clients within a month. It prompted us to do two things. The first was to hold workshops with our service engineers. We had let them get on with their jobs for years without actually asking them what they thought the clients

valued. We thought that technical skill was all they needed and all they were required to demonstrate. Yet they turned out to be a goldmine of insight into what clients really wanted. The second thing we did was to get out of our office and actually visit clients, sometimes with our service engineers, sometimes independently. Most clients were actually both very generous with their time and very informative.

A number of previously accepted assumptions turned out to be false. The first was that clients primarily valued engineers' technical ability, which, after all, was what allowed them to fix the problem. The reality was that clients did not question an engineer's technical skill, it was simply assumed. What was really valued was the engineer's 'informal' personal friendliness and reassuring authority, and particularly their ability to suggest how best to operate the heating system. The second surprise was that dividing client visits into 'routine' scheduled services and non-routine 'emergency' visits did not reflect reality from a client's point of view.

When we investigated we found that around a third of what we had classed as emergencies were nothing of the kind. In fact, they were occasions when a boiler was malfunctioning, but was still working. These required an engineer, but not urgently. In fact, on a number of occasions, we had pulled an engineer from a routine service to respond to what we thought (mistakenly) was an 'emergency', and in doing that had upset the client receiving the routine service. Finally, we found that our regular emails after every visit were seen as more of an irritant than anything else. Really, they were doing more harm than good. We now rely far more on our engineers to report on how clients are feeling. We also have put a lot of effort into our switchboard. They are the first point of contact when there is a possible emergency. They can both reassure clients and distinguish a real requirement for a fast response from a problem that can wait a few days. Looking back, the problem was that we did not know what our clients saw as 'good performance', and the solution was to trust the capabilities of our own people.

(Ilsa Lund)

Qualitative or quantitative measures?

An interesting question that relates to the worked example is, which is the more appropriate way to assess customer satisfaction – quantitative methods such as ratings and questionnaires, or qualitative methods such as focus groups? One way to answer this question is to consider how individual customers come to a view about their level of satisfaction with a service. There are two different answers: a rational approach and an incident-based approach.

The rational approach

The rational approach would suggest that customers consciously or unconsciously use a weighted average, so that a high score on one attribute or factor may offset a low score on another to arrive at a rational evaluation of the quality of a service. Indeed, many satisfaction surveys, such as SERVQUAL, are based on the assumption that a reasonable way of calculating overall satisfaction is by allocating weights to the various factors of transactions (according to importance as perceived by the customer), multiplying the weight by the score (on a 1–5 scale, for example) for each factor, and then combining the scores into an overall satisfaction rating.

The incident approach

An alternative view is that customers are less rational and react more to individual incidents. So, any single incident – delighting or dissatisfying – could, despite the remaining adequate and satisfying transactions, result in a feeling of overall dissatisfaction or delight (see Chapter 6).

The reality is likely to be some combination of these approaches, which means it is important to take care when constructing algorithms to assess customers' overall satisfaction with a service. It is certainly a mistake to assume that customers can identify with precision the reasons why they are satisfied or dissatisfied with a service. For example, on a training programme, participants complained about the standard of the accommodation. It was only in discussion with the group that it emerged that the underlying dissatisfaction was with one of the presenters and that the accommodation, if not wonderful, was in fact satisfactory.

12.5 Performance reporting

Performance reporting, as its name implies, is the practice of constructing a report on the performance of an operation. Private sector operations need to report performance, both to fulfil legal requirements and to keep stakeholders informed. A performance report should be a source of business intelligence that helps business leaders make more accurate, data-driven decisions. Public sector operations that are being financed by public money need to show that the money is being spent effectively. Performance reports should use performance indicators that indicate the achievements of the operation and its programmes. A report that communicates performance effectively helps operations to build and maintain trust with key stakeholders. Moreover, regular and systematic reporting can help to make sure that information is transparent and therefore encourages engagement between an operation and its stakeholders.

Performance reporting is the 'public face' of performance management. It involves taking performance data and compiling, aggregating, interpreting and consolidating it, using appropriate presentational devices such as management dashboards, spreadsheets, output charts, etc. However, some organisations have taken performance reporting to an extreme level by producing thick reporting documents with pages of detailed tabulations and colourful charts, which are meaningless to all but those who created them. The solution is to know which measures are important (usually around four to six), measure them carefully and report them simply, but report them with a view to making changes, not just reporting them for the sake of reporting them. Using the process that we described in 'designing a balanced performance management system' generally ensures economy in measure selection.

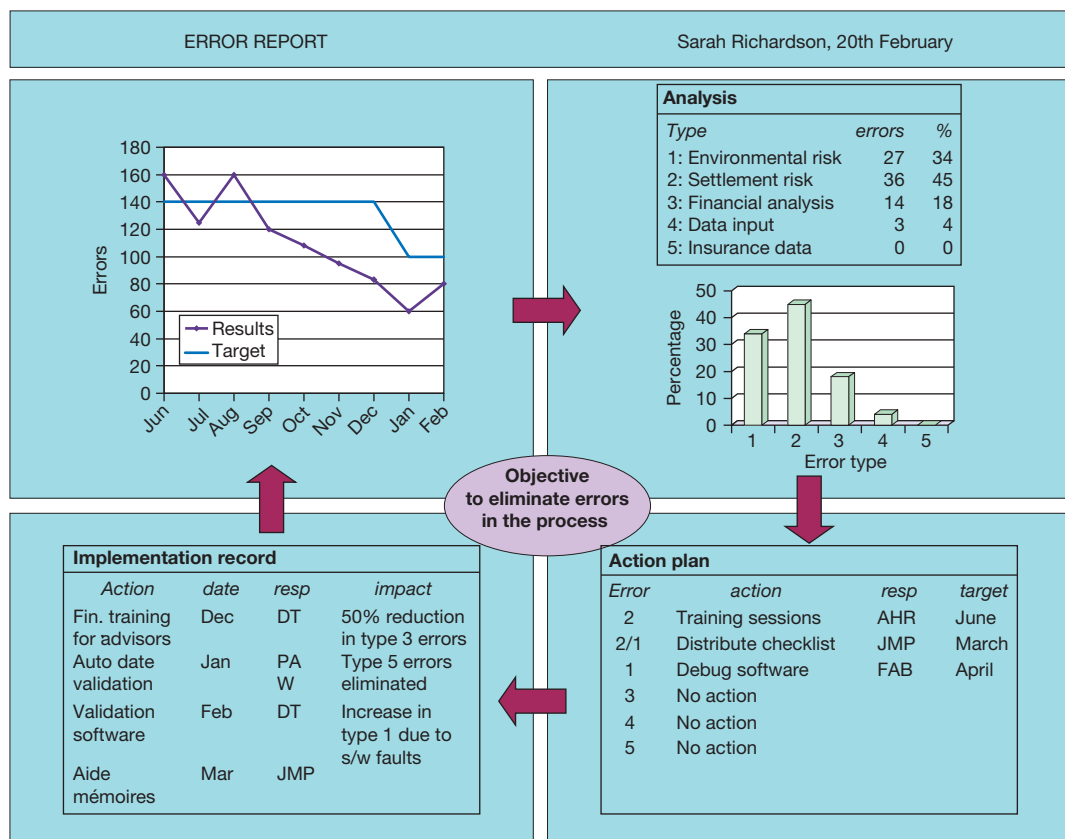
A popular method used in some organisations is to adopt a simple but visual report form for each measure. Figure 12.9 shows a display for a single (important) performance measure – the errors in a service process – which includes four quadrants.¹¹ Rather than simply showing the data (in this case percentage errors) for this month (February), the chart (top left) provides a clear view of the trend and the associated target, thus allowing changes over time to be seen. The top-right quadrant provides an analysis of February's data to identify the most frequent source of errors. As a result of the analysis, the bottom-right quadrant reports on the actions to be taken to try to deal with the most common errors, who will be responsible for taking these actions and by when they should report. The final quadrant provides an implementation record that checks the impact of previous action plans: who was supposed to do what, by when, and the effect that it had. The chart also, and importantly, displays in the centre the purpose or objective of the measure, with the person responsible for the measure and follow-up actions named top right. We also recommend that if there is no one responsible or no clear objective, then the measure and its report should be scrapped.

Most authorities warn against using too many measures and suggest that performance measurement reports should include a relatively small number of key measures, and that for each measure there should be a display of:

- the purpose/objective;
- the person responsible;
- trends over time;
- performance against target;
- supporting data and analysis;

Figure 12.9 An example of a simple visual performance reporting chart

Source: Adapted from work by Neely, A.D. (1996) *Measuring Business Performance*, Economist Books, London; and Carole Driver, Plymouth Business School.



- identification of causes/problems;
- action to be taken, by whom and by when;
- an assessment of action taken.

It is worth remembering that, although performance reporting is both useful and often necessary for analysing trends in operations performance, it does not always indicate what is actually driving performance in practice. Performance tends to be driven by resource allocation, budgeting, being able to exploit opportunities to improve service and dealing with service failures. These are the activities that shape current and future activities. Reporting, however well designed, looks backwards and indicates what has happened in the past.

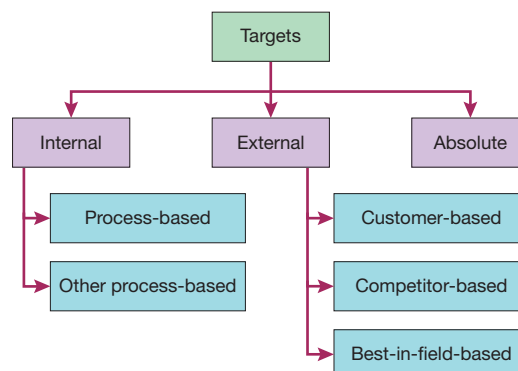
12.6 Setting performance targets

While not all measures will have targets associated with them, targets can be a useful means to aid performance management. Targets can help in controlling performance, judging improvements, motivating employees and – by using staged targets – communicating the speed and size of the change required. Indeed, target setting is a key element of driving performance improvement. There is evidence to suggest that performance improves when clear, defined, quantitative targets are provided.¹² There is, however, an alternative view that suggests that some measures and targets may lead to ‘gaming’ – in other words, managers ‘play the system’ simply to meet the target. One museum, targeted to increase its number of visitors, started counting not only visitors but also delivery personnel just to try and reach its targets. As the management commentator John Seddon stated: ‘Targets drive people to use their ingenuity to meet the target, not improve performance’.¹³

Operations managers need to decide carefully how targets will be set for their measures to control the process or drive process improvement, and/or motivate the staff. There are essentially three types of targets, or benchmarks, against which performance can be compared: internal, external and absolute (see Figure 12.10). (We will cover benchmarking in more detail in Chapter 17.)

Internal targets. Internal targets may be based upon the past performance of the process under consideration (process-based). The target is usually similar to the previous period’s target, or slightly greater or lower in order to drive gradual improvements in the process. The key disadvantage of using the process itself as the base for comparison, while undoubtedly encouraging improvements in performance, is that it only provides information as to whether the operation is getting better over time, rather than whether performance is satisfactory.¹⁴ The targets may also be based upon the performance of other similar internal processes (other process-based). This encourages comparisons across processes and the sharing of practices between them to try to meet the performance of

Figure 12.10 The three types of targets



the best. Comparison with other internal processes has the additional advantage that it provides a relative position for each process within the organisation.

External targets. External targets are based upon comparison with other organisations, using either competitor-based targets and/or ‘best-in-field’ benchmarks. Competitor-based targets are based on the performance of similar operations in other similar, competing organisations. Best-in-field benchmarks are based upon the performance achieved by organisations that may or may not be in the same industry but where the performance is considered to be outstanding. An important, though often overlooked, external target base for service operations is customer-based targets (just as customer-based measures, too, are easily overlooked) – that is, for a particular activity, what level of service do customers consider to be appropriate?

Absolute targets. Some processes need to be operated with absolutely no defects or with 100 per cent adherence to standard. It is unacceptable for life-support machines or stock-market computers or national defence systems to fail. Although they do occasionally fail, with serious consequences, their operational targets are absolute.

Stretch targets

A critical question to ask in respect of all three types of target is: by how much should the target be above the current level of performance? Essentially, this depends upon the size of the change in performance required, on the assumption that it is feasible and desirable that such a change can be made. Internal targets are appropriate for those operations wishing to improve their performance continually and incrementally. This would target performance improvements relative to their historical achievements. Often, organisations using a continuous improvement strategy, or *kaizen* (see Chapter 15), tend to be both successful and competitive: they may have already outperformed competitors or be the best-practice leader, focusing on building upon their existing strengths. Organisations undertaking radical change of a process should set stretch targets. These are likely to be based on external benchmarks because of the need to improve performance dramatically in relation to that of competitors or external comparators. Reference to external sources for targets, such as competitors, brings both legitimacy and a sense of urgency to those faced with the need for radical change.

Employee involvement in target setting

To motivate employees to try to reach a target level of performance, it is essential that they have some control over the variables that affect the performance, and it also helps if they have had a role in negotiating what that target would be – that is, what they think is achievable. This is what one would expect to find for all processes undergoing continuous, *kaizen*-type improvement, as employee involvement and participation are central to the philosophy of *kaizen*. This approach encourages employees to address such questions as:

- How can you improve what you are doing?
- How can you improve the process by which you are doing it?
- How can you improve the way in which you interact with other people?

This, in turn, requires the encouragement, support and authority (empowerment) to propose and implement these improvements, backed by a supportive organisational culture and a ‘team’ approach to problem solving and improvement.¹⁵ Because of this philosophy of empowerment, participation and involvement, where the responsibility for process improvement rests with employees rather than quality specialists, for example, targets should be set through a process involving employees. The employees should decide what might be achievable over a period of time, as it is they who have the responsibility for change and the authority to carry it out.

For organisations undergoing more radical change, targets may be imposed by the senior managers overseeing the change programmes on a command-and-control basis. In radical change programmes, therefore, overall responsibility may rest with senior management champions who devote a substantial amount of their time and effort to both the design and implementation of process change.

Linking targets to rewards

Organisations need to decide what rewards/penalties will be associated with the achievement of their chosen targets. If rewards linked to targets are to work as intended, they must be clearly perceived as sufficient to justify the additional effort to obtain them, directly related to the required performance, perceived as equitable, and must take into account the complexities of individual versus team-based effort.¹⁶ In addition, the reward structure must also be accompanied by appropriate feedback mechanisms.¹⁷

Rewards take a variety of forms, from purely financial to a mixture of financial and non-financial, such as achievement awards and other forms of recognition. To be effective the rewards need to be tailored to the specific requirements of the performance improvement programmes in use within an organisation. While we would expect to find financially-based rewards applied in all forms of change programmes, we would suggest that non-financial, and therefore less threatening and more encouraging, forms of reward would be used to promote continuous change. It has been contended that continuous improvement strategies require ‘reward systems that place greater emphasis on quality and team-based performance’,¹⁸ since they are specifically concerned with the motivation of employees and the elimination of the fear of job losses. Processes undergoing continuous change should therefore base their rewards on a mix of financial and non-financial rewards targeted at encouraging improvements in team-based performance.

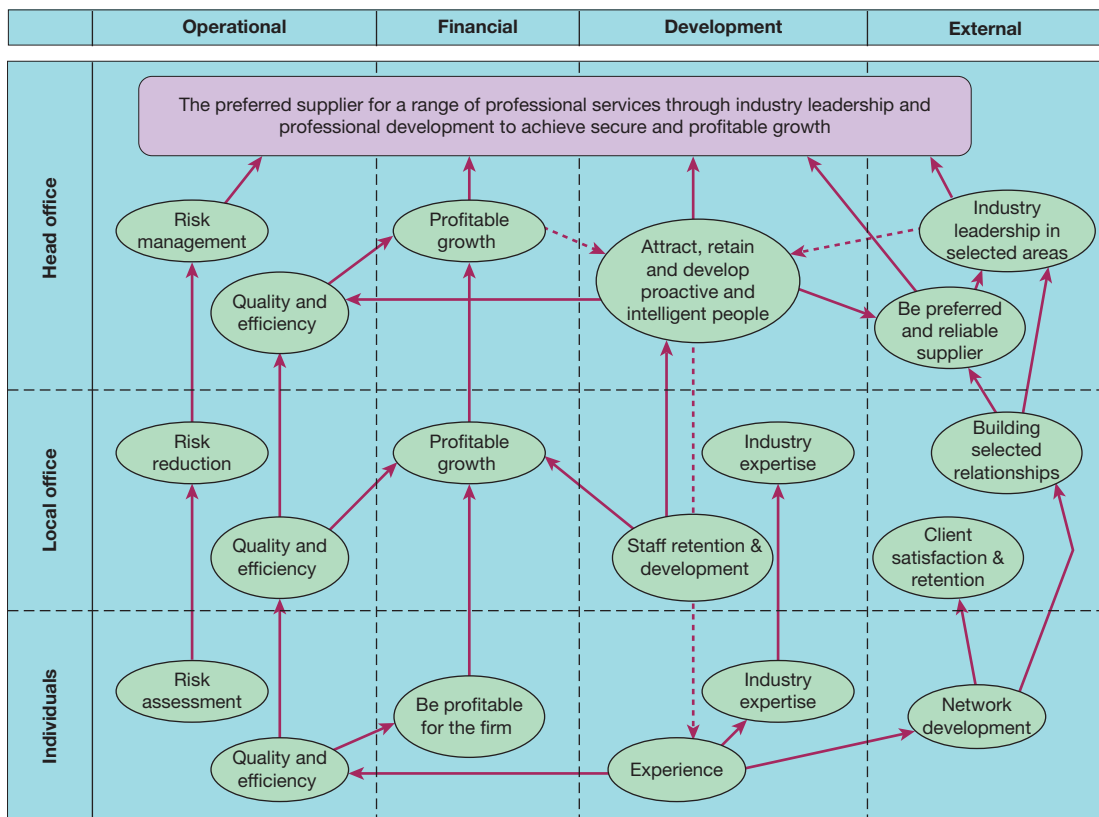
In contrast, radical change strategies emphasise individual performance, so the performance measurement system should measure the location of specific results and individual employee performance. Given the higher costs and risks associated with step-change improvements, we would expect that rewards associated with such changes would tend to be primarily financial in nature.

12.7 Achieving consistency

In Figure 12.2, we identified how we see the various elements of performance management. We also indicated the vital need for consistency among these elements. One of the most useful and widely used methods of doing this is called ‘strategy mapping’, and the approach is closely related to the strategic linkage model that we described previously. Strategy mapping was originally devised by Robert Kaplan and David Norton (who also developed the Balanced Scorecard, see earlier in the chapter). It is a procedure that attempts to clarify the cause–effect relationships in an organisation’s (or part of an organisation’s) strategy, and in doing so allows managers to check for consistency among the elements of a performance management system. As promoted by Kaplan and Norton, strategy mapping is clearly related to the Balanced Scorecard inasmuch as it uses the same four categories of performance.

Figure 12.11 illustrates a simplified example of a strategy map for a firm of consultants. The example depicts some of the performance objectives (or rather, short-hand versions of them) at just three levels in the organisation – head office, local office and the individual consultant – for the four main measurement areas associated with the Balanced Scorecard. The organisation’s strategy is contained in the oblong at the top of the diagram, the objectives are contained in the ovals and the arrows show the assumed major cause–effect linkages. Managers at all levels then need to devise appropriate measures and targets to meet their objectives.

The set of cause–effect relationships identifies not only *what* needs to be done to move a company or function forward, but also *why* it should be done. There are several versions of strategy mapping, so do not assume that all strategy maps will look the same. For example, the map shown in Figure 12.11 distinguishes between different organisational levels, and is sometimes referred to as a ‘cascaded’ strategy map. Some strategy maps will show relationships among activity and outcome objectives for the whole or part of an organisation. However, most strategy maps are such that the activities and outcomes are organised according to the Balanced Scorecard categories. The technique does not ‘devise’ a strategy, but it does show the logical links between the various elements

Figure 12.11 A strategy map for a firm of consultants

of a strategy. It provides a discipline that encourages the clear articulation of the cause–effect relationships within the strategy. As with many techniques of this type, the process of debating and drawing the strategy map can be as valuable as the finished result.

Strategy mapping is particularly useful for a number of reasons:

- It makes a logical connection between the elements of performance management.
- It requires management teams to draw arrows connecting actions (causes) with results (effects) and therefore make their assumptions transparent.
- It results in an easily understood ‘picture’ of the strategy behind performance management.
- The strategy map has considerable power as a communication tool. It is particularly effective to explain not just what is to be done, but also *why* a particular action is required.
- It can hold management to account in the sense that the map can be referred to in the future to check whether objectives have been achieved.
- The technique is flexible, which makes it relatively easier to develop and change business assumptions as circumstances change.

12.8 Performance and control

So far, we have focused on the various elements of performance management, but performance management is nothing unless it leads to specific management actions. Unfortunately, performance measurement is sometimes seen as an ‘end in itself’ – an activity that simply has to be done. But the whole idea of performance management is that management intervention should follow on from an enhanced awareness of an operation’s performance. Which is why managers need to consider the managerial purposes to which performance measures might contribute to achieving their objectives.

So, what are the actions that are driven by a knowledge of performance? Here we look at actions under the broad heading of ‘control’. By control in this context, we mean to have the ability to decide or guide how some or all of the organisation behaves or reacts to events.

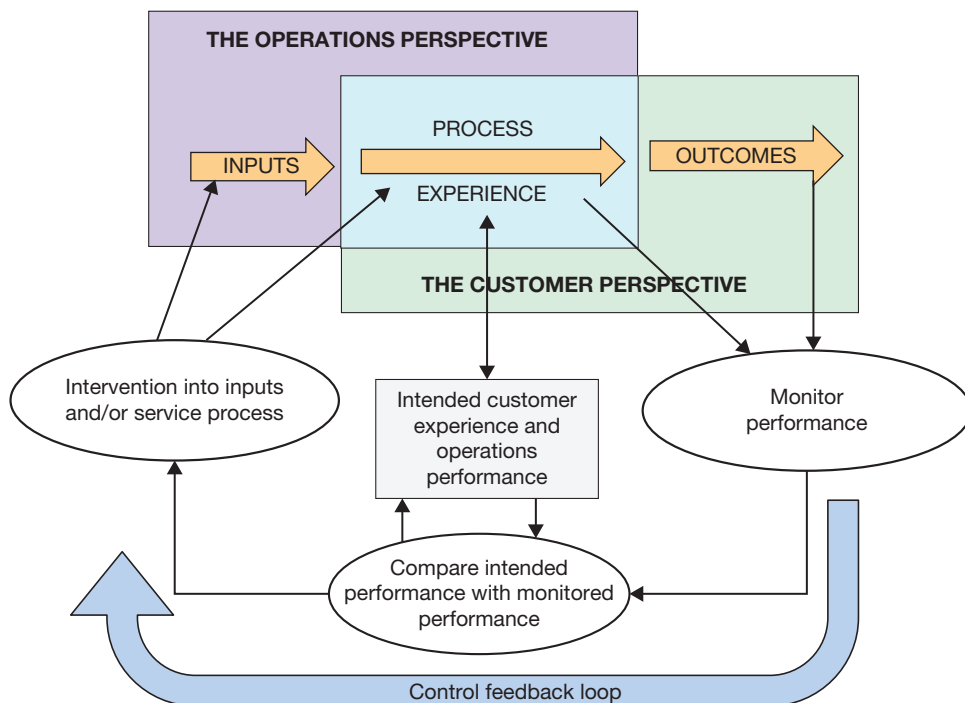
Performance and feedback control

The main purpose of performance measurement is to provide feedback so that action can be taken to keep a process in control. This series of activities requires a complete control loop, with measures, targets, a means of checking deviation, feedback mechanisms and means to take appropriate action if the process is not meeting the target. The control can be strategic, or for more operations-related tasks. Such tasks could involve ensuring consistent performance within an organisation, such as costs within budget, and also across organisations, to ensure that government health and safety regulations or discrimination legislation, for example, is being met.

Figure 12.12 illustrates the conventional simple model of operations control. And, although simple (and simplistic), it is a useful starting point for thinking about how performance management is related to control. The output performance from a service is monitored (using performance reporting, see earlier) and compared with the intended performance from both the customer and operations perspectives. Any significant deviations from intended performance are analysed and interventions made to either or both of the inputs to the service process and the working of the process itself.

This simple model of control is based on clear and unambiguous feedback but, as mentioned previously, for most service operations the model relies upon simplifications of a far messier reality. It is based on a model used to understand mechanical systems, but real organisations are not machines. Which is why the simple model needs modifying. In particular, two simplifications that are embedded in the simple model need addressing. The first is the assumption that the nature of the ‘intended performance’ remains static – in other words, there is no ‘learning’ in the control system. The second is that the service’s performance and objectives are clear and unambiguous.

Figure 12.12 Simple feedback operational control model



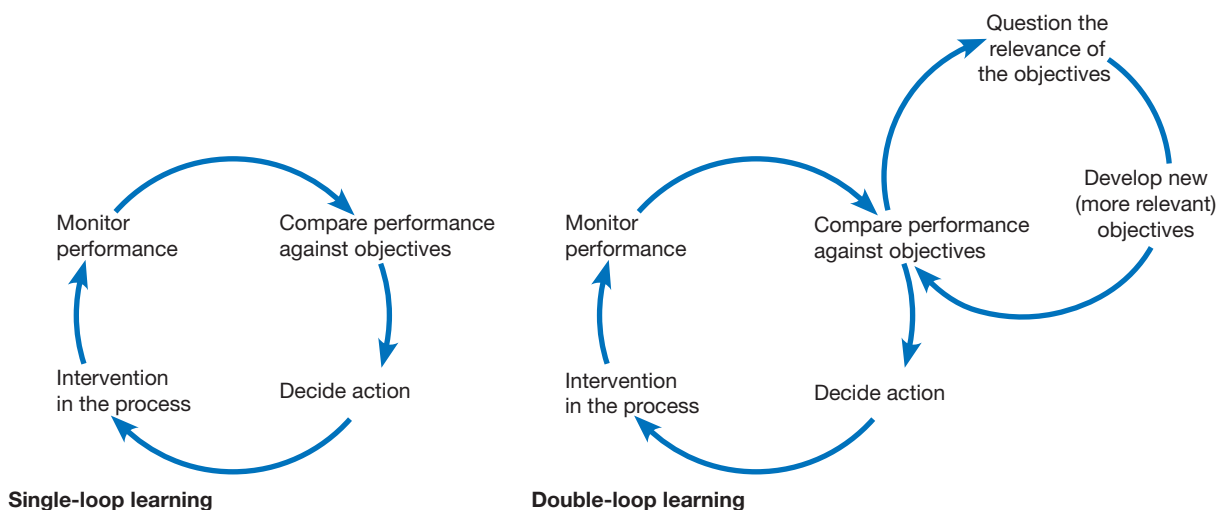
Control learning – single and double loops

Most services operate in conditions of uncertainty, where their ability to pre-plan or make decisions in advance is limited. So, rather than adhering dogmatically to a predetermined plan, it may be better to adapt as circumstances change. Further, the more uncertain the environment, the more an operation needs to emphasise its ability to learn from events. Generally, this ability depends on a learning process that concerns the development of insights and knowledge, and establishes the connections between past actions, the results of those actions and future intentions. The crucial issue here is, how does a service operation encourage, facilitate and exploit learning, in order to develop strategic sustainability? Initially, the development of learning capability requires recognition that there is a distinction between single- and double-loop learning.¹⁹

Single-loop learning is essentially what is illustrated in Figure 12.12. Every time an operational error or problem is detected, it is corrected or solved and more is learned about the process, but without questioning or altering the underlying values and objectives of the process. Nevertheless, single-loop learning is of great importance to the ongoing management of service operations. Unfortunately, the kind of ‘deep’ system-specific process knowledge that is so crucial to effective single-loop learning can, over time, help to create the kind of inertia that proves difficult to overcome when an operation has to adapt to a changing environment. All effective operations are better at doing what they have done before, and this is a crucial source of advantage. But while an operation develops its distinctive capability only on the basis of single-loop learning, it is exposing itself to risks associated with the things that it does not do well.

Double-loop learning, by contrast, questions fundamental objectives, service or market positions, or even the underlying culture of the operation. This kind of learning implies an ability to challenge existing operating assumptions in a fundamental way, seeking to reframe competitive questions and remain open to any changes in the competitive environment. But being receptive to new opportunities sometimes requires the abandonment of existing operating routines at certain points in time – sometimes without any specific replacement in mind. This is difficult to achieve in practice, especially as most operations tend to reward experience and past achievement (rather than potential) at both an individual and group level. Figure 12.13 illustrates the distinction between single- and double-loop learning.

Figure 12.13 Single-loop learning vs. double-loop learning, which questions the appropriateness of objectives



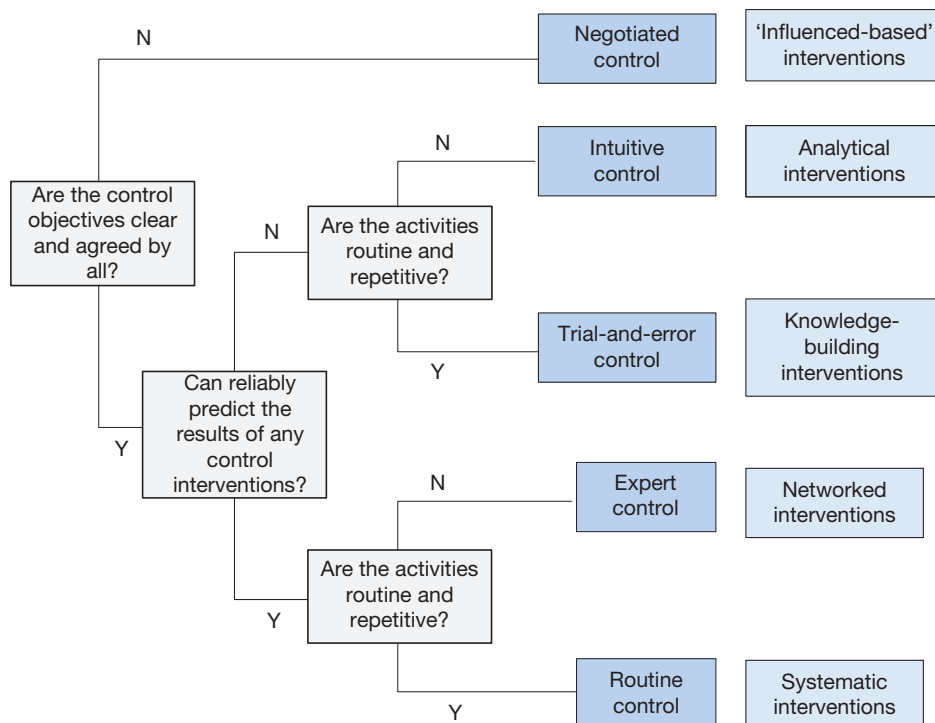
Agreed, unambiguous and repetitive?

Service operations are social systems, full of complex and ambiguous interactions. Once again, the IHIP characteristics that we described in Chapter 1 (intangibility, heterogeneity, inseparability and perishability) have implications for how performance is used to control service operations. Simple control models, such as that in Figure 12.12, assume that operations objectives are always clear and agreed, yet some services are political entities where different and often conflicting objectives compete. Local government operations, for example, are by their nature overtly political. Furthermore, the (often intangible) outputs from service operations are not always easily measured. For example, a university may be able to measure the number of qualifications it awards, or the jobs its students achieve, but it cannot measure the full impact of its education on their future happiness. Also, even if it is possible to work out an appropriate intervention to bring an operation back into 'control', most operations cannot perfectly predict what effect the intervention will have. Even the most professionally run hospital does not know exactly how a new shift-allocation system will affect performance. Also, some operations never do the same thing more than once anyway. Some assignments performed by consultants could be one-offs. If every output is different, how can 'controllers' ever know what is supposed to happen? Their plans themselves are mere speculation. Figure 12.14 illustrates how these questions can form a 'decision tree'-type model that indicates how the nature of control may be influenced. It identifies a number of types of control.

Routine control. This is relatively straightforward and reflects the simple model of control. Objectives are unambiguous, the effects of interventions are known and activities are repetitive. This type of control can be done using predetermined conventions and rules. There are, however, still some challenges to successful routine control. It needs operational discipline to make sure that control procedures are systematically implemented. Statistical process control (see later in the chapter) is an

Figure 12.14 The type of intervention that is appropriate can depend on the nature of activities being controlled

Source: Adapted from Slack, N. (2017) *The Operations Advantage*, Kogan Page, London.



example of this type of control. The main point, though, is that any divergence from the conditions necessary for routine control implies a different type of control.

Expert control. If objectives are clear, and the effects of interventions relatively well understood, but the activity is not repetitive (for example, installing or upgrading software or IT systems), control can be delegated to an ‘expert’ – someone for whom such activities are repetitive because they have built their knowledge on previous experience elsewhere. Making a success of expert control requires that such experts exist and can be ‘acquired’ by the firm. It also requires that the expert takes advantage of the control knowledge already present in the firm. Both requirements place a stress on the need to ‘network’, both in terms of acquiring expertise and then integrating that expertise into the organisation.

Trial-and-error control. If strategic objectives are relatively unambiguous, but effects of interventions not known, yet the activity is repetitive, the operation can gain knowledge of how to control successfully through its own failures. In other words, although simple prescriptions may not be available in the early stages of making control interventions, the organisation can learn how to do it through experience. For example, if a homewares retailer chain is opening different types of stores into new markets, it may not be sure how best to arrange the openings at first. But if the launch is the first of several, the objective must be not only to make a success of each launch, but equally (or more) important, it must learn from each experience. It is these knowledge-building skills that will ultimately determine the effectiveness of trial-and-error control. Increasingly, such heuristic approaches are being built into artificial intelligence algorithms by data analytics technicians and, latterly, by the AI algorithms themselves.

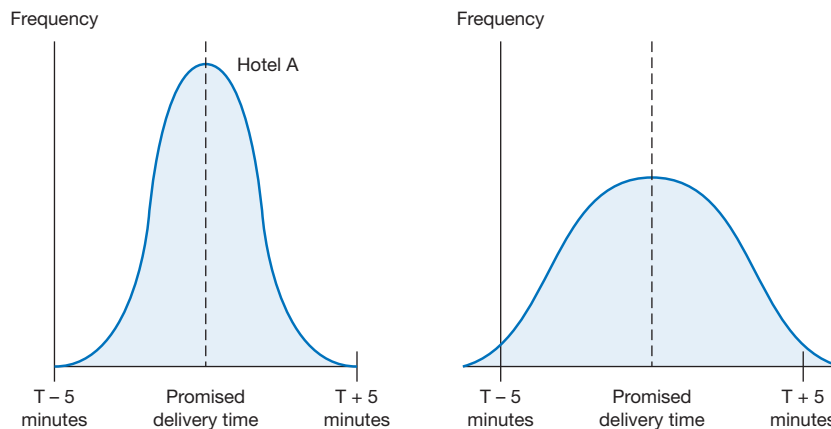
Intuitive control. If objectives are relatively unambiguous (so it is clear what the operation is trying to do), but effects of control interventions not known, and nor are they repetitive, learning by trial and error is not possible. Here, control becomes more of an art than a science. And in these circumstances, control must be based on the management team using its intuition to make control decisions. For example, a bank may be setting up a strategic partnership with a credit-rating agency. Objectives will be clear, but it is likely that control interventions will not be repetitive. Additionally, with a new relationship the effects of integrating each partner’s systems may not be fully understood. Instinct and feelings are, of course, valuable attributes in any management team, but they are the result, at least partly, of understanding how best to organise their shared understanding, knowledge and decision-making skills.

Negotiated control. The most difficult circumstance for control is when objectives are ambiguous. This type of control involves reducing ambiguity in some way by making objectives less uncertain. Sometimes this is done simply by senior managers ‘pronouncing’ or arbitrarily deciding what objectives should be, irrespective of opposing views. For example, controlling the activities of a childcare service can involve very different views among the professional social workers making day-to-day decisions. Often, a negotiated settlement may be sought, which then can become an unambiguous objective. But, even within the framework of negotiation, there is almost always a political element when ambiguities in objectives exist.

Performance and capable processes

An important concept in control, particularly the closer one moves towards routine control, is that of ‘process capability’. It is best illustrated using the statistical process control (SPC) approach. Figure 12.15 shows the distribution of sample means measuring the performance of two hotels (A and B), which deliver breakfast trays to guests’ rooms. In each case, the hotel offers guests a choice of times for delivery of their breakfast tray. Both hotels have chosen 10-minute ‘windows’ in the belief that this is what customers require. Figure 12.15 shows the distribution of the breakfast tray delivery times for a particular 10-minute window. Hotel A has put in place the processes and capacity to ensure that it consistently keeps its promises, whereas Hotel B appears unable to do so. The former is an example of a capable process whereas the latter is a process that, in SPC terms, is ‘out of control’. If the promise of meeting this time window is a key element of the ‘contract’ between provider and customer, the customer satisfaction ratings for Hotel B will be under threat.

Figure 12.15 Frequency of breakfast delivery times against promised delivery times for two hotels. Hotel A's delivery process is 'capable', Hotel B's process is 'out of control'



Hotel B has two basic strategies that its management might consider:

- to invest in the delivery process to ensure that it can meet its process specification consistently;
- to relax the process specification – in this case, increasing the duration of the ‘time window’ offered to guests (perhaps 20 minutes instead of the current 10 minutes).

Of course, this can only be implemented once customer research has indicated the importance of this aspect of the service offering.

Process control charts

SPC is based on the production of process control charts. It is normal practice to take a series of measurements and then to plot the mean of the sample readings. This is because, under the central limit theorem, the distribution of the sample means tends towards a normal distribution, even if the underlying distribution is not normal.

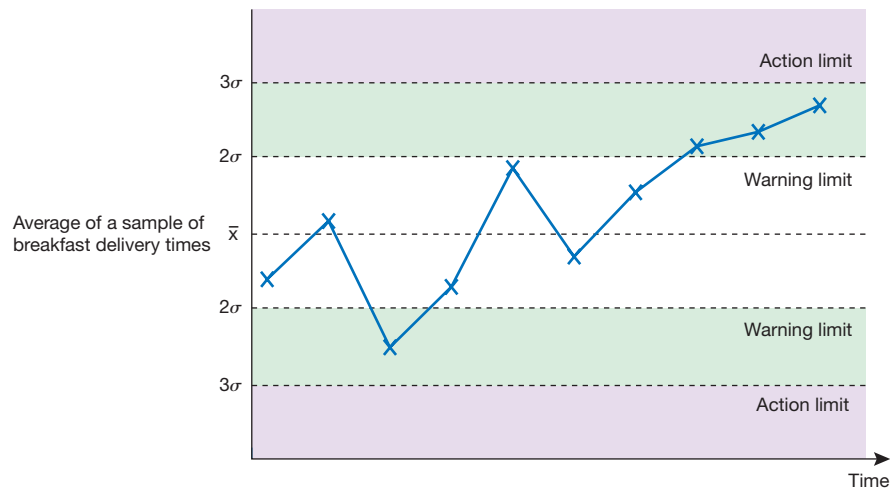
Processes can be plotted onto a control chart, such as that in Figure 12.16, to give a visual picture of their state of health. Figure 12.16 shows a plot of sample means taken at random, such as depicting the times breakfast was delivered in the hotel from the previous example. The chart shows the process mean ($\bar{x}$); warning limits set at $\pm$ two standard deviations (2σ); and action limits at $\pm$ three standard deviations (3σ). The value of process control charts lies in the removal of a temptation to ‘meddle’ in the process. A number of readings (5 per cent) will be expected to lie between the warning and action limits. The general advice if a reading is taken in this zone is to take another reading before doing anything. Premature adjustments may take the process out of control.

Figure 12.16 shows a process initially in control (the first six readings are a normal pattern), but then showing signs that the process mean has shifted as a run of points are all moving in the same direction, as opposed to the normal scattering of readings. As process managers spend time understanding these processes, it is frequently possible to identify causes of variation. These can be divided into those causes that may be avoided, perhaps through automation or better training, and those that are unavoidable. An example of the latter might be the impact of bad weather on a breakdown service.

SPC has been used extensively to control and improve (largely standardised) services in high-volume processes. Examples include:

- accuracy of financial transactions in a major retail bank;
- computer service response times;
- sickness and absenteeism in a contact centre;
- numbers of customer complaints per thousand transactions.

Figure 12.16 A statistical process control (SPC) chart showing the changes in the average of samples of breakfast delivery times at a hotel



However, it would be wrong to give the impression that SPC is easily applied to all service processes. It is clearly applicable to factory-like processes, where measures such as response times may be accurately assessed, but it is also valuable to apply the technique to attributes such as the number and intensity of customer complaints. As is often the case, the value may come from the discipline of thinking about the process as much as from the monitoring of the control chart.

High-volume commodity-type services whose processes tend towards ‘runners’ lend themselves most naturally to the quality systems approach. This is because processes can be mapped, and clear, consistent standards can be established and monitored throughout service provision. For example, many hotels have used standard operating procedures (SOPs) for a number of years, covering aspects of service delivery such as the way that housekeeping cleans and prepares a room. This activity lends itself to checklists:

- Has the floor been vacuumed?
- Have the complimentary soaps and shampoos been replenished?
- Has the bed been made and turned down?
- Have the waste bins been emptied?

These SOPs translate readily into processes that can be audited for compliance under a quality system. They deal with relatively tangible outcomes rather than less tangible aspects of the customer experience. Retailers, banks and contact centres attempt to measure these aspects of the customer experience by using checklists, which might include statements such as ‘Did the member of staff use the appropriate greeting?’ or ‘Did the member of staff thank the customer for the order?’.

12.9 Summary

What is ‘performance management’? – Performance management is the process of collecting and analysing data and communicating information about the properties of organisational processes, activities or groups of people. This performance management process is achieved through the use of a variety of mechanisms such as performance indicators, performance measurement, performance targets and performance reporting. But, be careful, the term ‘performance management’ is sometimes used to refer to human resource practices at the level of the individual, such as performance appraisals. The specific activities that relate directly to the process of making sure that

all the operations management activities are coherent are: setting the vision, mission and strategic objectives; defining what is meant by 'performance'; measuring performance; setting performance targets; reporting performance; and links to the control systems.

Setting the vision, mission and strategic objectives – A vision statement is the starting point for any performance management system. It provides the framework for subsequent performance management, sets the direction for and articulates the broad aspirations of the organisation. Some vision statements are short and to the point, others go into a little more detail. After this, setting strategic performance objectives is a step towards the practical end of performance management that allows the exploration of how strategic objectives are to be achieved. The strategic linkage model is a useful framework for articulating how strategic objectives can link to other elements in performance management, which involves logically connecting the objectives, including objectives in various parts of the organisation.

What is 'performance' in service operations? – There are various definitions of what 'performance' means. Sometimes it is used to mean a result or outcome of an action, at other times it is used to mean how the result was achieved. Another distinction concerns the scope for different stakeholders to interpret it. Some aspects of how we judge performance are relatively objective, other aspects of performance are more 'socially constructed' and are more open to interpretation. Using these dimensions can form a two-by-two matrix. Service operations tend to stress judging the process rather than the outcome alone, and involving subjective 'interpreted judgement'.

What is performance measurement? – Performance measurement is the formal process of obtaining, analysing and expressing information about an aspect of a process, an activity or a person. Performance data comes in a wide variety of forms and could be qualitative or quantitative, though often the qualitative results are converted into numbers or variables. One of the problems of devising a useful performance measurement system is trying to achieve some balance between having a few key measures on the one hand or, on the other hand, having many detailed measures. Measures should have a clear purpose, and a clear system to ensure the results will be acted upon, focused on what is meant to be measured, consistency whenever they are measured or whoever measures them, easily understood, unambiguous, capable of being analysed quickly, worth the cost of collecting and should not encourage any undesirable behaviours. The need for balance in measuring service performance is sometimes used to argue for so-called 'balanced performance systems', the best known of which is the 'four box' framework of Kaplan and Norton's Balanced Scorecard.

What is performance reporting? – Performance reporting is the practice of constructing a report on the performance of an operation. It is the source of business intelligence that helps business leaders make more accurate, data-driven decisions. Performance reporting is the 'public face' of performance management. Performance reports use performance indicators that indicate the achievements of the operation and its programmes, and help operations to build and maintain trust with key stakeholders. Regular and systematic reporting can help to make sure that information is transparent and encourages engagement between an operation and its stakeholders.

How are performance targets set? – While not all measures will have targets associated with them, they can help in controlling performance, judging improvements, motivating employees and communicating the speed and size of the change required. Target setting is a key element of driving performance improvement. There are three types of targets, or benchmarks, against which performance can be compared: internal, external and absolute, all of which should involve employees in the process. This is linked to the further issue of deciding what rewards will be associated with the achievement of chosen targets. If rewards linked to targets are to work as intended, they must be clearly perceived as sufficient to justify the additional effort to obtain them, directly related to the required performance.

How is consistency achieved? – It is particularly important to achieve consistency among the various elements of performance management. One of the most widely used methods of doing this is called 'strategy mapping', and the approach is closely related to the strategic linkage model. Strategy mapping was originally devised by Robert Kaplan and David Norton, who also developed the Balanced Scorecard. It is a procedure that attempts to clarify the cause-effect relationships in

an organisation's strategy, and in doing so allows managers to check for consistency among the elements of a performance management system. The cause–effect relationships identify not only what needs to be done to move a company or function forward, but also why it should be done. The technique does not 'devise' a strategy, but it does show the logical links between the various elements of a strategy and provides a discipline that encourages the articulation of the cause–effect relationships within the strategy.

How does performance and control fit into performance management? – Performance management is not an 'end in itself', rather its purpose is an activity that simply has to be done. But the whole idea of performance management is that management intervention should follow on from an enhanced awareness of an operation's performance. The actions that are driven by a knowledge of performance can be thought of as 'control'. Simple models of control are based on clear and unambiguous feedback, but this is a simplification, which is why simple models need modifying – either by building the idea of 'learning' into the control system, or to challenge the idea that a service's performance and objectives are clear and unambiguous. Another important concept in control is that of 'process capability', which is used extensively in statistical process control.

Discussion questions and exercises



1. Reread the case example of the HappyOrNot company. Although the terminals have proved successful, what do you see as the disadvantages of adopting these terminals to gauge customer satisfaction?
2. With many new ways of collecting data (most notably from social media), how can services make sure that all the data are useful?
3. Common measures used by call centres are speed of response and call abandonment rate. Assess these measures as drivers of improvement.
4. A tour operator specialising in holidays for young people is concerned about the quality of service provided. Each month, the marketing manager reports on the number of complaints received. How could this be better reported to help the firm improve its service?
5. *It is quite difficult to know exactly how long operators should be spending on each call. Sometimes a client really does need detailed advice or reassurance, at other times the call could be dealt with very quickly indeed. There's a minimum amount of time just to go through the courtesies. But there's also an upper limit. No matter how complex the call, our systems should be able to cope with it within a set time limit.* Said Duncan Hindes, Mortgage Services Manager, Beadles Bank. Duncan was speaking just after the bank had made a considerable investment in its

new call centre information technology project. The new system had been 'up and running' for several weeks and was generating considerable amounts of data. The average length of phone calls was of particular concern to him. He had a suspicion that the calls were varying too much and that operators should be able to control even the longer calls. He also felt that it should be possible, at the same level of service quality, to get the average call time down to under two-and-a-half minutes.

If operators spend too little time with clients, we can lose valuable opportunities to collect information, make them feel 'dismissed', and waste an opportunity to sell them further services. On the other hand, if operators spend too much time we are obviously wasting valuable operator time

Duncan decided that he should chart the average call length, and its variability, over time. He used the system to sample six conversations at random every hour, requested the system to calculate the average length of call for the sample and the range of call lengths for each sample. This is shown in Table 12.4. What does the information indicate?

6. Construct a strategy map (strategic linkage model) for an organisation with which you are familiar. How well do the objectives link with and support strategy? How well do the measures you use support your objectives?

Table 12.4 Call-length sampling results – six calls per sample

Sample	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Average call length	2.55	1.47	2.49	3.15	2.57	2.58	2.18	2.1	2.34	2.36	2.41	2.16	3.24	2.39	2.06
Range of call lengths*	3.49	3.13	5.33	5.47	5.37	6.18	3.37	5.23	3.21	3.14	3.19	5.17	5.48	5.21	2.52

*Range = longest call time in sample – shortest call time in sample.

Case exercise

Chilli Airways²⁰

Chilli Airways is a small regional airline based in Santa Fe, New Mexico. The company was founded just after the Second World War by former bomber pilot Frank Teller. Chilli has a fleet of 12 Beechcraft 1900D small commuter aircraft and 10 SAAB 340 medium commuter aircraft. The airline operates thrice-daily shuttle services, primarily between mid-west US municipal airports and larger hubs on the west coast. In the municipal airports, Chilli is typically the largest of three or four operators.

After years of inconsistent performance from local ground service operations (check-in, baggage, fueling, etc.), Chilli set up its own handling operation. These were coordinated by Chilli's wholly owned subsidiary, CGS. CGS initially established a small station at each of the 'munis' from which it operated, but in many small airports the CGS stations took over the running of ground services for other airlines too. At the major hubs, however, CGS' presence was limited to a station chief and check-in staff. Technical and ground-handling services were purchased from whichever local unit offered the best deal.

Frank Teller eventually retired and handed over the reins to a new CEO recruited from a large international carrier. Initially, the new boss did well, driving profit to record levels. But after three years in the post, cracks were beginning to show. Customer satisfaction began to decline, and with it, market share. Eventually, after another two years of poor financial performance, a large shareholder group forced changes in the constitution of the executive board as well as other senior management positions. The chief executive was replaced, as were the commercial director, marketing director and operations manager.

The Balanced Scorecard project

After a year in their new roles, Chilli's refreshed executive board began the design of its first Balanced Scorecard. The company followed best practice and designed the Balanced Scorecard in a series of workshops involving a design team constituted from both Chilli and CGS leadership teams, and the group was facilitated in the process by consultants.

After six months, the design process was largely complete. Chilli's executive had a robust destination statement and an agreed strategic linkage model, complete with objective definitions. This is shown in Figure 12.17.

As part of the design process, Chilli's newly recruited chief executive, Jake Walken, and his executive assistant Paulo Braga met regularly with lead scorecard consultant Jenny Bates. On a warm May morning, the three sat in a café in downtown Santa Fe. Paulo was the lead internal contact for the Balanced Scorecard project, and he worked closely with Jenny. In the previous week, Jenny and Paulo had received the final set of measure definitions for each Balanced Scorecard objective. Two are shown in Figure 12.18.

The café was quiet, and Jake was an old friend of the owner, so the group were able to push together three tables on which they laid out the measure definitions. Sipping espresso, Jake quietly perused the measures for ten minutes or so. Then he turned to Jenny and said, 'what do you think?'

Jenny, a seasoned scorecard consultant, was wary of making any comment on the content of a client's Balanced Scorecard. However, she had observed a problem in the team dynamics during

the scorecard workshops. The problem was that the CGS leadership team appeared to behave as if they were of a lower status than the main Chilli board. The problem was subtle, but Jenny observed a distinct deference on the part of the CGS managers to their Chilli co-managers. This problem was most in evidence during the activity brainstorming phase of the second workshop. To Jenny, the CGS managers seemed to be sceptical about activity suggestions pertaining to ground services that came from Chilli managers. Many of these activity suggestions were incorporated into objective definitions, however, and were evidenced in the measures now before her.

Jenny had also overheard conversations during the design process revealing unease about measure suggestions. Jenny had no way of knowing for certain whether the objectives and associated measures made sense or not – she was a scorecard expert, not a manager in commercial aviation.

Jenny had already conveyed her concerns to Paulo, who was in complete agreement. Jenny

answered Jake's question: 'I think that at the level of measures, we have some problems in relation to ground services. I think the CGS guys are comfortable with the outcome objectives, but not the means of achieving them. They are also worried about the measures. I detect some concern about unanticipated consequences. Whether the problems are real or not, I think we need to make time in the final workshop to formally critique the measures. It won't take long, and I think I can modify the plan to fit in a longer formal measure review session. Even if the current measures remain unchanged, I think it will be a good opportunity for the CGS managers to raise the level of their contribution.' Jake nodded agreement: 'Do it'.

Jenny used a standard measure assessment framework to help managers assess their chosen measures. Ordinarily it was not needed; managers usually had a good feel for whether a measure was appropriate or workable. However, now and then – as was the case here – it was useful to include a formal review using the framework.

Figure 12.17 Chilli Airways' strategic linkage model

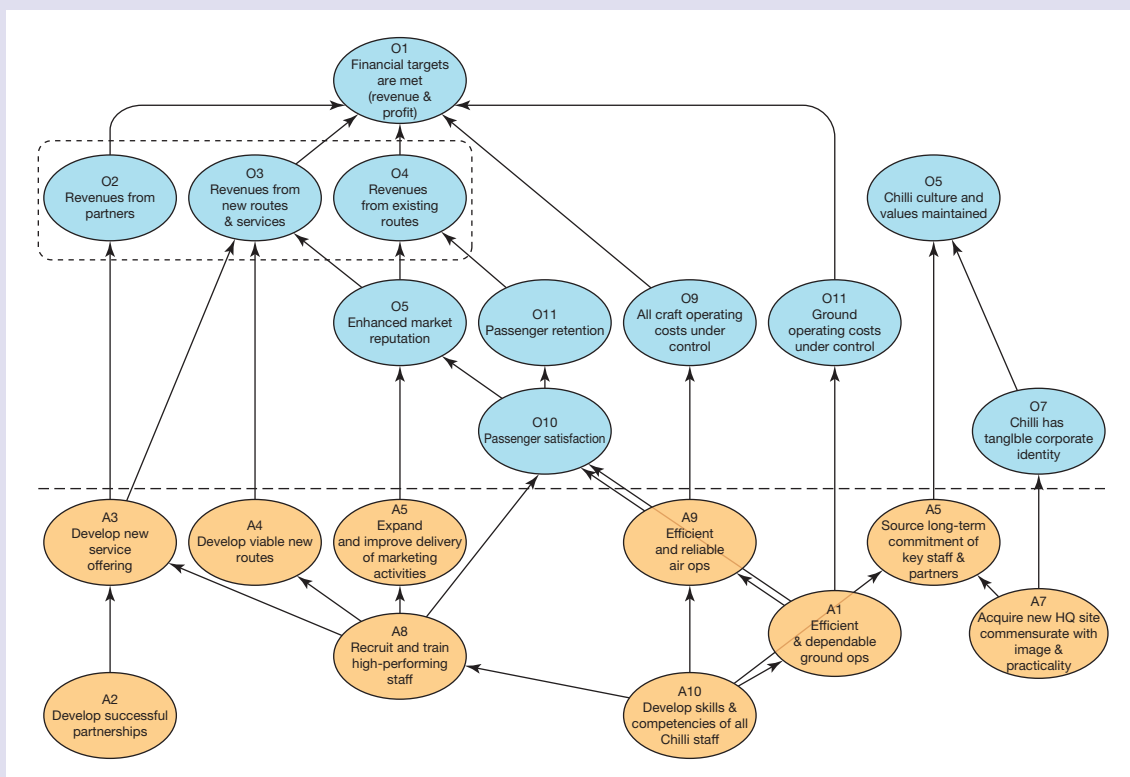


Figure 12.18 Two Chilli Airways objective definitions**Chilli objective definition****Outcome objective 10 – Passenger satisfaction**

Objective name	O10 – Passenger satisfaction
Objective description	This objective is designed to focus our attention on the key driver of profitability – the paying passenger. We will achieve this objective if we are efficient and reliable in the air and on the ground. Another critical driver of this objective is the capability, courtesy and motivation of our staff. We recognise that there are many different aspects of the total service that contribute to overall satisfaction, and not all of these are in our control.
Owner	Objective issues and dependencies
John Rickover	• TSA ‘cooperation’? • Activities of other airlines impinge greatly on customer experience. • Our influence in larger west-coast hubs is limited – we are often bumped from t/l, fuel bowser, de-icer slots by bigger carriers. • Baggage belt at LAX is chaos – but we get the blame. • Even though many influences on ‘satisfaction’ are outside our direct control, we can influence third parties to a degree. So, should any measure related to this objective ‘pick-off’ the contributions to satisfaction from these other domains?
Responsible team	
Air Ops & Ground Services mainly	
Measures and metrics	
E.g.: Baggage-unload times (BU), Luggage-cart availability (CA), Boarding to taxi time (BTT), Schedule adherence (SA), Bump rates (BR), In-flight survey (IFS), Aircraft condition (AC), Cabin service (CS), Lost baggage (LB).	
Need several measures for this – pick three.	

Activity objective 1 – efficient and dependable ground operations

A1 – Efficient and dependable ground operations	
Objective name	A1 – Efficient and dependable ground operations
Objective description	The success of our core passenger carrying business is critically dependent on the speed and reliability of terminal, and airside support operations. Specific terminal improvements will be to: Smooth inbound passenger flow and reduce throughput time. Improve queue management. Provide standardised response procedure for exceptions: lost luggage, problem passengers, weather delays etc., so as to minimise disruption to mainstream passenger flows. Airside improvements: To reduce in-process wait times for turnaround crews. Maximise utilisation of airside assets – especially fuel bowsters, de-icer trucks and waste wagons.
Owners	Objective issues and dependencies
Gerry Plant Paul Grainger	• A10 is critical underpinning; training cutbacks, especially in IS, have made us vulnerable. • AAM system needs upgrade to version 3.0 – training needed also – this was removed from last year’s budget. • De-icer upgrade programme is on hold, as per current year budget.
Responsible team	
Ground services mainly	
Measures and metrics	
Boarding to taxi time (BTT), Schedule adherence (SA), Lost baggage (LB).	

Figure 12.19 A Chilli Airways measure definition for baggage availability**Chilli Airways measure definition****Outcome objective 10 – Passenger satisfaction**

Measure name:	O10 Measure 2/3: Baggage availability	Objective name/owner:	John Rickover
		Measure reporter:	Paul Grainger – ground services
Measure units:	Minutes and seconds	Reporting frequency	Monthly
Definition/formula:	BU = monthly average of time from engine shut-down to bags hitting arrivals belt		
Data sources:	Shut down times for flt. numbers in air ops database. Belt start times with flt. numbers in ground services database for larger hubs. Need to capture for municipals.		
Availability:	At municipals, belt starts will have to be logged manually by crew chief. Need to create new input field on turnaround log. Turnaround log fed into CGS database three times daily. All other data already available.		
Implementation tasks, notes & assumptions:	We can pull all three data sets into a spreadsheet and match flt. nos. with dates. Not a huge job. After learning curve, probably an hour's work per month. Could easily be automated.		

Target information

Baseline information:	Mean for April through June 2020 (does not include municipals) is 18 minutes with a standard deviation of 15 minutes.			
Long-term target:	9 minutes with standard deviation of 6 minutes, by June 2024			
Annual targets (time/standard deviation):	June 2021: 16/13; June 2022: 14/10; June 2023: 11/8			
Quarterly targets:	September 2020: 17.5/14.5	December 2020: 17/14	March 2021: 16.5/13.5	June 2021: 16/13

Figure 12.20 A Chilli Airways measure definition for passenger throughput rate**Chilli Airways measure definition****Activity objective 1 – efficient & dependable ground operations**

Measure name:	A1 Measure 1/3: Passenger throughput time	Objective name/owner:	Gerry Plant/Paul Grainger
		Measure reporter:	Paul Grainger
Measure units:	Minutes	Reporting frequency	Weekly
Definition/formula:	PTT = Weekly average (Check-in + Security + Gate) (Check-in & Security: timed from queue entry to completion of process, Gate: timed from first Gate Call, to Boarding.)		
Data sources:	Check-in and Security: *helper staff (already in place at Cheyenne, Denver, Salt Lake) can record sample. Check-in teams can log first gate call and boarding times.		
Availability:	None of these measures available currently, though not too difficult to put in place.		
Implementation tasks, notes & assumptions:	Use sampling basis for Check-in and Security – what is sample size? Helpers will need stopwatch and all recorders will need record sheet. We do not have (or need) helpers at smaller munis – e.g., Santa Fe. Should we limit this one to larger munis?		

Figure 12.20 (Continued)**Target information**

Baseline information:	No consistent baseline data available, but anecdotally throughput is about 40 minutes at bigger munis. At Santa Fe and Colorado Springs it's harder to tell as all processes in one area, but most likely around 30 minutes.			
Long-term target:	Need to capture baseline first, but thereafter aim for 20% reduction by June 2024.			
Annual milestone:	Dependent on baseline, but just divide by 4.			
Quarterly milestones:	As above: annual/4.			

Figure 12.21 A Chilli Airways measure definition for airside asset response time**Chilli Airways measure definition****Activity objective 1 – efficient & dependable ground operations**

Measure name:	A1 Measure 2/3: Airside asset response time	Objective name/owner:	Gerry Plant/Paul Grainger
		Measure reporter:	Paul Grainger
Measure units:	Minutes	Reporting frequency	Weekly
Definition/formula:	ART = time from asset request to asset arrival		
Data sources:	GSE controller's log.		
Availability:	Available.		
Implementation tasks, notes & assumptions:	Manual trawl of GSE log required to import to excel. Can we automate? Possible cross-check using crew-chief's log? Safety? Don't want fuel bowsers racing to AC. Does this apply to hubs, or regional and munis only? Do we have influence?		

Target information

Baseline information:	Baseline data from GSE controller log suggests ART = 17 minutes, but considerable variability.			
Long-term target:	10 minutes by June 2024.			
Annual milestones:	June 2021: 15 minutes; June 2022: 13 minutes; June 2023: 11 minutes			
Quarterly milestones:	September 2020: 16:30	December 2020: 16:00	March 2021: 15:30	June 2021: 15:00

Questions

- Figures 12.19, 12.20 and 12.21 show some measures from the Chilli Airways Balanced Scorecard documentation. The measures are associated with the two objectives illustrated above. What concerns might you have about the measures and targets developed?
- What changes, or alternative measures, would you recommend for tracking activity objective 1 and outcome objective 10?

Further reading



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Notes



- 1 Micheli, P. and Mari, L. (2014) 'The theory and practice of performance measurement', *Management Accounting Research*, 25 (2), 147–156
- 2 The information on which this example is based was taken from Clarity Visual Management's online brochure.
- 3 This model is based on work by Professor Pietro Micheli of Warwick Business School. See Micheli, P. and Mari, L. (2014) 'The theory and practice of performance measurement', *Management Accounting Research*, 25 (2), 147–156
- 4 Based on Mari, L. (2007) 'Measurability', in M. Boumans (ed.) *Measurement in Economics*, Elsevier, London, 41
- 5 Neely, A.D. (2016) *Measuring Business Performance*, The Economist Books, London
- 6 The information on which this example is based is taken from: Owen, D. (2018) 'Customer satisfaction at the push of a button', *The New Yorker*, 29 January; and Watts, R. (2018) 'HappyOrNot aims to change customer feedback', *PC Magazine*, 9 February
- 7 Kaplan, R.S. and Norton, D.P. (1996) *The Balanced Scorecard*, Harvard Business School Press, Boston, MA
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- 10 This example is based on several real companies, although Ess Pannanservice is an invented name, and operational details have been substantially altered.
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Chapter 13

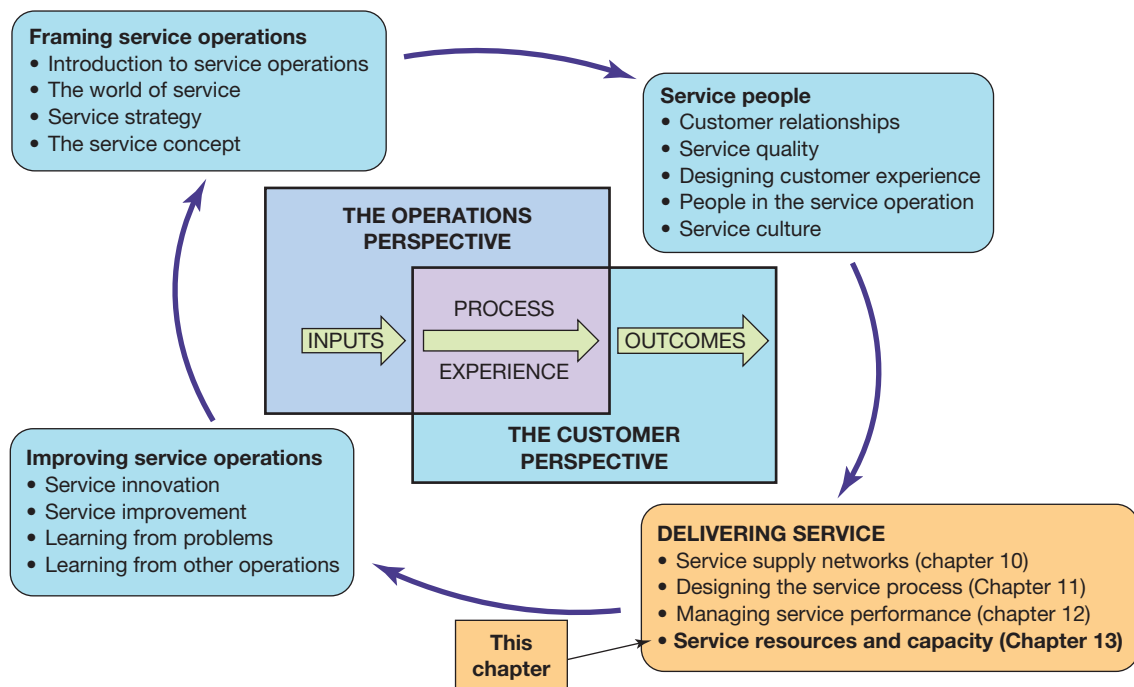
Service resources and capacity



Chapter 8 was concerned with managing people, service people – both staff and customers. This chapter focuses on all input resources, materials, equipment, customers, staff, and technology and facilities. Specifically, it is concerned with how these resources are managed to provide the service capacity that enables operations to serve their customers. In particular, it looks at how service operations manage, increase or reduce their operating capacity as they try to meet fluctuating levels of demand from customers. Figure 13.1 shows where this chapter fits into our overall model of service operations activities.

Learning objectives

- To define the meaning and importance of managing resources and capacity
- To be able to explain the difference between long-, medium- and short-term resourcing and capacity decisions
- To understand the importance of forecasting demand and capacity
- To be able to identify the ways in which service organisations manage bottlenecks and queues
- To gain an appreciation of what happens when service managers cannot cope with demand
- To explain why and how service organisations seek to improve their capacity utilisation

Figure 13.1 This chapter looks at service resources and capacity

Introduction

Resourcing a service operation means deciding how many resources it should have to provide the capacity that its activities require. Service operations managers spend a significant proportion of their time and energy in working out how they can make the most of their resources to serve more customers, improve choice for their customers and adapt to fluctuations flexibly, while at the same time keeping costs under control. Ensuring that resources such as materials, staff, equipment and technology are utilised to the right level has a major impact not only on the efficiency, and therefore the costs, of the operation but also upon customer satisfaction. To add complexity to this challenge, the customer frequently plays a significant part in service delivery and can be thought of and managed in a similar way to internal resources.

For example, the service operations managers for a large parcel delivery service are responsible for the movement of hundreds of thousands of packages each day, from collection, transportation, sorting, despatching and tracking, to timely and accurate delivery. The resources they manage on a day-to-day and week-by-week basis include not only the packages but also the trucks and drivers, the system of conveyors, and the people and processes employed in sorting out the parcels at the hub, not forgetting the scanning and information technology monitoring it all. But, in addition to its own resources, its customers also act as a resource for the company when they use standardised packaging or enter collection details via the website. Like all operations managers, the parcel service managers need to make the best use of their resources while at the same time ensuring they meet customer and organisational requirements.

13.1 What is resource and capacity management?

Service operations managers have a responsibility to ensure that their service processes have sufficient resources to deal with the anticipated levels of customer demand in such a way that quality of service meets its targets in the most cost-effective manner. Getting this resourcing decision wrong is almost always serious, sometimes terminal, and vital in achieving an effective operation. Too much capacity underutilises resources and drives your costs up. Too little capacity limits your ability to serve customers and therefore earn revenues. More specifically, underutilising resources has the potential to damage the long-term success of the organisation in a variety of ways:

- Expensive resources that are not earning revenue lead to poor financial results. The airline that fails to achieve a high load factor on its planes will struggle to survive.
- In many services, customers are suspicious of services that appear not to be busy. Banks and similar financial institutions find that customers are not happy about using an empty branch, and many diners prefer the ‘buzz’ of a busy restaurant.
- Service employees may become demotivated if underutilisation persists. Boredom and concern for their long-term employment may lead to poor service attitudes, which in turn lead to reduced customer satisfaction and lower profitability.

Conversely, resources that are overstretched also lead to problems for the success of the organisation:

- Overloaded resources mean that many aspects of service delivery suffer. A sudden surge of customers into a shop means that waiting times increase and staff cannot devote the amount of attention to customers that is desirable.
- Staff that are continually overloaded make more mistakes and, in the longer term, may decide to leave the organisation in search of less stressful employment.
- To deal with overload, staff may be drafted in to carry out tasks with which they are unfamiliar, or for which they are only partially trained. The potential for increased error rate is high and, again, stress levels may be intolerable for some members of staff.

The task of capacity management is to try to achieve a balance between too much and too little resource utilisation, within the strategic, financial and operational constraints of the organisation. Capacity management is concerned with putting a plan in place that makes the best use of resources to deal with the forecasted or expected demand for services.

Case example

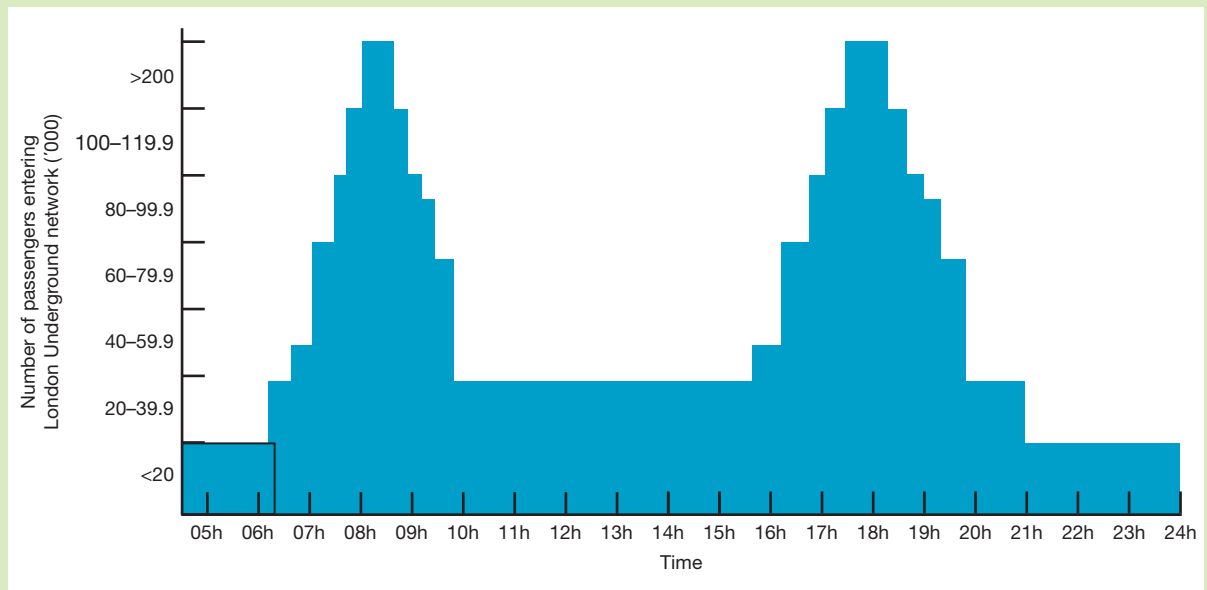
Demand fluctuation on London Underground

Anyone looking for an example of both the importance and difficulties of resourcing services, especially when demand varies throughout the day, need look no further than London Underground. The oldest and one of the most famous mass rapid transport (MRT) systems in the world, the London Underground (usually just called ‘the Underground’, or ‘the Tube’ by Londoners) had its origins in the

Metropolitan Railway – the world’s first underground passenger railway that was opened in January 1863. It is now the world’s eleventh-busiest metro system, transporting up to 5 million passengers a day, which means that it can be crowded, as anyone who has used it during its peak times knows. The number of users has increased by over 30 per cent in ten years.

Figure 13.2 The variation in demand (number of passengers entering London Underground network, '000) through a typical weekday

Source: Data from Transport for London



But from the perspective of Transport for London (TfL), which operates the system, an equally pressing issue is how to cope with the fluctuation in demand during each day. In most parts of London Underground, the morning peak time lasts from 07:30 to 09:30 a.m. and the evening peak from around 16:40 to 18:30. However, there is some variation, with different parts of the system experiencing higher levels of traffic during different parts of the day. The network is largely closed overnight during the week, with some exceptions for all-night services on Friday and Saturday nights and special occasions.

Figure 13.2 illustrates how demand varies throughout a typical weekday. However, there is some evidence that demand is 'spreading out' as passengers deliberately try to avoid travelling in peak periods. Some commentators see such shifting patterns, particularly the increase in off-peak travel, as reflecting the ways in which Londoners are changing the way they live and work.¹ The number of self-employed people in



Charles Bowman/Shutterstock

London has increased much faster than the growth in overall employment in the city. London has the highest proportion of self-employed people in the UK.

The main constraint on London Underground's resourcing options is the more-or-less fixed capacity of its network. More and better trains would help, but are expensive. There is an ongoing programme of commissioning new trains, some of which are a

little more spacious than some older models and have a carriageless layout, which allows passengers to move through the train to spread out more efficiently. These may help to ease some of the worst effects of overcrowding at peak times that make travelling to and from work a stressful experience. Crowded carriages cause discomfort to passengers and can also be the cause for delays. But London is not alone in facing these resourcing problems. In other large cities, notably Tokyo, the problem of overcrowding is probably even more severe. Here, 'train pushers' are employed to make sure underutilised capacity is filled by passengers physically being

pushed onto trains. There are some options to flex capacity, but they are limited. Essential maintenance is carried out during the nightly closures, and more substantial track maintenance is occasionally done during weekends when demand is lower. Similarly, cleaning work can be performed at night by some of London Underground's nearly 10,000 night workers. It also helps if passengers can be encouraged to board and exit trains as quickly as possible. The newer trains can help this: they are not much faster between stations, but they do draw passengers off the platform faster, which helps the system to stay fluid at peak times.

Defining and measuring service capacity

Service capacity is defined as the maximum level of value-added activity that the service process can consistently achieve under normal operating conditions over a period of time.² At the level of individual processes, it is relatively straightforward to define and measure capacity. For example:

- The number of calls a customer service agent can handle in the course of a normal shift.
- The number of meals that can be served by a restaurant during the lunchtime period.
- The number of repair calls made by a service engineer during an eight-hour day.

However, note the words 'under normal operating conditions' and 'consistently' in the definition of capacity that we have used. It may be possible, in some cases, for an individual employee to exceed the throughput rate for a short period. If call-centre employees handle 120 calls over 8 hours (15 calls per hour), it may be possible for them to achieve as many as 30 calls in one of these hours, but this rate is not sustainable over any length of time. Moreover, although overloading resources in the short term may appear to increase output in terms of the numbers of transactions completed in a given period, there may be an impact on the nature of the service and also the quality of the service that is being provided. Service organisations must take particular care to ensure that the service concept is not changed in the search for greater productivity. For example, a restaurant may decide to encourage customers to leave their table having completed their meal, in order to fit in a second sitting for dinner. While the restaurant has doubled its capacity, customers may feel that the nature of the service has changed and the level of service has deteriorated. Of course, there are strategies that the restaurant can adopt to manage this sensitively, but the operations manager must be certain that in increasing productivity the desired service concept is maintained.

To manage capacity, we must be able to measure it. At the level of a whole service operation, we could also measure capacity as in the individual processes above. A simple measure is the amount of demand it could cope with in a specified time period. A parcel delivery service may have an overall measure of capacity in terms of the total number of parcels that can be processed overnight. However, this overall measure may not be very helpful in managing the day-to-day operation. It is necessary to develop a measure of capacity that is sufficiently detailed to give a 'good enough' estimate of capacity under specific circumstances. So, for the parcel delivery company, some of the key aspects to be considered could include:

- The size, weight and value of the parcels to be moved – a package that is small but valuable will provide more revenue per truck movement than something less valuable that takes up a large amount of space.

- The geographical locations served by the company – rural districts have greater travel times, and many inner-city areas suffer from traffic congestion.

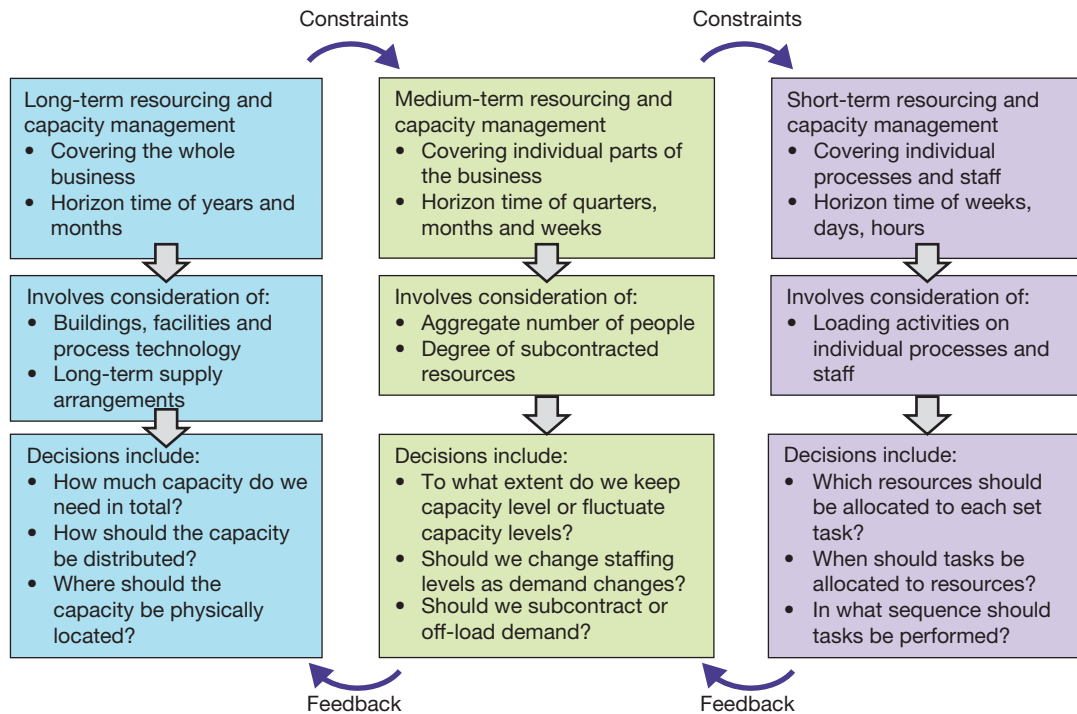
In practice, most service operations need to make allowances for specific circumstances when specifying or measuring their capacity. Often, the following factors need to be included as caveats to measures of service capacity:

- *Service mix.* If the service mix (the range of services provided) is made up of high volumes of ‘runners’ (see Chapter 11), the capacity calculation may be relatively straightforward. However, once the service mix incorporates fluctuating volumes of ‘repeaters’ and ‘strangers’, the calculation becomes more complex. So, for example, a customer service agent may be able to handle 120 ‘normal’ calls in a shift; however, if some of the calls are complex enquiries or serious complaints, the number of calls handled (the agent’s capacity) could drop significantly.
- *The impact of location.* It may seem that the appropriate measure of capacity for a service engineer would be relatively straightforward. However, consider the difference between an engineer operating in a major city and another engineer dealing with rural communities. The travel time between jobs could be far longer in a rural setting, which means that simply calculating capacity on the basis of the number of calls completed would be misleading, since it takes no account of travel times.
- *The extent of intangibility in the service.* Services with low degrees of intangibility are relatively easy to deal with. The number of short transactions per hour in a fast-food restaurant is relatively consistent. However, the customer-facing staff in a gourmet restaurant may have greater discretion as to how to carry out their task. They may perhaps spend time with customers in ‘building relationships’, with the result that an individual’s capacity becomes more difficult to define. This calculation becomes more complex when dealing with knowledge workers, who may combine short-term revenue-generating activities with long-term research and development. Capacity in this case is linked more to the individual service provider. As a manager, it may be almost impossible to know when someone is working to capacity when output is so variable.
- *The ease of identification of resource constraints.* The capacity of a process is determined by resource constraints or bottlenecks (see Chapter 11 for an explanation of ‘bottlenecks’). In a hospital, for example, the resource constraint may be the operating theatre at some times and the imaging department at others. For complex operations, the identification of the key resource constraints may not be easy. Alternatively, some resource constraints may not become immediately obvious at the start of a project. For example, an IT consultancy may require a wide range of technical skills for different parts of a project, but the precise requirements may not be known until part way into the contract.

Resourcing and capacity in the short, medium and long term (and integrating these decisions)

Deciding on capacity takes place in all operations minute-by-minute, day-by-day, month-on-month and year-on-year. Every time someone is moved from one part of an operation to another, capacity could be changed. Every change to staffing patterns, every adjustment of working hours impacts on effective capacity. These decisions may not be strategic, but they do impact directly on the long-term capability of an operation. They also take place within the constraints of the physical limits of the operation – the ability of its suppliers to supply, the availability of staff and so on. In other words, although capacity decisions are taken for different timescales and spanning different areas of the operation, each level of capacity decision is made with the constraints of a higher level. Figure 13.3 summarises some decisions taken at each level.

Figure 13.3 Resource and capacity planning should be integrated across levels because each level constrains what can be done in the level below



It is worth noting, however, that what Figure 13.3 shows as three levels of decision making is, to some extent, arbitrary. There will always be some overlap between the levels, and the actual timescales of the three levels will vary between industries. The important point here is that capacity planning should be integrated across levels because each level constrains what can be done in the level below. Which is why some kind of hierarchical approach is often used.

Hierarchical planning and control

Resourcing and capacity decisions can be both complicated and full of uncertainties. Added to this, the lead times for increasing capacity are often longer than customers are prepared to wait. Which is why 'hierarchical approaches' are necessary. They try to bring some order to the complexity by dividing up all the interrelated resource planning decisions into sub-problems that match an organisation's structure and hierarchy. They also bring a degree of stability in the planning process, so that relatively complex operations can be protected against too many short-term changes. At the same time, they can give some independence to planners at different levels. But doing this requires three types of integration:

- Integration of decision making at different levels – long, medium and short term.
- Integration of planning and control between the various parts of the organisation.
- Integration between different time periods.

The key test of how well a planning process integrates these aspects can be judged in two ways:

- How well the constraints imposed by decisions made at the higher level of planning, the wider span of the organisation or the longer timescale are transmitted to lower, narrower or shorter levels.
- How well the execution of detailed decisions at the lower level can provide the necessary feedback so that the quality of higher-level decision making can be judged.

13.2 Long-term resource and capacity management

Planning resources and capacity in the long term is largely a matter of shaping the physical nature of an operation. The strategic decisions that are needed at this level include such issues as the overall scale of the total operation, the number and size of different sites between which its capacity is distributed, the specific activities allocated to each site and the location of each site. All these decisions are related.

The overall scale of the total operation

The first capacity-related decision faced by any operation is ‘how much capacity should we have?’ It sounds a straightforward question, but is in fact influenced by several factors, related in particular to the circumstances of the organisation and its competitive position. Some of the factors are related primarily to the requirements of the market, such as the level, dynamics and uncertainty of forecast demand. Others are largely concerned with the nature of the operation’s resources, such as the availability of capital, the nature and cost of capacity increments, the effect of economies of scale and the flexibility of capacity provision.

For example, in a package distribution operation, some estimate of volumes to be sorted during the relatively short time available each night will be required. Likewise, when deciding the size of a supermarket, call centre, airport, surgery or cinema, the costs need to be weighed against forecast demand – not only short-term demand but also long-term demand, because the cost of changing facility size can be both expensive and sometimes difficult.

The two interrelated issues for operations managers are:

- facilities can usually only be added in large – and expensive – chunks;
- capacity needs to match demand.

Adding new facilities usually requires the organisation to commit significant amounts of capital. This can be a risky business because long-term demand can rarely be predicted with any great certainty. If necessary break-even volumes are not met, the facility will not pay for itself. In some cases, such as a theme park, where having sufficient customers creates the atmosphere, the service may not be as good as it should be if volume targets are not achieved. If volumes are exceeded, there may be significant localised problems for customers, resulting in customer dissatisfaction and lost business. Given that the majority of forecasts will be wrong (because they are only forecasts), operations managers will invariably suffer from the consequences of over- or under-capacity. For example, many airports have suffered from the latter problem; furthermore, owing to the length of time it takes to design a new runway or terminal building, and to go through the planning process and build the facility, volumes may again exceed capacity as soon as the new facility is opened.

There are three main strategies for long-term capacity planning (as there are for medium- and short-term capacity planning (see later in the chapter):

- *Plan for capacity to exceed demand forecasts.* This strategy is appropriate where there is an expanding market, or the cost of building a new facility is inexpensive compared to the cost of, or problems that would be created by, running out of resources, such as electricity or water supply, or air-traffic control facilities.
- *Build capacity to forecast.* This approach would balance the likelihood of not having enough and having too much capacity, and is appropriate where the costs and consequences of exceeding demand are similar to those for not meeting demand.
- *Plan for capacity not to meet forecast demand.* This is an appropriate strategy where it is acceptable not to meet demand, or where the cost of capital is very high compared to the costs and consequences of not meeting demand. Football clubs may be able to do this, using price premiums and revenues from television companies to balance the books and even set money aside for future expansion. The problem for some organisations that follow this strategy, such as supermarkets, is that it might give the competition time and income to pursue an aggressive expansionist strategy.

Forecast demand

Clearly, an organisation's view of future demand will be of particular importance in long-term capacity planning. So, for example, if a leisure business believes there is likely to be a demand for 500 rooms per night at a newly developed resort location, then it may build a 500-room hotel. If an insurance company's contact centre is forecast to handle 4,800 calls per week and one operator can handle a call every 6 minutes, then it may build a 12-station call centre (operators have 40×60 minutes a week, so can receive $2,400/6 = 400$ calls a week, so $4,800/400 = 12$ operators are needed). But capacity decisions are not always as simple as this. Although a 'single-point' forecast of future demand for an operation's products and services will have a major influence on how big its operations will be, other considerations will affect the decision.

One factor is the uncertainty of future demand. Even when the demand for an operation's services can be reasonably well forecast, the uncertainty inherent in all estimates of future demand may inhibit the operation from investing to meet the most likely level of demand. The economics of the operation may mean that, should the lower level of demand occur, the financial consequences would be unacceptable to the company. Yet there are also other consequences of over- and under-supply. For example, the availability of excess capacity may give an operation the flexibility to respond to short-term surges in demand. This could be especially valuable, either when demand needs to be satisfied in the short term, or when satisfying short-term demand can have long-term implications. So immediately after the introduction of a new service, especially when there are several competitors, is a bad time not to be able to satisfy demand. Market share lost at this point may never be regained.

Another factor is the likely change in demand. For example, short-term expected demand may be higher than expected long-term sustainable demand. In which case, does an organisation plan to provide capacity to meet the short-term peak or, alternatively, plan to satisfy only longer-term sustainable levels of demand? Conversely, short-term demand may be relatively low compared to longer-term demand. Again, there is the same dilemma. Should the operation build capacity for the short or long term? Like many capacity strategy decisions, this is related to the economics of scale of individual operations and the ease with which they can add or subtract increments of capacity.

Resilience or flexibility

Given that forecasting the size and nature of demand and future services is difficult, if not impossible, it is a responsibility of service operations managers to try to ensure that their facilities have some degree of resilience or flexibility.

Physical resilience can be created through either structural flexibility or developing the potential of the infrastructure. Building flexibility or resilience into a facility can be done in several ways:

- Buying extra land to facilitate any possible future expansion.
- Having a flexible internal structure, with open-plan offices and movable walls.
- Using flexible equipment, such as cordless telephones or desk-sharing schemes.
- Adopting different methods of working, using more home-based workers.
- Developing contingencies – railway companies, for example, may plan to use different routes if one route fails.

Major investments or disinvestments are required to deal with longer-term forecasted or anticipated fluctuations in demand. For example, a theme park resort might need to make significant investments every few years to install the new or replacement rides that will provide the capacity for the increasing numbers of guests it wants to attract to the park. One key issue with such large-scale investments is that this capacity usually comes in large lumps, such as a 180-room hotel. This could mean that the capacity may not always be fully utilised when it is first brought on-stream. Later, the same capacity might become oversubscribed, with bookings turned away.

The number and size of each site

There is a spectrum between many small sites on the one hand and a few large sites on the other. However, the range of options for this decision will be constrained by the degree and nature of the tangibility of the service being offered. This will impact those services whose customers demand

high absolute levels, or immediate service. For example, a national chain of fitness gyms could not have one huge site to serve its national market, nor would the fixed costs of such a service allow for a 'mini-gym' in every small district. Nevertheless, there are options, and the company still must decide on the range of capacities that make sense in economic and customer service terms.

The activities allocated to each site

In deciding what tasks to allocate to each site, the issue is largely how to balance the competing benefits of, on one hand, offering a wide range of services, and on the other achieving operations focus. Once again, this means balancing the customer and the operations perspective of managing service operations. Some services are based on providing a relatively full range of services at all their sites. For example, a chain of autocentres that service cars and bikes has sites in several major cities. It has decided that, to preserve its brand, all sites should be able to offer the same range of services, and therefore need the same range of facilities and skills. By contrast, a chain of veterinary practices has chosen to have three types of practice: small animal practices located in cities; large animal practices in rural areas; and specialist equine practices located in areas where there are many racehorse-training clients. The reason for this specialisation is usually that there are cost and knowledge advantages of focusing operations resources and processes.

This idea of 'focus', as its name implies, is that there can be significant benefits of individual operations having a relatively narrow range of tasks to perform. Benefits include a clarity of performance objectives, the ability to develop appropriate targeted resources, and enhanced learning and improvement. Most of the early work on operations focus was carried out by Wickham Skinner of Harvard Business School. He argued that one way of achieving effective operations was through a business establishing a consistent set of policies for the various elements of its operations, which will support not only each other but also market requirements. Focus, according to Skinner, can be expressed as dedicating each operation to a limited, concise, manageable set of services, technologies, volumes and markets, then structuring policies and support services so they focus on one *explicit* task, rather than on a variety of inconsistent, conflicting, *implicit* tasks.

The location of each site

Location is the geographic positioning of a facility (or facilities) that is providing capacity. Location decisions are often expensive and may have a significant impact not only as an investment cost but also on operations costs, since location may be affected by local wage rates and business rates, for example. Location may also have an impact on revenues, particularly when the operation involves physical contact with customers. For operations that do not require direct physical contact with customers, such as call centres and internet service providers of health or benefits advisory services, location decisions can be made to minimise the physical costs of the buildings and the running costs of the operation. For operations that need direct access to customers, expensive town-centre or out-of-town shopping malls may be essential.

Location decisions are a balancing act between supply-side factors and demand-side factors.³ Supply-side factors are those that influence the costs and difficulties of a location decision. The demand-side factors are those that influence revenues. Not all the factors below will apply to every location decision, but they are an indication of those factors that may need to be taken into account.

Supply-side factors include:

- land costs – the costs of acquiring the land;
- labour costs – wage costs, employment taxes, welfare provisions, etc.;
- energy costs – the cost of energy or the availability or even consistency of the supply of energy;
- transportation costs – the costs of getting resources to the site and of transporting materials to customers;
- government factors – local taxes, capital restrictions, financial assistance and political climate, and planning restrictions;
- social factors – language and local amenities;
- working environment – the history of labour relations and labour supply.

Demand-side factors include:

- convenience to customers – the site’s accessibility for customers, including transport network, parking, distance from markets;
- labour skills – the availability of particular talents, skills, accents and cultures;
- characteristics of the site – the intrinsic and maybe aesthetic appeal of the site;
- image – the reputation of the surrounding area and the extent to which there are complementary services in the vicinity.

Case example

PortAventura World Parks & Resort⁴

PortAventura World Parks & Resort is the largest family leisure and holiday destination resort in Europe. Since it was opened over 25 years ago, it has welcomed over 85 million visitors. In its attractive location in the south of Barcelona, Spain, the resort operates five four-star themed hotels and one five-star themed hotel, between them having more than 2,200 rooms and a convention centre with a capacity for up to 6,000 people. The range of leisure facilities on offer also includes three golf courses and a Beach Club with direct access to the beach. It is best known as the home of a leading theme park, a water park and five theme areas based on historic civilisations (Mediterrània, Far West, México, China and Polynesia), and one theme area based on Sesame Street, with a range of internationally renowned attractions.

Like most amusement parks, capacity management is a particularly important part of its service operations activities. Its location was, of course, chosen when the park first opened, and would be somewhere between difficult and impossible to change now. And it is, in many ways, a fine location. It is in one of the main destinations for tourism and holidays in Spain, with long periods of fine weather, an attractive city nearby, two airports within 30 minutes of it and a train station for PortAventura, which has connections to Barcelona and Salou. Each year the resort invests in new rides, attractions and infrastructure. For example, in 2019, as part of its



Greg Balfour Evans/Alamy Stock Photo

strategic investment plan, it opened its new premium four-star flagship hotel – Hotel Colorado Creek – PortAventura World’s first zero-emissions hotel. Less expensive, but also important, is the constant refreshing of its shows. For example, its ‘We Dance on Movies’ show won the award for Best Show in a European Amusement Park.

It is the effects of medium- and short-term capacity management that visitors would first notice, because getting it wrong can, at peak times, lead to overcrowding. And, while forecasts of the average number of visitors in a period of (say) a week may be reasonably accurate, variations day-to-day, and even hour-by-hour, can mean excessive queueing for visitors. One problem can be that too many visitors have been allowed in on a particular day. Some parks control entry to ensure

visitors are not subject to abnormal wait times. (For example, Legoland Malaysia does this. If the park becomes too crowded, they close the gates for all visitors without pre-purchased tickets.) Yet, having big crowds is, in many ways, a sign of success for any park; what is important is how the crowds are dealt with. Any failure to effectively control crowds in the short term will lead quickly to negative comments on social media and TripAdvisor. Mitigating the effects of crowding is a key factor in tourists' experience, an activity that PortAventura will need to address to a different extent all year round. The most obvious cause of overcrowding is when the number of visitors exceeds the capacity of the attractions. However, at PortAventura, like other parks, crowding can be more complex than simple overall visitor numbers suggest. This is because tourists distribute themselves unevenly throughout the parks. So, the solution to crowding often lies in the control of the sequence of visits

that tourists make, especially if they have some flexibility in their itineraries.

All attractions are included in the price of entry to PortAventura, but one can buy Express Tickets to avoid some queueing. Many parks use reservation systems to reduce overcrowding. Using these approaches, visitors are encouraged to register their next destination into a system, which enables a more accurate short-term estimate of future crowding. However, having to continually register their next destination can be seen as a nuisance by visitors. To compensate for this, priority queues may be made available to tourists who are willing to register their next destination, though this may lead to perceptions of unfairness by other visitors. Another tactic is to monitor queues, and send entertainment to those that are unacceptably long. (Disney World has a crowd-control command centre that sends over a parade of entertainers to keep visitors from thinking about the wait.)

13.3 Medium-term resource and capacity management

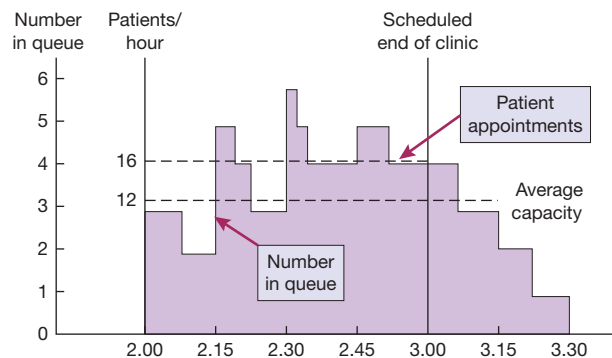
There are three basic approaches to dealing with mismatches between supply and demand in the medium term, although many organisations employ a mixture of all three. These approaches are:

- *Level capacity.* In this case, scarce or expensive resources are maintained at a constant level, and the organisation must manage the consequential issues for customer satisfaction and operational service quality.
- *Chase capacity.* The service organisation attempts to match supply to demand as much as possible by building flexibility into the operation. The prime objective is to provide high levels of service availability or fast response, in the most efficient manner.
- *Demand management.* Rather than change the capacity of the service operation, the organisation influences the demand profile to 'smooth' the load on the resources.

Level capacity approach

The prime objective of this approach is often to maximise the utilisation of expensive fixed resources. An airline seeks to fly planes that are as full as possible, with passengers paying the highest fares. Its key measure is the 'load factor', with the airline knowing that if it is exceeding a certain figure (about 80 per cent for an international airline), it will be making a profit.

To achieve this level of utilisation, the service organisation may have to make a number of trade-offs, most notably around customer-perceived quality of service. Figure 13.4 illustrates the situation in a hospital clinic. Here, the task is to make the most of the medical consultant. The clinic has to solve the problem of always having enough patients for the consultant to work on, with the added difficulty of there being a high percentage of 'no-shows'. The clinic has chosen to overbook appointments, and believes that it is better to upset a few patients rather than lose valuable consultant time.

Figure 13.4 Level capacity approach in an outpatients' clinic

To deal with the no-shows problem, the clinic has made four appointments at the start of each 15-minute period, estimating that one in four patients do not arrive and that the consultant will require five minutes per patient. If all goes to plan, the first patient will be seen immediately, the second within five minutes and the third within ten minutes, but it should be noted that they each have the same 2.00 p.m. appointment. In practice, some of the 2.00 p.m. appointments will still be waiting when the next 'batch' arrives for a (supposed) 2.15 p.m. appointment.

Some general principles and issues can be drawn from this example about the level capacity approach:

- Resource utilisation goals are frequently achieved at the expense of customer satisfaction.
- Customers may receive inconsistent service levels (those with 2.00 p.m. appointments fare better than those with later appointments).
- Customers (patients) accept (or suffer) this poor level of service because the service is valuable to them and there may be no or few alternatives.
- There is a danger that the service provider may become complacent and not make attempts to cut the emotional cost of waiting for the customer, making it potentially vulnerable to competition (in this case, private healthcare).

To overcome this problem of variable service levels, the service organisation may use yield management or queue management approaches (see later).

Examples of organisations that use the level capacity strategy as their dominant approach include the following:

- Airlines, which need to maximise the revenue from their most expensive resource (planes). The prime objective is to have planes flying as frequently as possible, preferably full of passengers. This may mean that passengers do not always receive the service they anticipated.
- Professional services, who may have a recognised expert in a specialised field. It is frequently the case that the overall workload will not sustain another professional, leaving clients with a choice as to whether they wait or find an alternative provider.
- Popular restaurants, which may intentionally not expand capacity in order to maintain exclusivity. Having to book days, sometimes months, ahead in order to ensure a table may enhance the service concept.

Examples of methods adopted under the level capacity approach include the following:

- *Promoting off-peak demand.* This is often combined with a pricing strategy to encourage customers to switch. The organisation must be careful that this does not bring about a change in service concept. A restaurant encouraging customers to move to less popular times may institute a 'happy hour' with cheap drinks, which may damage the restaurant's reputation with existing customers.
- *Queue management.* This is dealt with in more depth later, but it is important to point out here that making an assumption that customers will continue to queue can be dangerous. It is, after

all, sending the message that their time is relatively worthless, and they are only prepared to wait because they anticipate that the service they receive will be valuable enough to make the wait (lost time) worthwhile.

- **Booking systems.** Making forward bookings is a form of queue management. It allows the organisation to schedule capacity ahead, and for customers to utilise queuing time for themselves. Supermarkets have successfully utilised this system for their delicatessen counters, issuing customers with numbered tickets to ensure that people are served in order, and allowing customers to judge whether they have time to continue shopping before their number is called. As with the physical queue, customers may not want to wait and so may go elsewhere. Indeed, if the organisation has the reputation that customers need to book ahead, it may lose potential sales if customers assume that there is no point in trying.

Chase capacity approach

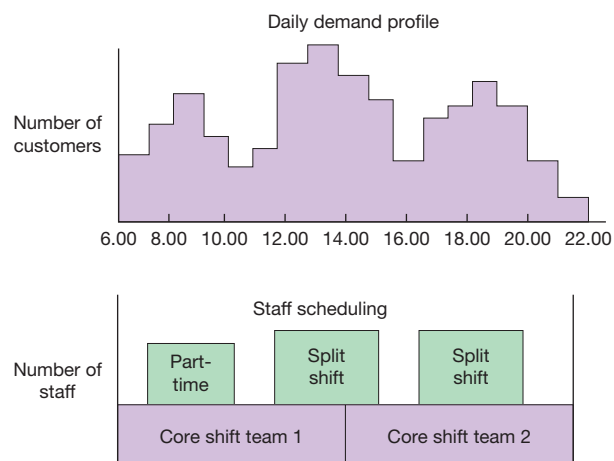
This approach is usually adopted by high-volume consumer services, since a major aspect of their competitive strategy is the provision of ready and rapid access to service. For these services, capital resource utilisation is rarely a prime goal, although cost reduction will be very important. For example, consider the following statements concerning a fast-food restaurant:

- A key objective is to maintain short queue lengths. This is managed by staffing tills and kitchen in line with expected demand.
- If the queues are too long, customers go to another fast-food outlet.
- The premises are not fully utilised: there are only about six hours out of the possible 24 hours when the facilities are 100 per cent utilised.

The challenge of this type of high-volume ‘standard’ service is to develop sufficient volume flexibility. In other words, the operation must be able to cope with wide ranges of customer demand, providing consistent service standards at minimum cost. Figure 13.5 shows the demand pattern for a fast-food restaurant, with a crew roster to show how the restaurant manager schedules the staff to deal with the variation in demand.

In this restaurant, the staff are organised into three categories: those on one of the core shift teams, those working split shifts and those working part time. The split shifts allow the manager to schedule staff for the forecast demand peaks. There will probably be a weekly rotation between the core shifts and the split-shift personnel. In this example, the early-morning peak load is covered by employing part-time labour. In addition, the manager will have a pool of labour to be contacted

Figure 13.5 Chase capacity strategy for a fast-food restaurant



at short notice to cover absenteeism or an unexpected rise in demand. A common strategy is to extend the length of the split shifts, with some organisations operating a ‘compulsory overtime’ policy as part of their conditions of employment.

Other examples of organisations that employ the chase capacity approach include retailers that need to deal with extremely high demand at weekends, customer service centres operating extended hours through call centres, and rail companies that schedule higher staff levels when they run more services at peak times.

There are two general principles for the effective use of the chase capacity approach:

- Most organisations operating the chase strategy must develop a high degree of volume flexibility. In other words, they must be able to respond to changing demand profiles. Usually this is achieved through employing staff on flexible contracts, allowing the operations manager to decide working hours as required.
- Although a principal objective is to ensure that customer service targets such as availability or response times are achieved, many of these service organisations fall into the commodity category (high volume/low process capacity). In contrast to the organisations employing the level capacity strategy, they frequently have relatively little means of differentiation and are therefore rather price sensitive. The challenge in adopting the chase capacity strategy, therefore, is to ensure that costs are strictly controlled and that flexibility is not achieved at any price.

Typical methods used to chase capacity include the following:

- *Use extra working hours ('overtime').* Existing staff are likely to have contracted hours of work, but in most types of organisation it is acceptable to ask staff to work longer than their normal working times. This is the quickest and most convenient method of gaining extra capacity. However, extra payment, and agreement from staff, is normally necessary. Excessive overtime can also reduce productivity over long periods.
- *Annualised hours.* Under this arrangement, staff are contracted to work a set number of hours per year rather than a set number of hours per week. This can avoid many of the costs associated with overtime, and the staff time available to an organisation can be varied throughout the year to reflect demand. However, when very large and unexpected fluctuations in demand are possible, all the negotiated annual working time flexibility can be used before the end of the year.
- *Flexible staffing levels.* Some organisations use flexible employment contracts, allowing operations managers to decide when staff will be working. In some cases, staff will work a standard core time, but in many retail organisations staff may not know when they will be working beyond the next few shifts. Another approach is to employ part-time staff who must work ‘compulsory’ overtime as and when needed. Although this gives flexibility, the possibility of staff resentment at having to work inconvenient hours, and the knock-on effect of poor customer service, may limit this method’s usefulness. More controversial is the use of so-called ‘gig working’ (see the case example that follows).
- *The use of subcontractors or temporary staff.* Organisations may use temporary staff or subcontractors to deal with short-term overloads. Although these workers may be readily available, they may not be sufficiently trained or motivated to deliver service in the style of the organisation. However, some organisations report that their temporary staff may be more responsive and less complacent than long-service staff. Some call centres use organisations that specialise in what is called ‘peak lopping’. Excess calls are automatically routed to the organisation and they are answered in such a manner that customers are unaware of the switch.
- *Skills flexibility.* It may be possible to structure some degree of flexibility in job designs and job demarcation so that staff can transfer across from less busy parts of the operation as necessary. It can be a fast method of being able to react to short-term demand fluctuations, but it does require investment in skills training and can cause some internal disruption.
- *Making use of customers.* Many service operations may have the option of changing the service process to utilise customers as temporary employees. In effect, this is again changing the service concept. Some regular customers may be very happy to be included in the service process – clearing tables, or even serving other customers as well as themselves.

Case example

Working in the gig economy

For decades, most people's idea of a 'job' was full-time employment with one employer for many years. But, increasingly, this description does not reflect how a significant number of people conduct their working lives. One development has been what has become known as the 'gig economy'. This is usually taken to mean a labour market characterised by the prevalence of short-term contracts or freelance work, as opposed to permanent jobs. The relationship between a worker and their client is characterised by a high degree of autonomy for the worker, client payment by task or assignment, and a short-term relationship between worker and client. But it is a controversial arrangement. Depending on one's point of view, it is either an opportunity for people to engage in a working environment that offers them flexibility of employment hours or, alternatively, it is a form of exploiting a workforce by denying them normal employment protection. Independent 'freelance' work is not a new phenomenon, but the emergence of cloud-based platforms and the ubiquity of mobile devices has facilitated the ability for employers to find the people they need from a the local (and in some cases, global) pool of talent. From the point of view of those who want this type of work, the platforms make it easier to advertise their skills.

Advocates of the gig economy claim that people can benefit from the flexibility that gives them control over how much time they want to work, depending on their other responsibilities. But this is likely to depend on their motivation for gig working. Estimates of the prevalence of this type of work and the motivation of those doing it do vary. But one survey⁵ indicated that there are four key segments of independent workers. Thirty per cent are 'free agents,' who actively choose independent work and derive their primary income from it. Approximately 40 per cent are 'casual earners', who use independent work for supplemental income and do so by choice. About 14 per cent are so-called 'reluctants': those people who make their primary living from independent work but would prefer traditional jobs. Finally, the 'financially strapped,' who do supplemental independent work out of necessity, account for 16 per cent. However, these percentages are likely to change over time and be affected by different approaches to legislation in different countries. As the same survey showed (and as one would expect), those who do independent work by choice (the free agents and casual earners) reported greater satisfaction with their working lives than those who do it out of necessity (the reluctants and the financially strapped).

Demand management approach

Most organisations operate a mixed approach to capacity management. Whether adopting a principally chase or level capacity strategy, most service organisations also operate some degree of demand management. Examples of this approach include:

- *Pricing strategies.* These typically takes the form of offering price incentives to encourage customers to move to off-peak times. The 'happy hour' in the pub or wine bar is a good example.
- *Surge (or dynamic) pricing.* This is a dynamic version of the above. It relies on frequent adjustments in price to influence supply and (especially) demand so that they match each other. Probably the best-known example of surge pricing is the algorithm used by 'ride-hailing' apps. During times of excessive demand or inadequate supply, when the number of people wanting a ride exceeds the number of available drivers, the app applies a multiplier to increase its normal fares based on the scarcity of available drivers.
- *Restricted service at peak times.* The philosophy here is similar, though taking the form of a disincentive. In this case, the organisation may provide a limited service at peak times, again encouraging customers to move to less busy times. Some restaurants operate this policy, providing a limited menu at these times.

- *Specialist service channels.* Rather than provide a general service at all times, the provider may choose to segment the demand and to allocate specific times for special needs. Doctors' surgeries are a good example, with advertised times for services such as immunisations, mother-and-baby clinics and counselling provision. This allows the surgery to schedule specialist resources to restricted times, often making better use of scarce resources.
- *Advertising and promotion.* Increasing public awareness of the service and informing customers of special offers will stimulate demand. Bookshops not only advertise, but will also stimulate demand by arranging sessions for authors to autograph their works. A particular problem with advertising is that it tends to increase the inaccuracy of any forecasting model used by the business. Although it is possible to track the effectiveness of advertising in stimulating demand, it is often difficult to pre-judge the likely impact of a new campaign.

Putting the approaches together

Most complex service organisations use all three of the capacity strategies in different parts of their operations, depending on the respective underlying cost models. Some examples are shown in Table 13.1. The prime objective of the airline is to maximise 'load factor' on flights – the utilisation of its most expensive assets. It employs a number of strategies to ensure that it makes the maximum revenue on each flight, using sophisticated yield management techniques (see later) to help adopt the optimum pricing strategy to sell unsold seats as departure time approaches. The airline may simply oversell seats in the belief that there will be a number of 'no-shows'. Passengers who are then not able to obtain the seat they thought they had booked need to be compensated in some way, although unless this is managed well it can significantly affect customer satisfaction.

To maximise the opportunity for customers to book seats, the airline employs a chase strategy in its sales department using a relatively cheap resource (as compared with planes) – scheduling staff to meet forecast demand patterns. It is better to suffer slightly reduced productivity here rather than lose potential seat revenue.

The insurance company uses a level strategy for its actuarial staff (back office), in part because they are relatively expensive, but more because they are often in short supply. The lead time to recruit and train an actuary is measured in years rather than weeks and therefore it makes no sense to attempt to chase demand.

Similarly, the restaurant chain will operate a level strategy in its manufacturing function because it has relatively fixed capacity: although it can increase capacity marginally using overtime, significant increases can only be achieved by investing in another kitchen or restaurant.

Table 13.1 Capacity approaches in three different services

	Level capacity strategy	Chase capacity strategy	Demand management
International airline	Ensure that aircraft are flying with maximum payload as frequently as possible	Schedule staff reservations department to meet demand to ensure bookings can be made	Promote off-peak demand Try to maximise revenue from each flight (yield management)
Insurance company	Protect back-office experts (actuaries and investment specialists) from variations in customer demand	Schedule direct sales operation (call centre) to provide maximum access for customers	Influence selling cycle so as not to coincide with policy renewal peaks
Restaurant chain	Keep manufacturing of basic food materials as close to 'level' as possible Maintain high utilisation of process plant	Draw up staff rosters to reflect anticipated demand Use part-time staff to manage peaks Call-in staff for demand surges	Use promotional activity to stimulate demand in quiet periods Devise special offers to allow for bulk-purchasing discounts

13.4 Short-term resource and capacity management

The difference between medium- and short-term capacity management is only partly one of time-scale. Certainly, short-term in this context usually means coping with demand and capacity fluctuations over hours and days, rather than the days, weeks and months of medium-term capacity management. But it also implies an emphasis on reaction to demand fluctuations rather than the advanced scheduling of resources to cope with them – more concerned with control than planning. Short-term capacity management involves the adjustment of activities in response to immediate demand within the constraints of the resources set by medium-term planning. It is concerned with creating a ‘schedule’ or timetable of activities that:

- shows what time each activity will start and finish (often referred to as ‘scheduling’);
- allocates staff, customers, equipment and/or facilities to activities (often referred to as the ‘loading’ of resources);
- decides what order things will be done in, e.g. which customers/orders to deal with first (often referred to as ‘sequencing’).

Scheduling

Scheduling means producing a detailed timetable indicating when activities should start and end. Schedules are familiar in many consumer environments. It can be a particularly complex task, especially if activities are being rescheduled in response to short-term changes, and when dealing simultaneously with many activities and several different types of resource, probably with different capabilities and capacities. Examples of schedules include:

- A bus timetable that shows the time each bus is due to arrive at each stage of the route.
- A table plan for a restaurant, where, as bookings are received, tables are allocated, giving an instant picture of the demand for any given time period with the likely start and finishing times at each table. It also implies bookings will be accepted on a first-come, first-served basis and that customers without reservations may have to be turned away.
- A school timetable that shows where every student, and member of staff, should be at any time of the day, what they should be doing and when things take place.
- An appointment book at a car servicing workshop, providing space for a given number of standard services and more complex jobs, showing who will do which job and roughly how long they are expected to take.

Most operations have rules or policies regarding the scheduled allocation of capacity. Sometimes these rules are relatively informal, developed over time in such a way that most customers are satisfied. Other operations, usually those with more volume and/or complexity, tend to have more formal allocation systems. For example, most leisure centres have one large space or sports hall, which can be used for a number of activities. It might be configured for two five-a-side football pitches, four badminton courts or one tennis court. To create the schedule or timetable, the leisure centre manager must carry out the following tasks:

- Decide the proportion of time that the sports hall will be configured for each of the activities.
- Ascertain the optimal schedule for these activities based on customer preference. For example, badminton clubs may prefer Thursday evenings while five-a-side football may be more popular on Fridays.
- Check the schedule for ease of transition between activities. It may be relatively easy to move from tennis to circuit training because there are relatively few changes to make, but changing from badminton to football might require more staff to move and set up equipment.
- Create a booking schedule for the various slots to allocate capacity (times) to specific customers.

The degree of detail included in schedules will need to increase as the time approaches the scheduled time of the activity. For example, at the leisure centre, tomorrow’s schedule will indicate

exactly which customers have booked a badminton court, and at what time. Moving further forward in time to, say, next month, the manager will be interested only in which evenings are allocated to specific activities, which can then be booked by specific individuals as that week approaches. It is also essential to know the ‘freeze’ – the time period ahead within which it is impossible to change the schedule. A restaurant may be able to deal with changes in customer mix almost up to the last minute, whereas an operating theatre in a hospital will require more notice to change its detail schedule.

Loading

Loading is the amount of work that is allocated to a specific part of an operation. It is a capacity-related issue that will attempt to reconcile how much the operation or the process is *expected* to do with how much an operation or process *can* do. Essentially, it calculates the consequences of the operation’s overall workload for individual parts of the operation. For example, the schedule of activities at the leisure centre will have implications for the resources (both staff and equipment) at the centre. Some combinations of scheduled activity may overload some staff or require some equipment to be used by more than one set of clients simultaneously. So, loading may have implications for which schedules are feasible.

Sequencing

After the ‘loading’ of work onto the various parts of an operation, the order or sequence in which activities will be performed needs to be determined. This task is called ‘sequencing’. The priorities given to work in an operation are often determined by some predefined set of sequencing rules. Some of these are summarised below:

- *First in, first out (FIFO) or first come, first served.* This is the approach used by many consumer services. The leisure centre may allow customers to book up to two weeks ahead for badminton for the Thursday evening time slots of 6.00–7.00 p.m., 7.00–8.00 p.m. and 8.00–9.00 p.m. and will take requests in order until all the courts are full. This scheduling rule is simple and has the advantage of being perceived to be fair to all potential customers.
- *Last in, first out (LIFO).* There are rare occasions when this rule makes sense. The sequence of loading a delivery truck would follow LIFO scheduling, so that the first call would be to deliver the products or materials closest to the tailgate of the lorry.
- *Most valuable customer first.* The leisure centre may allow the local football club to have early access to certain parts of the forward schedule and to ‘block book’ capacity for training. If the club needs to have the use of the hall on every Friday for training, this represents steady income for the leisure centre, though it may be the source of annoyance for other, smaller organisations that are excluded from using the hall for single occasions.
- *Most critical first.* Emergency services adopt variants of this rule, grading the nature of each demand between critical and non-essential. Clearly, life-threatening situations call for immediate action and these demands tend to override all other activities.
- *Least work content first.* In situations where demand far outstrips supply, this rule allows more customers to be satisfied quickly. Airline check-in desks sometimes operate a version of this rule, providing faster service for those passengers with hand baggage only. This means that the total queue is reduced and fewer customers wait. The problem with this rule is that some customers wait far longer than they would under FIFO and are potentially more dissatisfied.
- *Most work content first.* With activities that have long process lead times it might seem prudent to schedule the tasks with the longest time requirement first. This may not always be helpful because, once started, these tasks may become lost among other ‘work in progress’ and not progress as fast as they could. Using this rule alone does not usually produce the best performance against customer requirement dates.

Different rules may be applied in different circumstances. Where customers arrive together, they generally expect to be treated equally and therefore FIFO will tend to be applied. However, this is not always the case. At the PortAventura World Parks & Resort, described earlier, it is possible to buy express tickets that enable customers to bypass the queues of customers who pay standard prices. This obvious privilege can cause high degrees of ill feeling among 'standard' customers.

Back-office processes frequently deal with longer lead times than front-office processes and may apply a number of scheduling rules. In the more complex situations, it is possible to use a simple algorithm similar to that used in manufacturing shop-floor control, called critical factor calculations. In this approach, a comparison of estimated work content against requirement date allows for a calculation of an urgency factor. Each stage in the process is provided with a list of the most urgent jobs, enabling prioritisation. A spin-off from these calculations is a spot check of the performance of the process. If all tasks fall into the 'most urgent' category, clearly significant action is required to avoid major customer dissatisfaction.

Case example

Karolinska Hospital improves resource utilisation⁶

In healthcare, resourcing issues can literally mean the difference between life and death. When the Karolinska Hospital in Sweden faced a resourcing crisis it prompted an investigation into how well its expensive and scarce resources were being utilised. What it found was that its operating theatres, surgeons and other staff were being utilised for little more than 50 per cent of their time, largely because of how patients were being scheduled through its resources. The hospital realised that it would have to change how its processes operated if resource utilisation was to be improved. When the bottleneck resource was discovered to be the operating theatres themselves, the hospital looked at ways in which it could reduce the time the patients needed to spend in theatre. So, it created a separate patient preparation area that allowed activities to be carried out on patients in parallel, rather than in sequence, with surgery. It also discovered that some delays were caused because anaesthetists were being called away to other parts of the hospital. So, instead of operating



JONATHAN NACKSTRAND/AFP/Getty Images

independently, anaesthetists were formally allocated to the operating theatre team and a pre-operative clinic created to evaluate patients prior to surgery. Tackling these process issues, largely around throughput, the hospital found that more operations could be carried out using the same resources. More than this, it became possible to create a far more reliable schedule because the time between diagnosis and surgery had been cut dramatically.

13.5 How do services manage bottlenecks and queues?

In Chapter 11 we discussed the idea of a bottleneck (the part of a process that constrains or restricts capacity) and how trying to eliminate them was part of process design. But, because of variation in activity times, short-term bottlenecks are inevitable even in the best-designed process, and the resulting queues of customers or their orders are features of many service operations. Managing these well can have a significant impact on both capacity utilisation and customer satisfaction.

Bottleneck management

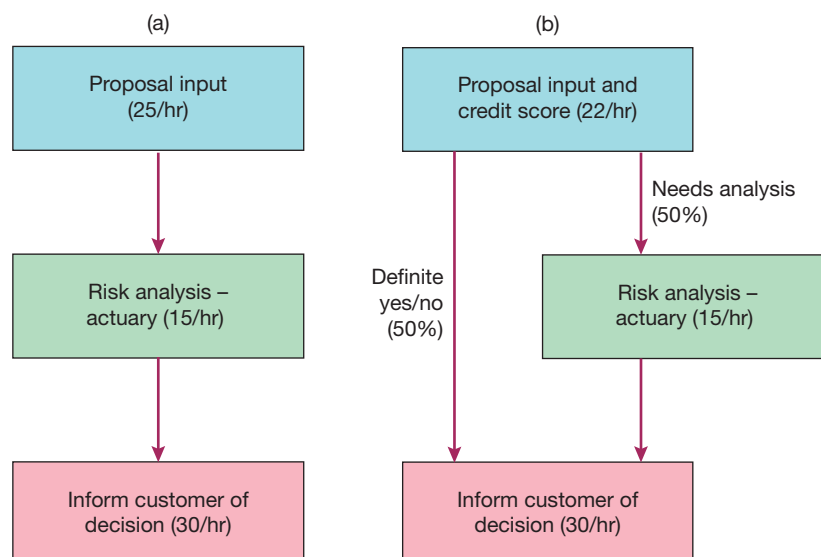
A clear understanding of where resource constraints or bottlenecks exist in operations processes provides greater understanding as to what is a realistic estimate of capacity. To return to our earlier example, the key resource constraint of the leisure centre is likely to be the central sports hall. All other resources, such as other facilities and staff, are likely to be linked to the most effective use of this space. It is therefore important to manage this bottleneck, because it determines the effective capacity of the whole operation. This is why it is always important for service operations managers to understand where the bottlenecks exist in their service processes.

For example, a company providing loan finance needed to increase the standard of service provided to its customers, while also increasing productivity of its risk assessment process. The management was given the task of meeting increasing demand without increasing resources. Initially, it was not clear how this could be achieved, but when the process was mapped it became obvious that a problem lay with the actuaries (the people who assess the degree of risk). Figure 13.6(a) shows a simplified version of the original process flow, with all proposals passing through an actuary's hands for sign-off. With this arrangement, capacity is constrained by the throughput of the actuaries at 15 proposals per hour.

After an investigation, it was recognised that many proposals did not require actuarial sign-off because initial credit scores indicated a clear accept or reject decision, which could be taken by more junior, less-expensive staff. The initial processing took slightly longer, but in the revised process, shown in Figure 13.6(b), only 50 per cent of the proposals needed to be seen by an actuary. The capacity of the process therefore rose by nearly 50 per cent to 22 proposals per hour.

This improvement was achieved simply by monitoring the activity levels within the process and then deciding whether the current resource constraints were really bottlenecks or not. Once the assumption that all proposals must be seen by actuaries had been questioned, it became possible to improve response times and productivity simultaneously.

Figure 13.6 (a) Original flow and (b) revised flow for the loan risk assessment process



There are some general rules for managing bottlenecks:

- Ensure that only essential work passes through the bottleneck.
- Be ruthless in taking away non-essential activities from the bottleneck.
- Ensure that no substandard work passes through the bottleneck.
- Once you have established where the bottleneck is, devote proportionally more management attention to it to ensure maximum throughput and therefore maximum effectiveness for the process.

And, finally, if you have a complex system, the best thing is not to try to move the bottleneck. It may be difficult to manage but at least you know where it is.

One way to identify a bottleneck is to observe where the queues of work or customers form in the process. In simple processes, this is probably as good a test as any, but it is as well to be wary. Queues may form much earlier in the process because people operating feeder activities may work at a slower rate than is theoretically possible because they believe there is no point in working at a full rate if the customer or the jobs will have to wait at the subsequent bottleneck. Indeed, service operations might well decide to limit the number of customers accepted into the process because of the potential dissatisfaction caused for customers who have to wait much longer than anticipated.

It is also important to distinguish between long-term and short-term bottlenecks. Long-term, or fixed, bottlenecks provide the best estimate of the capacity of the operation and the basic capacity management approach can be determined as a result. However, short-term bottlenecks may frequently occur, giving rise to the need for immediate response. For example, a key member of a call centre may be unexpectedly absent, which may mean that capacity to deal with particular enquiries is dramatically reduced.

Queue management

A queue can be any ordered collection of items waiting to be worked on in some way. It can comprise items of information, materials, vehicles or people. Queues occur in most service activities. Indeed, for any operation using a level capacity strategy, queues are ‘designed-in’. Furthermore, no capacity strategy is always perfect in balancing demand with capacity, so queues are almost inevitable. When the queue is comprised of people, they may be visible to both the customer and employee, as in the queue for a ride in an entertainment park, or they may be invisible to one and/or the other, as in a queue of callers to a switchboard or a list of customers awaiting a repair engineer.

Few people like queuing. In fact, it can be the cause of intense dissatisfaction with a service. Which is why practitioners and academics have studied how people react to it and how best to reduce the frustration that queuing can cause. It has been shown that not only does dissatisfaction with the wait increase with waiting time,⁷ but also dissatisfaction with the service as a whole.⁸ So, given that perceived waiting time is usually greater than actual waiting time,⁹ the answer is usually taken to be to try to reduce perceived waiting time. Ten principles of waiting have been suggested:¹⁰

1. *Unoccupied time feels longer than occupied time.* It is a good idea to try to provide customers with something to do, or forms of distraction, so that the time passes more rapidly for them. Some services show promotional videos to people waiting in a physical queue. Waiting areas for lifts often have mirrors to enable the customer to check their appearance. Telephone call centres or helpdesks frequently play music while ‘on hold’, although this is not universally welcomed.
2. *Pre-process waits feel longer than in-process waits.* Once customers feel that they have made a start inside the service process and that something, however trivial, is happening, they tend to feel happier. A simple acknowledgement by a server that they have been noticed can have a significant impact. Also, using pre-process time in some way, such as completing a form or making choices about the service, can reduce the perceived waiting time.
3. *Anxiety makes the wait seem longer.* Sometimes customers do not know whether they have been forgotten or not, which can be allayed by giving them numbered tickets to demonstrate that they are part of the system. Also, the nature of the service will have a significant impact. If the customer is worried about flying or going to the dentist, the wait may seem interminable, possibly giving rise to some tense behaviour with service providers. Customer-facing employees should be trained to observe the effects of anxiety and to find ways of giving reassurance.

4. *Uncertain waits are longer than known, finite waits.* Customers are generally more happy to wait if the expected duration is known, and if there is a good reason for it. If the duration is unknown, research suggests that customers become restless far more quickly. Theme parks frequently position markers at known points in the queue, informing customers how long they should expect to wait. Of course, the real wait time is often a little shorter than this, with customers then pleased that they did better than expected!
5. *Unexplained waits seem longer than explained waits.* Being provided with a plausible explanation of a delay reduces uncertainty for the customer. It also gives the impression that the organisation knows it should not take the customer for granted.
6. *Unfair waits are longer than equitable waits.* Generally, customers expect that those who arrive first should be seen first. Many organisations have replaced the multiple queue/multiple server system with a single queue/multiple server approach because of the perceived unfairness of being stuck in a slow-moving queue. This approach also eliminates the anxiety as to which queue to join. In some cases, such as a hospital casualty department, there may be a good reason why some customers are seen out of turn, but it still seems necessary for there to be an explanation rather than for the provider to assume that other customers will understand.
7. *The more valuable the service, the longer customers will wait.* The more complex the service, and the more it is customised to the needs of the individual, the more likely it is that customers may be prepared to wait. It should be noted, however, that this should not be assumed.
8. *Solo waiting feels longer than group waiting.* The realisation that others are also feeling the pain may reduce the customer's anxiety of thinking that they have made the wrong choice. If others think it is worth waiting, it confirms the customer's decision to wait. Also, people tend to talk to each other, providing a distraction from the length of the wait.
9. *Uncomfortable waits feel longer than comfortable waits.* By making queuing conditions as comfortable and indeed as distracting as possible, the wait time will be perceived to be much shorter. Uncomfortable conditions sensitise customers to the time and poor service.
10. *New or infrequent users feel they wait longer than frequent users.* Frequent users of a service may be attuned to a wait and they may be more relaxed because they know what to expect. New or infrequent users are likely to be more anxious and uncertain, so operations should consider trying to identify them and provide them with information and reassurance.

A booking system is a queue, with the advantage to customers that they do not have to physically queue for the service. The advantage for the service provider is that the operations manager is better able to manage resources to meet demand. For example, the fast-track express systems used at entertainment parks such as PortAventura World Parks & Resort in effect create a 'virtual queue'. Visitors to the park are given a time slot to return to a pre-booked ride, which allows them to use their time more effectively. Supermarkets that operate a ticket system at their delicatessen counters are using the same principle. In both cases, the service provider has found a way to ensure equity of treatment for its customers and has enabled customers to make better use of time otherwise spent queuing.

Case example

Border-line unreasonable¹¹

A holiday is supposed to be a relaxing experience. But not always. Go to a foreign country and there is one part of the journey that is often anything but relaxing: passport control. Most countries insist that

everyone has to have their passport checked by an immigration official when entering a new country. Some even check them when leaving. This means that queues are almost inevitable at what is possibly

the worst time for most weary passengers. After a long flight, they only want to get off the aircraft and go on to their destinations as quickly as possible. Unfortunately for them, getting out of the airport is becoming far more challenging because of growing queues for passport control at many airports. While not alone, Heathrow, Europe's biggest airport, has come in for criticism. The airline Virgin Atlantic published data showing that, one month, the airport had hit its target of processing more than 95 per cent of non-European Economic Area passengers within 45 minutes on only one day. In fact, in that same month, some passengers had waited up to 156 minutes.

Border control officials, who check incoming passengers, do try to manage these queues through scheduling more staff at busy periods. Yet it is when there are insufficient staff to cope with the number of arriving passengers that queues at passport control become excessively long. Ideally, the main objective should be to guarantee that all checks are completed without error, in a reasonable amount of time and without suffering excessive staff costs. In this sense, passport control is a typical queuing problem. The problem is that these three goals are often contradictory. Paying more staff should shorten waiting times, but is expensive. Speeding up the checking process itself reduces waiting times but increases the chances of staff making poor decisions. So, which objective should be given priority: avoidance of errors, passenger waiting time, or cost?

Of course, if aircraft arrival times were perfectly predictable, and staff schedules perfectly flexible, then smart staff scheduling should be able to avoid excessive waiting times. But air travel is a dynamic environment and the load on passport control is directly related to the arrival times of aircraft, which



Richard Baker/In Pictures/Getty Images

are often delayed. Typically, less than 80 per cent of arriving international flights at Heathrow are on time, and since over 90 per cent of passengers at Heathrow are international travellers, border control is particularly affected by flight delays.

One suggestion is to allow more non-domestic passengers to use automated passenger kiosks to speed up processing. However, this would mean extra investment in technologies such as face recognition, and some argue that, politically, it may not be feasible. Taxpayers are more likely to approve of spending more on smoothing entry for themselves than for foreign visitors. Moreover, ePassport gates, for example, are not perfect. And while improvements in this type of technology mean that only around 1 per cent of passengers fail ePassport tests, this can mount up at very busy airports. Another (partial) solution is for airlines to pay a small sum per passenger to speed business-class customers through priority passport-control lanes. However, not only does this dismay passengers who are not prioritised; unless extra resources are provided, prioritising some passengers only delays the others further.

Queuing theory and simulation

Management scientists and mathematicians have studied the behaviour of queues, producing statistical models to predict queue length and so on. The mathematics of these models are beyond the scope of this text, but fortunately there are a number of computer simulations available to help us predict the implications of operational decisions.

Simply put, there are three key parameters to queuing theory: the arrival rate of customers, the server rate and the number of servers or serving positions available. The arrival rate and server rate must be further understood in terms of their variability. Even if the average server rate and arrival rate are the same, queues will still form if there is variability in these rates. Figure 13.7 illustrates this situation.

The example in Figure 13.7 demonstrates the impact of variability in arrival rates and process rates. In this case, the process time is reasonably constant – perhaps because it is a standard process, possibly determined to a large extent by automation or standard scripts – while customers arrive in a more random pattern. In this simple system, there may be up to four customers in the queue, the first being served and three waiting. The longest wait time for customers is therefore 20 minutes (4×5 minutes), which perhaps is surprising when we know that average process time matches the average arrival rate. The average queue length is about 2.5 customers, implying an average wait time of 12.5 minutes.

Computer simulations now provide invaluable information to the service operations manager. In a more complex situation than that described above, it would be impossible to model the likely outcomes, but a simulation can identify the impact of different queue designs, priority rules and so on. Whether the situation is complex or simple, the key question remains: ‘How long is an acceptable waiting time?’.

Pooling

One important principle of queuing is that ‘pooling’ queues can bring benefits, because a system where multiple servers pull from the same queue of customers results in a shorter waiting time, yet gives the same level of utilisation as a system where customers join separate queues. In other words, the arrangement of queues has an impact on queuing effectiveness without having to change the nominal capacity of the servers. Figure 13.8 shows two arrangements. In (a) customers are required to choose one queue. The problem here is that any delays occurring at one server will affect everyone in that queue. In arrangement (b), however, where the queue is pooled and the customer at the front of the queue goes to the first available server, delays by one server will affect that server only. There can also be psychological benefits. Forming a single queue both

Figure 13.7 The impact of variability on queues

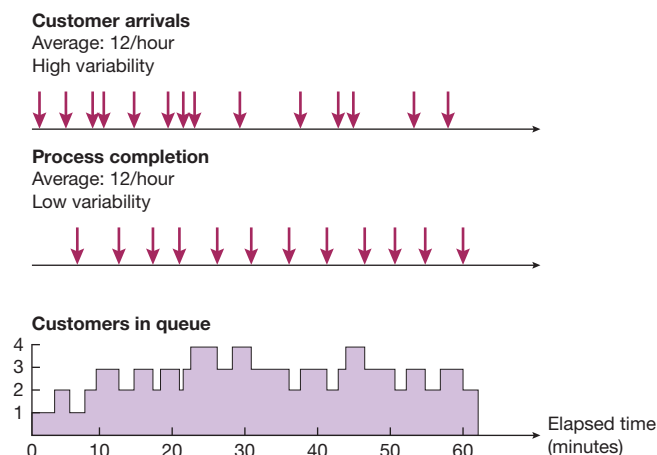
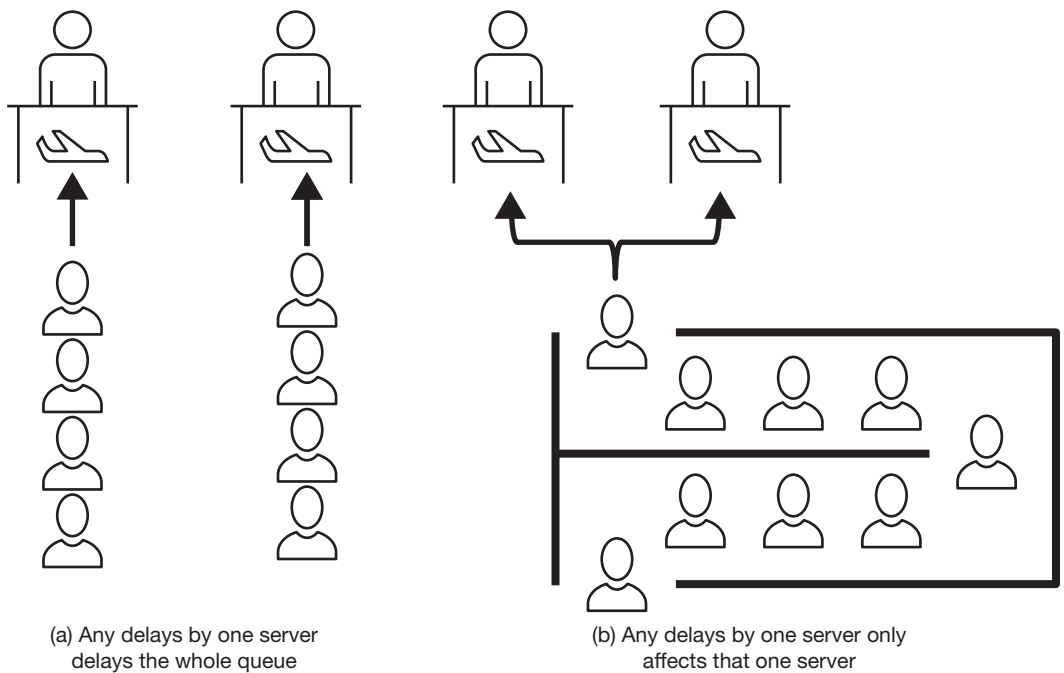


Figure 13.8 (a) Multiple lines, multiple servers and (b) single line, multiple servers

eliminates the choice of where to go without second-guessing about the best queue to choose, and is also seen as more equitable.

Queue behaviour

Most mathematical models of queuing theory assume that customers waiting in a queue behave rationally. Clearly, anyone who has been in a particularly long queue knows this is not necessarily true. A more holistic approach would need to include other factors, such as the following:

- *Queue discipline.* This is the set of rules that determine the order in which customers waiting in the queue are served. In most regions, simple queues, such as those in a shop, use a first-come, first-served queue discipline. However, there are cultural differences. Some countries have a very strong sense of queue discipline, where 'queue jumping' and 'cutting in' are socially unacceptable. Other countries are far more relaxed about such things. The implication is that any service must take cultural norms into account when trying to predict queue behaviour.
- *Rejecting.* If the number of customers in a queue is already at the maximum number allowed, then the customer could be rejected by the system. For example, during periods of heavy demand, some websites will not allow customers to access part of the site until the demand on its services has declined.
- *Balking.* When a customer is a human being with free will (and the ability to get annoyed), he or she may refuse to join the queue and wait for service if it is judged to be too long. In queuing terms, this is called balking.
- *Reneging.* This is similar to balking, but here the customer has already queued for a certain length of time and then (perhaps being dissatisfied with the rate of progress) leaves the queue and therefore the chance of being served.

13.6 What happens when managers can't cope with demand?

There is usually a point at which service managers find it difficult to cope with increasing demand (called the 'break point', see Figure 13.9). This is when managers and staff enter the 'coping zone'. At these levels of capacity utilisation, things are just too busy – staff become stressed, everything becomes a problem and, importantly, perceived quality (customer satisfaction) declines, along with revenues per customer.¹²

For example, in a restaurant operating at high levels of capacity utilisation, in the coping zone:

- customers have to wait a long time for service;
- there is increasing likelihood of 'stock-outs' (items being removed from the menu);
- customers feel rushed and under pressure not to ask too much from busy serving staff;
- staff feel under pressure and are less likely to give courteous responses or the personalised service expected.

This break point is usually reached before full or 100 per cent utilisation for two reasons. First, it is often not possible to run any single resource at full capacity for any period of time; staff in a restaurant, for example, simply cannot work 'flat out' all the time. Second, several resources may be involved and while staff might be working 'flat out', only 80 per cent of the tables might be in use.

Interestingly, there may be problems at times of low utilisation, too, which affect both staff and customers. In the case of the restaurant:

- The perception of the overall quality of service experience is low because the restaurant is 'dead': there is no buzz of conversation, but instead often prolonged silences.
- Service may be slow, because although there are not many customers, the kitchen may not be working at maximum effectiveness.
- In the same way, serving staff may be less attentive than might be expected because they may not be busy enough to be fully tuned-in to customer needs.

Figure 13.9 illustrates the profile of customer-perceived quality against capacity utilisation and illustrates how quality may suffer through both too many and too few customers in a high-quality restaurant.

The shape of the profile, the break point and the size of the coping zone will vary between organisations. Figure 13.10 illustrates the relationship between customer-perceived quality (satisfaction) and capacity utilisation in a nightclub. Here, customers may not enjoy the atmosphere until the place is crammed with bodies! Still, at some point the club's resources will start to struggle with the demand placed upon its resources – bouncers, toilets and bar, for example – as it enters the coping zone.

Figure 13.9 The coping zone in a high-quality restaurant

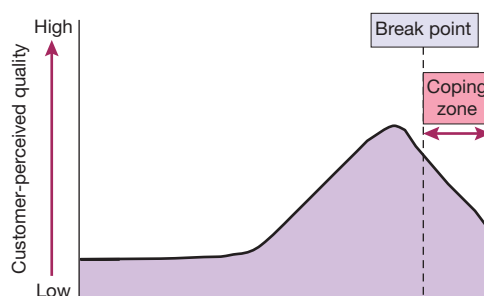
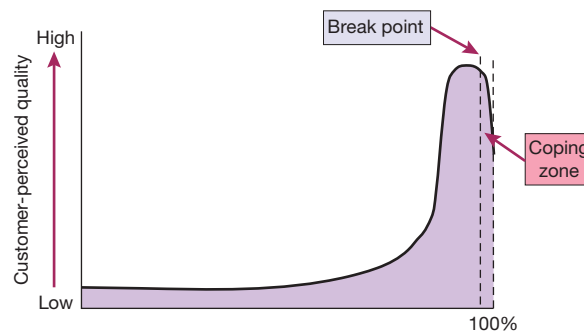


Figure 13.10 The coping zone in a nightclub

How to manage the coping zone

There are seven steps in building-up this profile and managing the coping zone.

Step 1 Identify the service concept

Underpinning the service concept of a high-quality restaurant is the belief that customers may book a table for the whole evening. They will not be rushed to vacate their table since the restaurant has no intention of selling the space twice in an evening. It is intended that the service experience should be relaxed, with staff able to converse with customers and make recommendations about food and wine, where appropriate.

This is a very different concept from a restaurant wishing to create a high-energy situation, often with staff rushing around, and with the customers encouraged to eat up and leave. It is important to be clear as to what the designed or desired service concept is, particularly as the restaurant gets busy.

Step 2 Determine how capacity utilisation is to be measured

For the high-quality restaurant, the best measure of capacity utilisation is the number of tables, and also chairs, that are occupied during the evening. To some extent, other resources such as serving staff or kitchen capacity can be adjusted to the busyness of the restaurant area.

The unit of measure is often best taken at the lowest level that the business analyses or controls performance. A call centre might look at the average loading of a customer service agent on an hourly basis throughout the day, whereas a professional service firm might look at an individual's case load.

Step 3 Draw the outline profile

Figure 13.9 shows the relationship between customer-perceived quality and capacity utilisation as it exists for the majority of customers on the majority of occasions. This does not represent all customers at all times. Some customers, for example, prefer the empty restaurant and would rank it as high quality at low utilisation. For others, the occasion and their mood will have a significant influence on where they would place themselves on the profile. This data can be captured from aggregating customer satisfaction indices and comparing that to utilisation at the time.

Step 4 Understand the nature and impact of the coping zone

While we accept that low utilisation is as much of a problem for quality of service as high utilisation, in some ways it is, in fact, worse because revenue is also low. However, here we are focusing on operations working in the coping zone. It is important to recognise the signals that suggest

this zone has been reached and be sensitive to them. Tempers flaring, customers looking around or queues appearing may all signal that break point has been passed. It is also worth undertaking some financial analysis to try to demonstrate the impact between passing the break point and its effect on costs and revenues, for example.

Step 5 Determine the 'ideal' operating area

In Figure 13.9 we identified the break point at 80 per cent capacity utilisation. At 100 per cent utilisation, in the case of the restaurant, it would be impossible to seat any more customers. There are two broad approaches that can be adopted:

- *Operate at 80 per cent capacity utilisation.* Operating at this point would suggest that the restaurant could be losing potential revenue. It is true that it might receive lower short-term revenues, but it may also upset long-standing customers by appearing to be greedy, squeezing as many people as possible into every available space. It is critical to understand the difference between customer satisfaction at 80 per cent and at 100 per cent, and to what extent this significantly reduces the customers' likelihood of returning.
- *Operate at 100 per cent capacity utilisation.* Generally speaking, this is a short-term cash-generating strategy. It is more appropriate to theme restaurants that are the 'place to be seen' for a period, before those customers that are concerned about fashion move on to the next 'in' place. This strategy might also be appropriate for restaurants in holiday resorts, which do not expect high levels of customer returns.

Our example restaurant depends on long-term customer retention and word-of-mouth advertising. As a result, it targets its operations at the 80 per cent point. To manage this, the owner has removed some of the tables to give a less crowded feel to the area, only replacing them on particularly busy occasions.

As a result, the owner has made the 80 per cent a 100 per cent effective capacity. In other words, at this point, the restaurant is making sufficient revenue to meet its short-term financial goals, and is giving a high level of customer satisfaction to safeguard its future business. It is worth noting that because there is a gap between 100 per cent effective capacity and 100 per cent potential capacity, it is possible for the restaurant to be working at greater than 100 per cent utilisation on some occasions. For many managers, this is the norm in their business!

Step 6 Understand why coping happens

Clearly, it is impossible to maintain the capacity balance on 80 per cent capacity utilisation at all times. Even if the restaurant has a booking policy, there is always the possibility that one of the most valuable customers will book at the last minute and the owner will be reluctant to turn this business away.

In other situations, the launch of a new service or periods of faster-than-anticipated growth may put parts of the business into 'coping' mode. This has been seen recently in the customer service departments of mobile phone network providers and banks following product launches. In some cases, some of the coping might have been avoided if the company had carried out some forecasting, or had simply communicated internally.

A key point here is to recognise that all but the extremely resource-rich organisations will be in the coping zone sometimes. If the coping zone is never entered, the inevitable conclusion is that the organisation has too much resource.

Step 7 Develop coping strategies

Most organisations cope after a fashion. In the restaurant, all the diners are given food, but perhaps not with the greatest customer experience. Likewise, on the crowded flight, all passengers get a meal and a drink, though those that are served last may have limited choice and little time to eat before the aircraft starts its descent.

Left to their own devices, customer-facing staff will find their own ways of coping. Some of these informal coping strategies will be entirely appropriate and innovative, using interpersonal skills and intuition to judge how to handle each customer. Others might be less satisfactory, typified by the following examples:

- Waiters who become overly focused on one task, making it impossible for customers to attract their attention to make yet more demands.
- Doctors' receptionists who, faced with a crowded waiting room, become extremely 'efficient' in their dealings with patients, to the point of rudeness.
- Retail assistants who 'forget' to offer a customer a range of services, knowing that if the customer chooses one of these, their workload will increase.

Operations managers develop coping strategies based on one or more of the following:

- Giving more information to customers, alerting them to possible difficulties. An example is the electricity company that, after a major storm, places a recorded message on its helpline to say 'If you're calling about loss of power in this district, we should be able to restore it within two hours'. This reduces the load on overworked telephone lines and operators.
- Intentionally reducing the service on offer, perhaps using a limited menu at peak times in the restaurant.
- Being clear to staff about what really matters most for customers; concentrating on the 'must dos' rather than the 'nice to dos'.
- Building resource flexibility by bringing staff from a lightly loaded area to assist with the overload. Call centres manage this by switching calls to other centres, whereas Disney brings managers from back-office functions to assist with customer-facing operations on busy days. It is important to note that some of this resource may not be as efficient as the normal workforce.

There is a very strong link between prolonged overload and employee stress (see Chapter 8). It is relatively easy for providers to deal with short-term, predictable overloads. If we know we're going to be busy for a week or two, we can prepare for it, and many people get a 'buzz' from working together to cope with a crisis. The real problem with coping comes from protracted periods of overload, without hope of a let-up in the foreseeable future. Management support and appreciation becomes extremely important at this stage.

If the operation is in the coping zone for prolonged periods, it may be necessary for managers to give their staff 'licence to underperform'. For example, nurses in a busy accident and emergency department may not be able to carry out all their duties in the way in which they were trained. If this persists for any length of time, this will lead to stress and possible burn out. Part of the coping strategy, therefore, is to agree which bits of the service are 'must dos' and which bits can be safely left for the time being.

Coping – the key questions

We have devoted a lot of space to coping because understanding how the organisation deals with this area may give clues as to where capacity management must be strengthened. The key questions to address are:

- What does the customer-perceived quality/capacity utilisation profile look like for your service or services?
- How does this vary by service process and by customer group?
- What measures or early-warning signals tell you that you are about to enter the coping zone (as opposed to measures such as lost customers or increased complaints, which tell you that you *were* in the coping zone)?
- What suffers for customers when you enter the coping zone?
- What suffers for employees when you enter the coping zone?
- How could you manage the coping zone better to reduce the impact on customers and employees?
- How could you avoid being in the coping zone as much?

Of course, coping will affect every part of the organisation, in areas where both chase and level strategies are operating, although coping is perhaps more obvious in operations that are employing a chase strategy. In effect, chase becomes level in the short term because the organisation is not capable of adding another unit of capacity quickly enough to deal with an unexpected surge in demand. Coping is perhaps more sensitive here because, as we have noted, organisations employ this strategy when fast response or high levels of availability to customers are particularly important. These customers are not usually prepared to wait, either because the service is not particularly valuable to them, or because there are alternatives available.

13.7 How can organisations improve their capacity utilisation?

There are four important ways of trying to improve capacity utilisation:

- yield management;
- building flexibility;
- reducing capacity leakage;
- getting organisational support for capacity utilisation.

Yield management

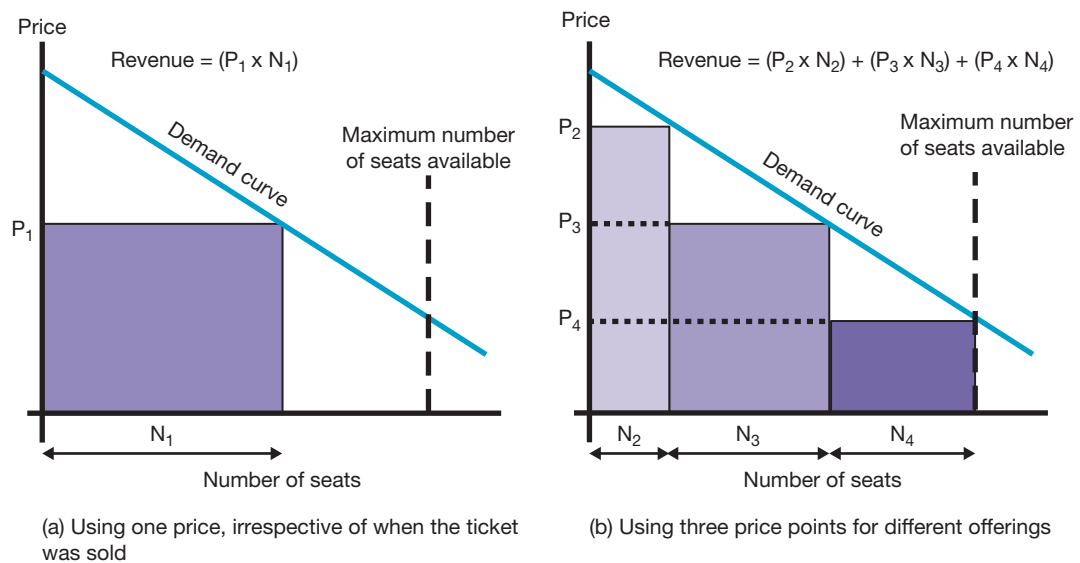
Yield management is employed extensively by hotels and airlines to deal with the fact that their capacity is perishable. In other words, if the hotel room is not sold tonight, the contribution from that potential sale is lost for all time. In fact, yield management can be applied to virtually any type of service:

- If it has a fixed number of ‘products’ that it wishes to sell – for example, airline or bus seats, hotel rooms or rental cars.
- The value of what is sold is time-constrained – that is, after a certain date or amount of time, the product loses value.
- Different customers are willing to pay different prices for the same product.

Yield management is focused on determining the maximum revenue to be obtained from the various segments served by the capacity at hand. Thus, an airline might estimate how many full-fare-paying (business-class) passengers will book for any given flight, and then adjust the remaining capacity for economy-class passengers and other discount, pre-booked customers. As departure time approaches, the airline may release some capacity to discount travel shops and, as a last resort at the very last minute, to standby passengers.

Figure 13.11 shows a simplified example of the principle behind varying prices under a yield management approach. It illustrates an airline that (to keep the example simple) operates a single-class service on a particular route. As with any service, there will be a demand curve for this service that shows how demand varies as price varies. At very high prices demand will be low, but as the price is reduced the number of people willing to pay the fare increases. Figure 13.11(a) shows the effect of offering the seats on the aircraft at one fixed price (P_1), where N_1 passengers are willing to pay this price. The total revenue for the airline will be $(P_1 \times N_1)$. However, suppose the airline offers three price points: P_2 , a fully refundable fare that can be bought anytime; P_3 an advance, non-refundable fare bought over two weeks in advance; and P_4 , a non-refundable fare bought over four weeks in advance. Under these conditions, if the airline has priced its tickets appropriately (not always easy), the total revenue will increase to $(P_2 \times N_2) + (P_3 \times N_3) + (P_4 \times N_4)$.

There can be drawbacks to this approach, however, especially if the different prices become evident to customers. It can lead to potential damage to the service concept. Full-fare-paying customers may be unhappy to discover that the person in the seat next to them is flying for a fraction of the price. This may give the impression that the airline is merely after every last piece of revenue, with customer satisfaction of minor importance.

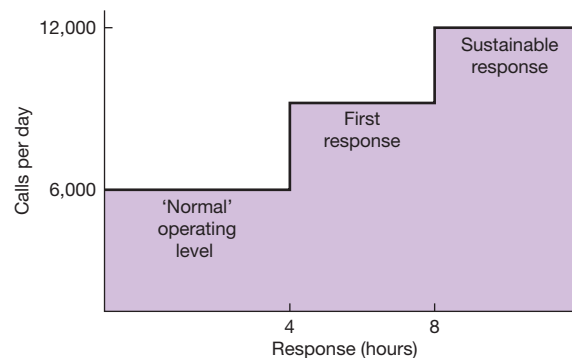
Figure 13.11 A simple example of airline pricing

Building flexibility

There are four basic forms of operational flexibility. It is critical to define carefully the type and extent of flexibility required in order to develop effective capacity management plans:

- **New service flexibility.** This is the requirement of the service operation to introduce new services into an existing mix. It will be necessary to define how frequently this might occur and the extent to which the operation will require new capabilities to achieve it. For example, house loan (mortgage) companies are continually introducing new 'products' with varying interest rates and repayment terms. In this case, the frequency of new 'product' introduction is extremely high, but the requirement for new capability is low.
- **Service-mix flexibility.** This is the ability of the operation to deliver more than one service. A hotel may provide a number of services simultaneously, dealing with business people, holiday travellers, conferences and wedding celebrations.
- **Delivery flexibility.** This is the capability of the operation to change the timing of the activity. Courier organisations are increasing this form of flexibility, offering different speeds of delivery and a range of pick-up and delivery times.
- **Volume flexibility.** This form of flexibility is required by many consumer services operating a chase strategy. It refers to the ability of the organisation to change its level of output to cope with fluctuating demand. Thus, the call centre may deal with 6,000 telephone transactions on a normal day, but may have to cope with twice that amount following an advertising campaign or a new product or service launch.

Figure 13.12 demonstrates the notion of minimum effective lead times – the time it takes to respond to a change in demand. If an unexpected surge of demand occurs, the call centre manager can increase capacity by 50 per cent in four hours. This is accomplished by asking staff to stay on after their normal shift, calling in off-duty staff and by bringing in other staff from the organisation to man the phones. It should be noted that this is very much a 'first' or emergency response, as some of the staff will not be fully trained and productivity levels will probably suffer as a result. Within eight hours the call centre manager can bring on line more capacity, perhaps from other call centres if the increase in demand is sustained.

Figure 13.12 Minimum effective lead times for a call centre

This is a valuable tool in assisting operations managers to plan for the foreseeable contingencies. In addition to specifying the type of flexibility required, the service manager must also consider the following:

- *Range.* How much flexibility is required? Does the call centre need to move from 6,000 calls to 12,000 calls or only to 8,000 calls per day? How many new services will be introduced and how frequently?
- *Response.* How quickly must the change be made? Can the call centre change from 6,000 to 12,000 calls in four hours or will eight hours be good enough? Clearly, the faster the response, the more expensive it is likely to be.
- *Effectiveness across the range.* Most processes have an optimal range. It is unlikely that they will be equally productive across the entire potential range, and are likely to strain at the extremes.
- *Cost of providing the flexibility.* What is the premium resulting both from the change in output level itself, and in providing the capability in the first place? For example, providing training so that more staff are multi-skilled represents a significant investment.

There are a number of approaches to building flexibility. These include:

- *Flexible employment contracts.* Employees may be asked to work a given number of hours per week, month or year. In this way, staffing levels may be more easily matched to expected demand. Flexibility in this area may extend to the requirement for staff to move between functions to cover fluctuating workloads. It is important to recognise that these staff may not be as effective when carrying out tasks that are less familiar to them.
- *Overtime.* Asking staff to work longer hours is a common short-term measure for building volume flexibility. However, it is generally accepted that using overtime in the longer term does not give the required increase in output as employees simply expand the work to fit the extra time available. In this event, overtime is a poor approach, costing a great deal in extra salary and creating employees who are overtired through being at work for long periods.
- *Short-term outsourcing.* The development of relationships with other service providers who can deal with short-term peaks in demand is a common practice, particularly in call centre activities. This requires some pre-qualification of suppliers, but can provide flexibility at relatively low cost.
- *Menu-driven service (standardisation).* Standardisation of service offers provides opportunities for increased volumes of fewer activities. This creation of 'runner' activities (see Chapter 11) smooths the workload and provides opportunities for a degree of customisation or personalisation for customers. For example, education providers often allow students to tailor their courses by selecting from a menu of modules, within pre-determined constraints.
- *Teamwork.* The development of multifunctional teams allows a group of employees to deal with fluctuating workloads rather than simply operate on an individual basis. There are several benefits to this approach, including the support that group members give each other and the ability to 'flex' capacity very rapidly.

Reducing capacity leakage

Many operations managers carefully plan their capacity in ways we have discussed in this chapter; however, sometimes managers are surprised to find they do not have as much capacity as expected. Here are some possible explanations:

- *Labour sickness and absenteeism.* Prolonged periods of overload and compulsory overtime usually prove counterproductive, with staff taking time off to recover. Alternatively, the organisation may need to look at its management style, placing more emphasis on team building rather than 'command and control' approaches.
- *Labour underperformance.* It is extremely common to find that call centres may have the right number of 'heads' but they may be ineffective because there has been insufficient investment in training. Alternatively, employee churn means that experienced staff leave just at the point they are becoming effective.
- *Scheduling losses.* There are times when staff are idle, with too much capacity for the demand, whereas at other times there is too much demand for the capacity to deal with. This often arises because demand profiles are not understood or are too volatile, or where staff preferences for work patterns do not fit with the business needs.
- *Costs of complexity.* The more the organisation deals with a broad range of services, the greater the possibility that staff will deal with a higher percentage of tasks that may not be part of the daily routine. This potential 'relearning' may give rise to inefficiencies and rework.
- *Quality failures.* The need to deal with quality failures is clearly lost capacity. Of course, part of the role of the call centre may be to deal with poor quality generated elsewhere in the organisation. It is essential that the extent of this rework is understood and charged to the appropriate location.

Organisational support for capacity utilisation

The challenge for operations managers is to understand capacity utilisation in the context of a changing world. Many of the issues need to be resolved by the organisation as a whole, rather than simply confined to the management of service delivery processes. Aspects of this organisational support include:

- *How is the service concept changing?* To what extent do operations managers have 'visibility' in the future strategic direction of the organisation? Without this inclusion in the strategic development process, it is unlikely that capacity planning and capacity utilisation and development will be effectively carried out. Often, resource managers are left to develop capacity plans that have little relevance because the concept has been changed. For example, many service companies providing repair and maintenance support for information technology have changed the emphasis of their service concept away from servicing equipment towards supporting customers. The nature and length of customer transactions have changed beyond recognition and require a link between this change in strategic direction and resource planning for it to be implemented.
- *How well are the internal interfaces managed?* A key role for the operations manager is to manage the internal relationships as well as customer relationships. Coordination of marketing promotions and new service introductions are vital, as well as getting to the root of quality failures and long-term quality costs. Successful organisations are often those that manage the internal relationships well. This does not necessarily mean that everyone always agrees, but that there is valuable internal debate. In fact, it could be asserted that an organisation without some degree of conflict will not learn and move forward.
- *How important is resource management in the culture of the company?* In some sectors, resource management is seen as a low-level task. The 'stars' of the company are often seen as those who deliver the latest deal or solve the latest crisis. Resource management needs a different type of 'hero' who is able to plan longer term and persuade the organisation to think differently about resource management.

13.8 Summary

What is resource and capacity management? – Resource and capacity management is concerned with putting a plan in place that makes the best use of resources to deal with the forecasted or expected demand for services. Service capacity is defined as the maximum level of value-added activity over a period of time that the service process can consistently achieve under normal operating conditions. But measuring capacity may not be straightforward; it can be influenced by a range of factors including service mix, location, intangibility and resource constraints. Managing capacity can be thought of in the long, medium and short term, with some sort of hierarchical planning and control procedures to integrate the three timeframes.

What is long-term resource and capacity management? – Planning resources and capacity in the long term is largely a matter of shaping the physical nature of an operation. The strategic decisions that are needed at this level include such issues as the overall scale of the total operation that is very dependent on demand forecasts, the number and size of different sites between which its capacity is distributed, the specific activities allocated to each site that are dependent on the potential benefits to be gained from operations ‘focus’, and the location of each site, which is influenced by the balance between supply-side factors and demand-side factors. All these decisions are related.

What is medium-term resource and capacity management? – There are three basic approaches to dealing with mismatches between supply and demand in the medium term, although many organisations employ a mixture of all three. These approaches are level capacity, chase capacity and demand management. In the level capacity approach, scarce or expensive resources are maintained at a constant level, and the organisation must manage the consequential issues for customer satisfaction and operational service quality. In the chase capacity approach, the organisation attempts to match supply to demand as much as possible by building flexibility into the operation. The prime objective is to provide high levels of service availability or fast response, in the most efficient manner. In the demand management approach, rather than change the capacity of the service operation, the organisation influences the demand profile to ‘smooth’ the load on the resources.

What is short-term resource and capacity management? – Short-term resource and capacity management means coping with demand and capacity fluctuations over hours and days, rather than the days, weeks and months of medium-term capacity management. It also implies an emphasis on reaction to demand fluctuations, rather than the advanced scheduling of resources to cope with them. It involves the adjustment of activities in response to immediate demand within the constraints of the resources set by medium-term planning. It is concerned with creating a timetable of activities that shows what time each activity will start and finish (called ‘scheduling’), allocating staff, customers, equipment and/or facilities to activities (called the ‘loading of resources’) and deciding in what order things will be done (called ‘sequencing’).

How do services manage bottlenecks and queues? – Key constraints (bottlenecks) define the capacity of the service process. It is critical to devote management attention to these aspects of operations. Queues are inevitable in service operations. Developing queuing (or ‘waiting line’) strategies, often using queuing theory and computer simulations, will reduce potential customer dissatisfaction. One important principle of queuing is that ‘pooling’ queues can bring benefits, because a system where multiple servers pull from the same queue of customers results in a shorter waiting time, yet gives the same level of utilisation as a system where customers join separate queues.

What happens when managers can’t cope with demand? – Almost all service operations experience a point where demand outstrips supply: customers may perceive a fall in quality, and staff feel under increased pressure. This is known as the coping zone. Services should develop coping strategies, given that all operations will reach that point sometimes. However, it is important to develop actions to avoid being in the coping zone too much. This usually requires organisation-wide approaches.

How can organisations improve their capacity utilisation? – There are four important ways of trying to improve capacity utilisation. Yield management techniques enable services with perishable capacity (hotel rooms, airline seats) to maximise revenues. It is critical to define the nature of

flexibility required to meet market demand in terms of range and response. Techniques to build flexibility include flexible employment contracts, overtime, outsourcing, developing menu-driven services and teamwork. Capacity leakage may impact significantly on the ability of the operation to meet its demands. And understanding and developing the organisation's support for resource management is an important task for operations managers.

Discussion questions and exercises



1. Suggest how the following three service operations might measure their capacity, outlining the problems in so doing: (a) a garden centre that sells plants and gardening supplies; (b) a hospital; and (c) an online fashion retailer.
2. Reread the case example 'Demand fluctuation on London Underground'. How might Transport for London spread out demand from its peak periods?
3. The idea of 'pooling' was described as increasing the efficiency of queuing. Why do you think that supermarkets do not use it?
4. One place where queues are not always enforced are bars, where people compete for attracting the attention of servers. People who jump the queue at the bar (even without meaning to) cause considerable frustration to customers who have been overlooked. However, one solution that has been proposed is the use of facial recognition technology, which will make getting drinks at busy bars faster and fairer. The system organises customers into a 'virtual' queue to manage crowds, and identifies who has been waiting the longest. Not only that, the security-style system will also help people get served more quickly by advising younger-looking patrons who may be underage to get their identification ready, and let staff know if they have already been checked. What might be the advantages and disadvantages of bars using this system?
5. A recent newspaper article¹³ criticised London arts venues for introducing 'surge pricing' by charging higher prices for blockbuster exhibitions at busy times. The piece said that venues such as the Royal Academy of Arts and the National Portrait Gallery were asking visitors to pay up to 22 per cent more at weekends and in other peak periods. Other galleries were operating a premium on exhibitions throughout the whole of August, when tourist numbers were high. It said that the variable charges were reminiscent of the 'surge pricing' policy used by taxi-hailing services such as Uber to maximise revenue when demand for taxis is at its greatest. If you had to, how would you defend this practice?
6. When a video, taken by a fellow passenger, showed a bloodied and unconscious man being pulled off a United Airlines flight at O'Hare International Airport in Chicago, it caused a sensation on social media and other news outlets.¹⁴ The incident began when United overbooked the flight and decided that it needed to bump four passengers off (common practice, when a flight is overbooked). They offered a financial encouragement for passengers to take a later flight, first offering \$400, overnight hotel accommodation and a flight the following day. No one accepted and the offer was increased to \$800. Still no one accepted the offer, so a manager announced that passengers would be selected to leave the flight, with frequent fliers and business-class passengers being given priority. The first two people selected agreed to leave the plane. The third person selected also agreed. However, when the fourth man was approached, he refused, saying that he was a doctor and had to see patients in the morning. Eyewitnesses said the man was 'very upset' and tried to call his lawyer. So, instead of selecting another passenger, or increasing its offer (it could have offered a maximum of \$1,350), security staff were called. The encounter with the security staff concluded with the man being wrenched from his seat onto the floor, after which he was hauled down the aisle, blood covering his face. (a) How should the airline have handled the situation? (b) After the incident attracted so much negative publicity, United announced a new upper limit of \$10,000 in compensation for passengers who agree to give up a seat on a flight where United needs to free space, and that it would create a 'customer solutions team to provide agents with creative solutions' for getting inconvenienced customers to their destination. Do you think that these were sensible moves?

Case exercise

Treegrove Holiday Village

We have changed the village and the farm very significantly. When I inherited the estate, it was a farming village where most people living there either worked on the farm or were retired farm-workers. But things change. Fewer people were needed for the farm. The retired people either passed away or moved into sheltered accommodation locally, soon almost all the houses in the village were being let. At the same time, the economics of the farm changed. Originally, we had a large dairy herd, a few sheep and the remainder was arable land growing cereals. But the dairy farm became unprofitable, and it became obvious that the long-term financial future of the whole estate would have to be based on leisure and agritourism.

(Rosemary Markham, owner, the Treegrove Holiday Village)

Rosemary had inherited the estate in the Cotswolds, an attractive country area in the UK that attracted many native and overseas visitors. Over a five-year period, she cut the dairy herd and milk production by two-thirds, reduced the area devoted to cereals and invested in building 20 caravan-style wooden cabins on the farm that were let year round, on a weekly (mainly in the summer period) or weekend (mainly in the colder months) basis. In addition, as the tenancies of the village houses expired, she converted these to accommodate short holiday lets. She also developed an area of the farm as a caravan and campsite, as well as erecting ten yurts (tent-like structures based on the traditional dwelling used by some Central Asian nomadic groups). In total, the site and village together had 15 houses, accommodating between three and five people, 20 wooden cabins, accommodating up to three people, and 10 yurts that could sleep three to four people. The camping and caravan site had 24 spaces for 'normal' tents or caravans, but some larger campervans needed two spaces (for which they were charged double the normal rate). Figure 13.13 shows an outline map of the village.

As we expanded the accommodation side of the business, it became obvious that there were opportunities to provide other services to our guests. We started a small shop on-site that sold the food basics that guests may not have brought with them, but

also where guests could pre-order specialist produce from local suppliers. The next stage was to extend the shop to form a café that provided pizzas, toasted sandwiches and similar snacks. Originally this was open only at lunchtimes in the summer, but we have gradually extended the opening hours as it has become more popular. It is now an attraction in its own right. People who are not staying in the village visit it when they come for our other attractions.

(Rosemary Markham)

The 'other attractions' that Rosemary was referring to had become an increasingly important contribution to Treegrove's income. These started out as small-scale 'displays' and 'exhibits' intended for the guests who were staying in the village. It was only after establishing these that it became obvious that they had the potential to attract (paying) visitors who were not guests. The first of these were 'static' exhibitions of old farm equipment and a small museum of the local area. The next was a more ambitious viewing area in the farm's milking parlour.

The milking parlour

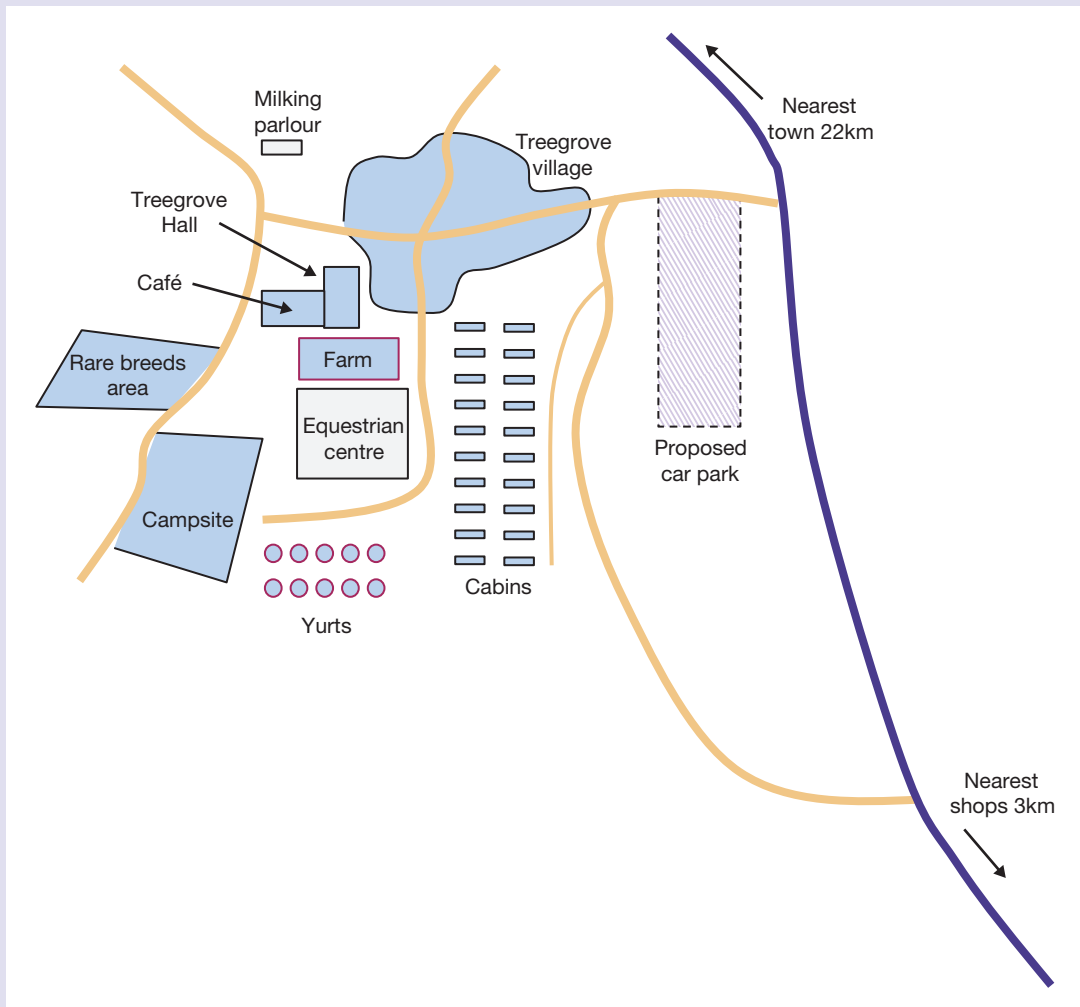
When the farm's dairy herd was larger, they had invested in a 'carousel' parlour where cows were milked on a slow-moving turntable. Milking usually lasted from 3.30 p.m. to 6.00 p.m., during which time visitors could view from a purpose-built gallery, which had space for 12 people. On average, visitors liked to watch for around 10 minutes.

We're sometimes a bit busy on Saturdays and Sundays and a queue often develops before 3.00 p.m. as some people want to see the milking and then go home. Unfortunately, neither our dairy worker nor the cows are prepared to start earlier. In our most busy period, up to 80 people have been through the parlour in an hour.

(Rosemary Markham)

The equestrian centre

Rosemary had kept horses since she was a girl, and even before expanding the accommodation side

Figure 13.13 Outline map of the Treegrove Holiday Village

of the business had offered 'yard' facilities to local horse owners who wanted to stable their horses at the farm. From there it had been an obvious step to arrange one- to three-day equestrian events, both for people who wanted to bring their own horses and for those who wanted to hire horses from those stabled at the yard. The events usually involved trekking, schooling and sessions on equine training and care. Most customers for the equestrian centre activities were guests staying at the village accommodation. All such activities had to be reserved in advance. Two full-time 'stable-hands' looked after the horses all year round, but in the busy summer months when equestrian guests needed to be taken

out trekking, or when training sessions were held, part-time local people were hired to perform the more routine tasks around the centre.

The rare breeds area

A rare breeds area had become a favourite of the children who visited the village. It consisted of rare sheep (that were also bred as a commercial venture), a few pigs, goats and some 'exotic' cockerels. If any staff were available, children could be supervised in petting the animals. This was not a popular job among the village staff. Children who were unused to animals could sometimes be poorly behaved, and the animals could become distressed.

Coping with demand variation

All the accommodation at Treegrove was open and available all year round, including the Christmas period. However, it was unusual for many cabins to be booked during the Christmas holidays, and unknown for any of the yurts to be booked. But most of the village houses were fully booked months in advance. The main problem with Christmas booking was that staff were reluctant to work over this period. Nevertheless, by moving staff from some of the other facilities, it normally was possible to cover the bookings. Table 13.2 shows the occupancy rates for the village houses, cabins and yurts for the previous year.

Generally, the issue of coping with the seasonal fluctuations in demand is one of our biggest problems. We handle this partly by using temporary part-time staff. In the 'back-office' parts of Treegrove this isn't a major problem. In our laundry, for example, it is relatively easy to bring in extra people in busy periods. However, this is more of a problem in the parts of the hotel that have direct contact with guests, such as reception, equestrian staff and so on. New temporary staff can't be expected to have the same knowledge or customer contact skills as our more regular staff. Our solution to this is to keep the temporary staff as far in the background as we possibly can and make sure that our skilled, well-trained staff are the ones who usually interact with the customer. So, for example, a server in the café, who would normally take orders, serve the food, and take away the dirty plates would in peak times restrict his or her activities to taking orders

and serving the food. The less-skilled part of the job, taking away the plates, could be left to temporary staff. The other problem that we have is that the day visitors, not surprisingly, tend to come at the weekends. In the quieter months slightly more than 60 per cent of the visitors each week come on Saturday or Sunday.

(Rosemary Markham)

Table 13.3 shows the number of day visitors per month in the previous year.

Future plans

It was the increase in 'casual' day visitors that had been the most notable development for Treegrove. Rosemary had come to realise that she was catering for two distinct, but related, markets. The guests who stayed in Treegrove's accommodation, even those who stayed only for two or three days, wanted a peaceful 'country-style' atmosphere, with attractions as an extra option. The day visitors came mainly for the attractions such as the milking parlour, rare breeds area and to see the horses in the equestrian centre. For them, the 'country-style' atmosphere was very much a secondary issue. The decision that Rosemary faced was how to attract and serve the day customers without destroying the 'country-style' atmosphere valued by the guests staying in the accommodation.

For example, if we want to increase the number of day visitors we will have to invest in more attractions and, just as importantly, build a car park. At

Table 13.2 Occupancy of Treegrove accommodation by type (average percentage occupancy by unit)

Type of accommodation	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Village houses	26%	21%	29%	34%	48%	69%	94%	99%	64%	32%	24%	78%
Cabins	11%	8%	13%	32%	39%	74%	88%	99%	57%	29%	23%	46%
Yurts	< 1%	< 1%	5%	30%	32%	68%	82%	95%	41%	18%	4%	< 1%

Table 13.3 Number of day visitors (to the nearest hundred)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Visitors	900	1,700	2,700	3,400	2,800	3,900	4,100	4,300	2,200	1,100	600	700

the moment day visitors park along one of the small roads adjacent to the village, or in one of the fields close to the main road. We should really build a permanent 'hard-surfaced' car park that would be serviceable all year round. We have a site that could be used, and we have planning permission, but I'm not sure how big it should be. I don't want it to be too big or it might disturb the guests using our accommodation.

(Rosemary Markham)

Nevertheless, the day visitors were important in terms of the income they brought in, so Rosemary was considering ideas that might be attractive to them.

I have started to rethink our priorities. For the last few years we have focused primarily on developing the accommodation side of things. But actually there is a limit to how big that part of the business can get. We can't build more houses in the village because of local planning regulations, and we are running out of space for more cabins and yurts. Just as important, packing more cabins and yurts into the farm would destroy the peaceful and rural atmosphere of the place. So, maybe attracting more day visitors is the way to go.

(Rosemary Markham)

In addition to building a car park, attracting more day visitors would require investment in more attractions. Rosemary's idea was to extend the rare breeds area and the café, as well as developing the shop to be an outlet for 'upmarket', mainly local produce.

Two further ideas for expanding the business were being considered by Rosemary and her team. The first was to move into the wedding venue business. Changes to UK law meant that any 'suitable' premises could be licensed to conduct weddings. The village hall in Treegrove was well equipped and, with some refurbishment, Rosemary believed that it could be made into an attractive wedding venue. This would allow the business to offer a 'wedding package' that included both the hall and accommodation for guests in the village houses (or even in the cabins and yurts if preferred). The other idea was to offer 'farming-related' visits for school parties. These would be aimed primarily at local primary schools (children aged from 5 to 11 years) and would consist of talks in the village hall followed by activities on the farm, such as feeding the rare breed animals. Other activities and projects could be arranged in conjunction with the schools.

Questions

1. What are the main capacity constraints that Rosemary faces?
2. How does Treegrove currently cope with demand fluctuations, and what more could it do?
3. What would be the effects on the capacity management of the business of the three proposals for the future that Rosemary mentions (expanding the number of day visitors, promoting wedding packages and school visits)?
4. If Rosemary goes ahead and builds a car park, how many car or bus spaces should it have?

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Notes



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Part IV

Improving service operations

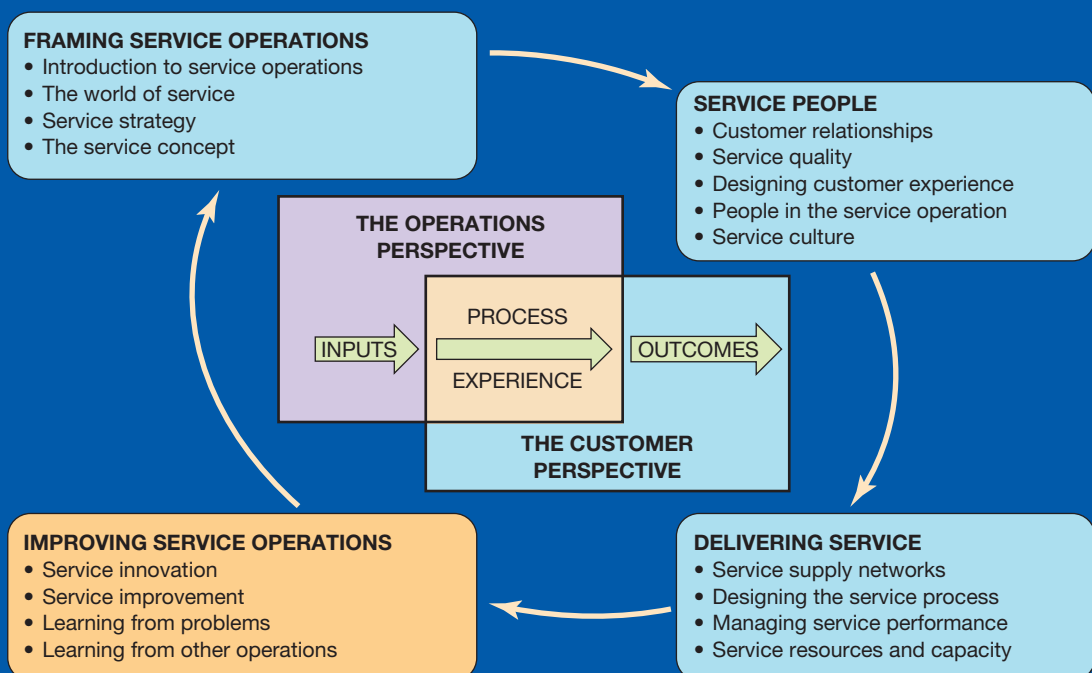


Successful operations do not stay still, they learn, innovate and improve. Service operations are no different. They can adopt many of the improvement methods and techniques available to any type of operation. But, in addition, their often-close relationship with customers offers particularly powerful improvement opportunities.

This part consists of four chapters:

Part IV Contents

- 14 Service innovation
- 15 Service improvement
- 16 Learning from problems
- 17 Learning from other operations



Chapter 14

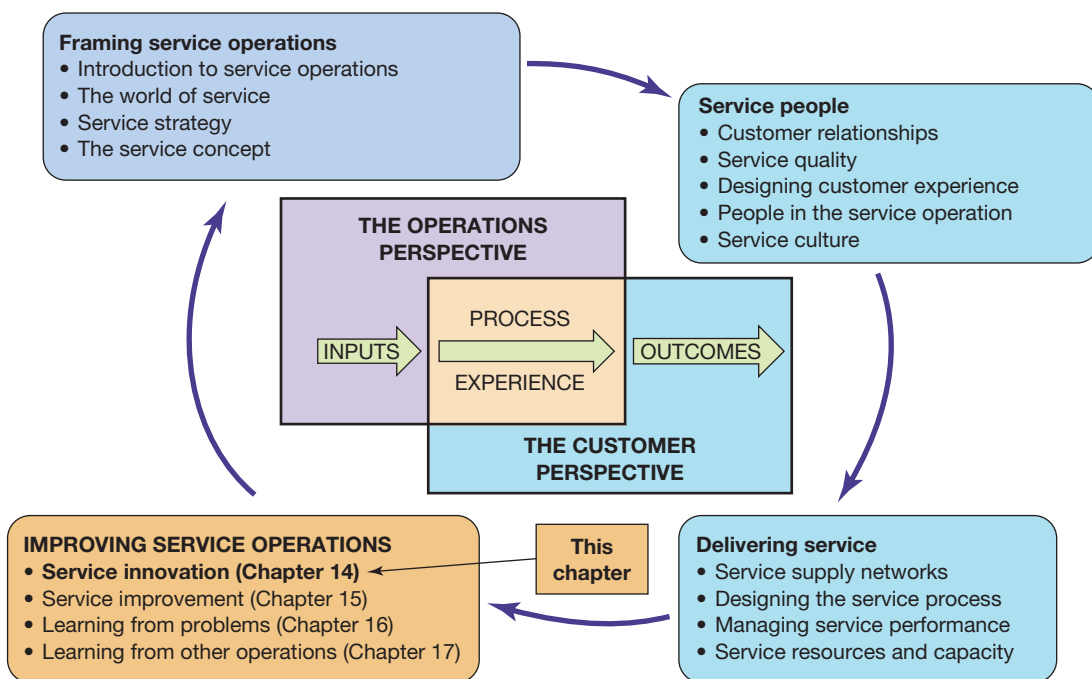
Service innovation



This chapter looks at the nature of innovation and the development of new and modified services. It includes a discussion of the importance of innovation and describes the innovation process. Figure 14.1 shows where this topic fits in our model of service operations management.

Learning objectives

- To be able to explain what is meant by innovation
- To understand the nature and importance of service innovation
- To be able to identify the stages of the service innovation process
- To gain an appreciation of the resources necessary for the service innovation process

Figure 14.1 This chapter looks at service innovation

Introduction

For any service organisation, maintaining any kind of competitive advantage in the long term depends on the development and introduction of new services. Because of this, it has always made sense to devote time and effort to how new services are developed. Moreover, it has long been accepted that there is a connection between *how* companies go about developing services and how successful they are in the market-place. But, although undoubtedly important, service innovation can be particularly tricky to manage within most organisations. First, by its nature service innovation is multidisciplinary. Innovation requires inputs from all of a firm's internal resources. It is clearly not an activity that can reside only in one function. Market specialists, operations staff, whoever is responsible for developing staff skills, those who buy in specialist help – in fact, the whole organisation needs to be involved.

Second, developing innovative services is at the same time both a formalised and an opportunistic process. It is too important to leave to chance and must be formally organised. However, in a world where markets and technologies are changing fast and sometimes unpredictably, organisations must be sufficiently agile to recognise and exploit opportunities as they present themselves. Third, most of the ideas and advice on how best to encourage innovation and develop new offerings has focused on, and is informed by, experience in the manufacturing sector. This bias could never be justified in terms of the economic importance of the manufacturing and service sectors of economies, as we pointed out in the first two chapters. The bias possibly derives from the assumptions that most innovation was technology-related and most technology was deployed in manufacturing companies. Both assumptions are no longer valid. The importance of technology to service innovation is amply demonstrated by the growth of internet-based retailing, sharing economy platforms, the increased use of artificial intelligence, mobile apps and many more examples.

14.1 What is innovation?

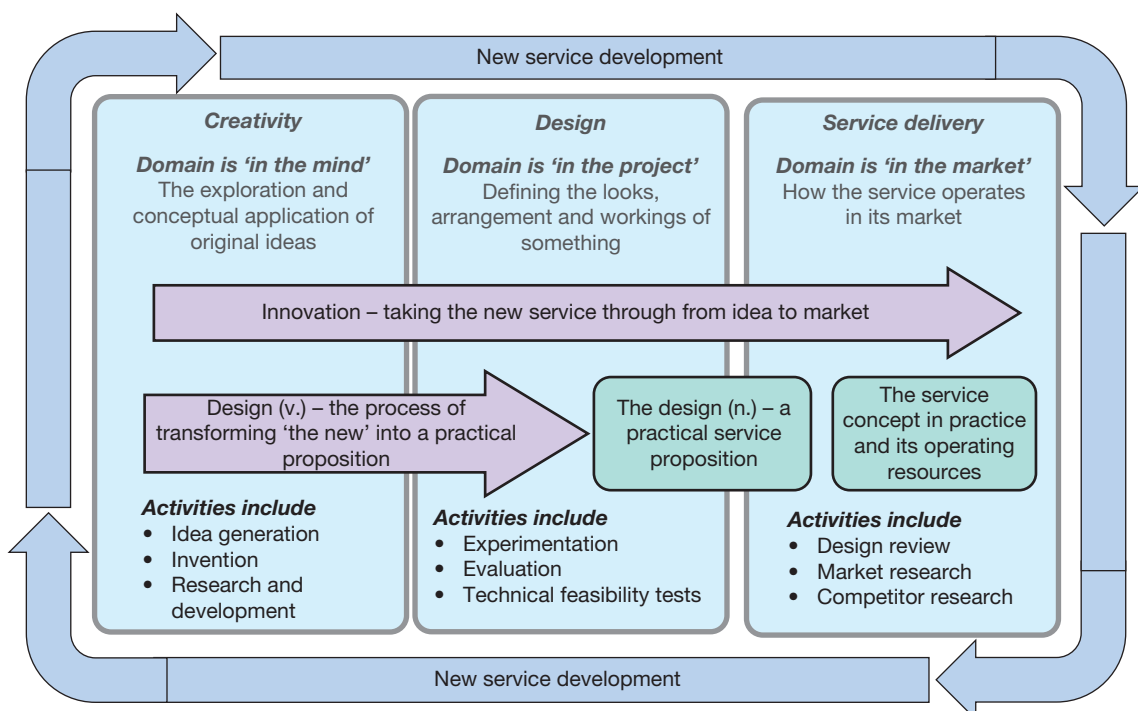
Like most writers on service operations, we make full use of the terms 'innovation', 'creativity' and 'design' in relation to the development of new services. But what is the relationship between these ideas? They are clearly related to each other but have similar yet different meanings that

overlap to some extent. It is best to start with what is meant by 'innovation'. There are many definitions of innovation used in business publications, the corporate world, the popular press and academic publications. The term is notoriously ambiguous and lacks either a single definition or measure, which has contributed to significant confusion among those interested in the topic. Most definitions include ideas such as 'new methods', the 'act of introducing something new', 'new knowledge incorporated in offerings' and so on. What runs through all definitions is the idea of some degree of novelty and change. Innovation is simply about doing something new. But it is worth noting that the idea of innovation is both broader and more complete than simply that of 'invention'. Of course, an 'invention' is also novel, but it does not necessarily imply that the novel method has the potential to be practical, economic or capable of being developed commercially. Innovation implies not just the novel idea, but also the process of transforming the idea into something that provides a return for an organisation's customers, owners, or both. Here we use the term 'innovation' to mean the total process of taking a new service from original idea through to market reality.

Another particularly important attribute that is central to innovation is creativity. 'Creativity' is the ability and process of moving beyond conventional ideas, rules or assumptions in order to generate significant new ideas. It is a vital ingredient in innovation. So, if creativity is a basic ingredient or underlying process of innovation, and innovation implies making novel ideas into practical, commercial form, what is the overarching process that transforms innovative ideas into something more concrete? In the way we use the term, that process is 'design'. Service design is the process that includes both business and creative decisions and activity, which turns ideas and inventions into a working service. The design of a service (the noun 'design') is a description of how resources and processes are arranged so that the intention of the innovation is realised. A design must deliver a solution that should work in practice. After which, the resources that will ensure that the required service concept is delivered in the reality of the market need to be refined.

Figure 14.2 illustrates the relationship between creativity, innovation and design as we use the terms here.

Figure 14.2 The relationships between creativity, innovation, design and new service development



Case example

IDEO, service innovation and design¹

The interplay among creativity, innovation, design and new service development is worthy of philosophical study. Yet, in commercial practice, success in all four areas benefits from a systematic and pragmatic approach and is well illustrated by the success of IDEO, one of the world's most successful design consultancies. The firm first became known for designing breakthrough technology-based and engineering products, such as Apple's first mouse. But the approaches that IDEO developed were also applicable to services, and service design now constitutes a large share of the company's work. What endured as the firm grew and widened the range of sectors it worked in, was its characteristic human-centred innovation process that became known as 'design thinking'. IDEO sees design very much as a process. As some have put it, design is more of a verb than a noun.

IDEO takes a human-centred approach to innovation that draws from the designer's toolkit to integrate the needs of people, the possibilities of technology and the requirements for business success. The firm believes that design thinking can transform not just the way companies develop their services and products, but also their processes and their strategy. IDEO argues that the design process has the capability to go well beyond what has traditionally been seen as its product/service design focus. IDEO's human-centred design approach offers any type of problem solver an opportunity to design with communities, and to understand the people they're looking to serve. The approach also helps them to generate scores of ideas, and to create innovative new solutions that are rooted in people's actual needs. In other words, human-centred design encapsulates a belief that all problems, even those particularly difficult social ones (for example, poverty, gender equality, clean water) can be solved using design



Montri Thipsorn/Shutterstock

principles. Furthermore, human-centred design holds that it is the people who have to cope with problems that are best placed to contribute to their solution.

For example, IDEO, together with Ascensia Diabetes Care, applied its human-centred design approach to the challenge of type 2 diabetes. It is usually treated by drugs, diet and exercise, but one of the problems for type 2 diabetes sufferers is access to information on managing their condition via lifestyle change. Ascensia recognised the importance of context and commissioned IDEO to help develop an offering that went beyond the provision of a physical measurement device, and instead provided a supporting context or service for diabetes care. The service package would include education and monitoring of patients, but also proactive attention to the lifestyle factors that cause and continually impact upon the patient's health. The human-centred design approach allowed Ascensia to create a smartphone app-based service that brings together patient data, live support/mentorship and customised educational content. Not everything in the service is automated, however. When patients invoke the service, they are paired with a certified diabetes educator who creates a dedicated programme of care based upon

individual patient circumstances. The programme of care provides the patient with information – for example, on healthy eating and cooking, mental health and self-management of their condition. The app and the server in combination exploit many data sources on the client side, such as exercise watches and glucose monitors, and in turn the

data informs app feedback to the patient such as progress tracking on their condition, as well as the provision of more lifestyle advice so as to refine the patient experience. Not surprisingly, there were several diabetes sufferers within the IDEO design team and they tested the service and its associated products on themselves.

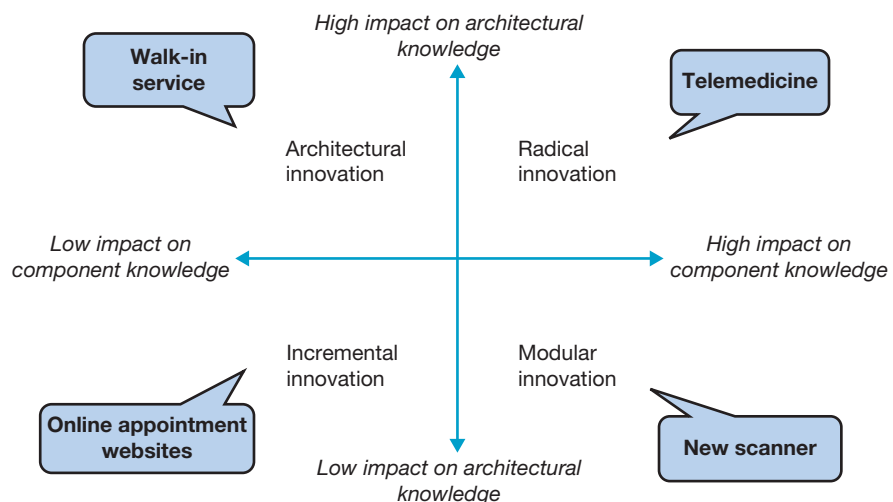
Categorising change – the Henderson–Clark model of innovation

Two researchers, Henderson and Clark,² looked at the question of why some established companies sometimes fail to exploit seemingly obvious incremental innovations. They answered this question by dividing the technological knowledge required to develop new services (and products) into ‘knowledge of the components of knowledge’ and ‘knowledge of how the components of knowledge link together’. They called this latter knowledge ‘architectural knowledge’. Figure 14.3 shows the Henderson–Clark Model applied to primary healthcare. The model refines the simpler idea of the split between incremental and radical innovation. In this model, incremental innovation is built upon existing component and architectural knowledge, whereas radical innovation changes both component and architectural knowledge. Modular innovation is built on existing architectural knowledge but requires new knowledge for one or more components. By contrast, architectural innovation will have a great impact upon the linkage of components (or the architecture), but the knowledge of single components is unchanged.

So, for example, in healthcare services, simple (but useful and possibly novel at the time) innovations in a primary care (general practitioner) doctors’ clinic, such as online appointment websites, would be classed as incremental innovation because neither any elements nor the

Figure 14.3 The Henderson–Clark Model – a primary healthcare example

Source: Adapted from Slack, N. and Lewis, M.A. (2020) *Operations Strategy*, 6th edition, Pearson, Harlow.



relationship between them is changed. If the practice invests in a new diagnostic heart scanner, that element of the diagnosis task has been changed and will probably need new knowledge, but the overall architecture of the service has not been changed. This innovation would therefore be classed as ‘modular’. An example of architectural innovation would be the practice providing ‘walk-in’ facilities in the local city centre. It would provide more or less the same service as the regular surgery (no new components), but the relationship between the service and patients has changed. Finally, if the practice adopted some of the ‘telemedicine’ technology that monitors patient signs and can react to significant changes in patient condition, then this would be radical innovation. The components are novel (monitors), as is the overall architecture of the service (distance diagnosis).

The degree of change

The nature of service development is not just changing, but changing more rapidly and possibly changing more fundamentally. From a market perspective, international competition has become increasingly intense. In many markets there are a number of competitors bunched together in terms of their service performance. Even small advantages in service specifications can have a significant impact on competitiveness. This shift has made customers both more sophisticated in exercising their choice and often more demanding in terms of wanting services that fit their specific needs. Also, markets are becoming more fragmented. Unless companies choose to follow relatively narrow niche markets, they are faced with having to develop services capable of being adapted in different ways to different markets. If this were not enough, service life cycles have become shorter. An obvious way to try to gain advantage over competitors is to introduce updated services. Competitors respond by doing the same, and the situation escalates. While not every industry has such short life cycles as, say, the entertainment industry, the trend, even in B2B markets, is towards more frequent new service introductions.

Equally importantly, rapid technology changes have affected many service sectors. In the recent past, internet-based technologies introduced startling new possibilities (and uncertainties) for almost all services in all industries. Artificial intelligence, algorithmic decision making, facial recognition and many other emerging technologies all opened up potential new forms of offerings. Partly because of the scale and pace of such technological developments, it has become increasingly obvious that effective service development places responsibilities on every part of the business. Marketing, purchasing, accounting, operations are all, like it or not, an integral part of any organisation’s ability to develop services effectively and efficiently. Every part of the business is now faced with the question ‘How can we deploy our competencies and skills towards developing better or different services?’. New service development is now seen as the mechanism by which all parts of the business, but especially operations, leverage their capabilities into the market-place.

Change pathways – ‘service characteristics’ innovation and ‘process characteristics’ innovation

It is obviously simplistic to treat innovation in the ‘technical’ specification characteristics of a service separately from the process that delivers or (co-) creates it. Yet, while accepting this oversimplification, it can be useful to do this (temporarily) in order to describe different innovation trajectories. In the following section, for ease of explanation, we treat ‘service characteristics’ innovation and ‘process characteristics’ activities as though they were totally separate. We are certainly not suggesting that the two should be organised separately. It would be foolish to develop any service without taking into consideration the constraints and capabilities of the processes that will produce it. Similarly, developing processes to take advantage of new technologies or process methods will have implications for the development of services in the future.

The degree of 'service characteristics' innovation

Imagine a conceptual scale that helps to give some degree of discrimination between different levels of service characteristics innovation. Such a scale could progress from relatively minor modifications at one extreme, through to the novel and/or radical changes exhibited by a 'pioneer' service. For example:

- *Product modification.* Customers would notice little change, even if the delivery mechanism has changed.
- *Product extension.* Customers would detect extra functionality, with some noticeable changes in delivery methodology.
- *Product development.* Customers would detect distinct 'next-generation' functionality, with extensive redesign of original method or technology of delivery.
- *Product pioneer.* Customers immediately detect novel or radical changes to functionality, with similarly extensive changes to the method or technology of delivery.

The degree of 'process characteristics' change

Just as it is important to understand the degree of service characteristics innovation, so it is important to understand the degree of change to the 'process characteristics' aspects of a service – the degree to which the process of creating (or co-creating) a service could again be placed on a continuum from 'modification', through 'extension' and 'development', towards what might be called a 'pioneer' level of change:

- *Process modification.* Relatively small changes, where the nature of the activities within a process remains largely the same even if there are some minor rearrangements in the details of the sequence or arrangement of the activities within the process.
- *Process extension.* Redesign of the sequence or 'routing' between activities, possibly with minor change in the nature of activities.
- *Process development.* Some redefinition of the purpose or role of activities, possibly with some change in the core methodology or technology within the process.
- *Process pioneer.* Implies adopting radically different, or at least novel to the operation, types of change both to what is done in the process and how it is done.

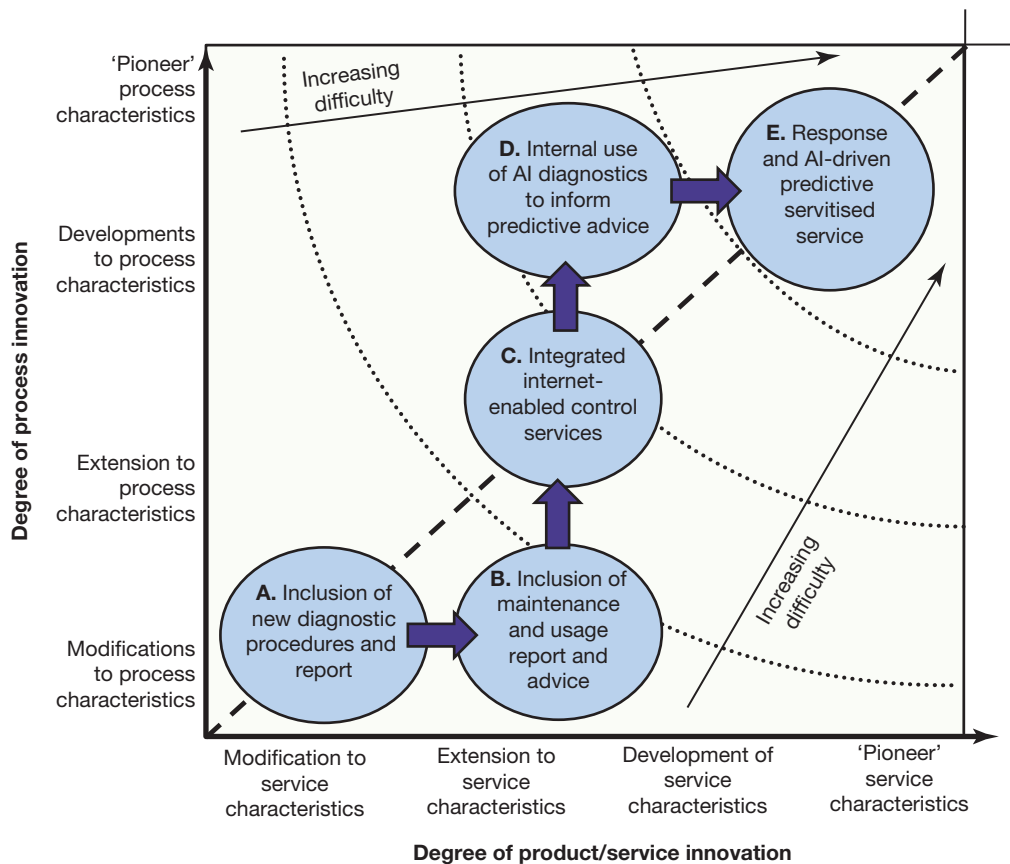
When we discuss improvement in Chapter 15, ideas of continuous improvement are usually taken to mean degrees of process change limited to 'modification' or 'extension' changes to the process. Radical improvement is usually assumed to mean what we have termed 'development' or 'pioneer' process change. The most important issues here are, first, that the greater the degree of process change the more difficult that change is to manage successfully and, second, that many small changes need managing in a different way from few, relatively large changes.

Service characteristics and process characteristics innovation do not necessarily happen together

Although service and process characteristics innovation can occur simultaneously, they may not. For example, Figure 14.4 illustrates the innovation trajectory of the service offered by a field service organisation that services and maintains industrial equipment. Originally, it offered a basic service simply visiting clients on a pre-set schedule to carry out agreed servicing tasks and reporting any obviously unusual deterioration in the equipment. The company's first innovation was to invest in some standard software that ran a simple diagnostic procedure on the equipment, which formed the basis of a report to each client (position A).

The next innovation was to include more of the data from the diagnostic run in the form of a usage report. Together with extra advice from the service engineer, this enhanced the service innovation, although it required little change to the process followed by the service engineer (position B). Then followed two stages in innovating the company's process that, initially, were not evident to clients. The first of these was to wirelessly link the engineer's diagnostic equipment to a home-based diagnostic algorithm, the data from which formed the basis of internal technical discussions among engineering staff (position C). Over time, this data formed the inputs to more sophisticated

Figure 14.4 Although the relationship between ‘product’ and ‘process’ innovation is close in service innovation, the two can diverge



artificial intelligence-based predictive algorithms that considerably enhanced the engineers' understanding of their clients' equipment (position D). When their knowledge and expertise, as well as experience, with the use of these internally developed systems was satisfactory, the company offered a new and radically enhanced set of services, including sophisticated prediction of equipment performance and even a fully servitised offering where the company took responsibility for all equipment-related operation and care (position E).

14.2 What is different about service innovation?

Is service innovation different from innovation in other sectors such as manufacturing or agriculture? As ever, the answer is yes . . . and no. Clearly, creativity, novelty and translating those things into practical services through some kind of design process are common to innovation of any kind. Some authorities see any kind of innovation as being largely about technological change. So, innovation in services is seen as being fundamentally similar to innovation in manufacturing, and it should therefore be considered using theories, techniques and concepts of manufacturing. Just like in manufacturing, a service innovation can be novel, or the renewal of an existing offering. When put into practice, it provides benefit to the organisation that has developed it by adding value to their customers.

As we mentioned earlier, there is no single agreed way to define innovation. Generally, there is an agreement that innovation involves realising an idea in practice. When defining service innovation, some even qualify the condition of novelty by describing service innovation as the effort to develop

an element that has already been invented, so that it has a practical–commercial use.³ In other words, innovation is simply where an invention becomes adopted in a societal and/or organisational context. Something that is realised, or more usually commercialised, need not be new to the world (or even to the market) to count as innovation, but may be new in a given context or organisation.

As we have demonstrated several times already in previous chapters, services have several distinct characteristics that should be considered when trying to understand any domain of service activity. Service innovation, at some levels, can be viewed as being significantly different from manufacturing. Therefore, new theories, techniques and constructs have to be employed to understand innovation in a service context. Once again, it is the tendency of many (although not all) services to exhibit the IHIP characteristics (intangibility, heterogeneity, inseparability and perishability, see Chapter 1) that are put forward as, at the very least, adding a distinct ‘flavour’ to service innovation. Some of the distinctive features of service innovation that have been suggested include the following:

- *Service innovation is often more incremental and less radical than traditional product innovation.* Innovations are often a mix of small, although not insignificant, innovations and changes introduced to solve single customers’ problems (what is also sometimes called ‘ad hoc’ innovation). Similarly, a related idea is that service innovations are more often organisational innovations, involving changes to how a service is delivered or organised, rather than to the core characteristics of the service itself.
- *Service innovation is less driven by technology and not as reliant on formal research and development resources.* As a result, a new service innovation is generally tested in a real market rather than in R&D laboratories. However, while this is probably true for some knowledge-intensive services, such as consultancy, it does not totally reflect the innovation practice of many mass services, especially those that deliver their value through, for example, mobile apps. Similarly, large-scale enterprise applications, such as resource planning and control software or cloud-based ‘software-as-service’, cannot be tested ‘in the wild’ but must undergo thorough load and security testing in simulated demand environments.
- *In service innovation it is more difficult to separate product, process and organisational innovations.* This is a common assumption, and arguably has some validity. However, as we demonstrated earlier, it is possible, and sometimes desirable, to view ‘product’ and process innovation separately.
- *Service innovation is more interactive in that it involves the engagement of both internal actors (marketing and technical staff, back-office and front-office staff, etc.) and external players (suppliers, regulators and especially customers).* So, the process of introducing new services will be more complex and interdisciplinary. In fact, more contemporary approaches to service design (see the IDEO case example earlier in the chapter) are critically dependent on immersion in the customer’s domain from the earliest stages of the innovation process.
- *Developing this idea still further, some organisations employ a significant degree of co-creation on the part of customers, both in the design and delivery of service.* The co-creation makes innovation permanent and ongoing, and triggers a new innovation ‘curation’ role on the part of service operations managers, who have to monitor co-created service, and hard-wire and exploit new potential. Co-creation and customer design involvement are not unique to the service sector, but both approaches tend to be employed in a broader sense than in the world of product innovation and design.
- *Service innovations are easier to copy and more difficult to protect.* High-visibility services, where customers ‘see’ a significant part of the service, are clearly more exposed to be inspected by anyone who wants to view them. It is common practice for service companies to ‘sample’ the service offered by their competitors. Moreover, whereas specific technologies embedded in a new manufactured product can be protected using patent law, it is not always as easy to do the same with service features.

Why is service innovation important?

At the level of an individual service organisation, the advantages of effective service innovation have both defensive and aggressive benefits. To explain the defensive role of service innovation, we must return to a point we made earlier – namely, that services are relatively easy to copy and more

difficult to protect. In fact, one of the most persuasive arguments as to why service innovation is so important is that frequent service innovation reduces the likelihood that competitors are able to imitate one's offerings. This risk is usually referred to as the 'imitability of service innovation'. It means that, because service innovations can be easy to copy, the length of time for which they provide a competitive advantage will be limited. There are relatively few means to protect intellectual property in service innovation. Patent protection can apply for the tangible aspects of a service innovation, but not its less-physical elements. However, the more complex the service innovation, the more difficult it is likely to be for competitors to understand it and reproduce it. Less dramatic, more incremental service innovations will be easier to develop, will usually require smaller investment, but are prone to being copied. This is the dilemma of service innovation. Does the service organisation direct its energies at small, incremental, but easily copied innovations, or at more dramatic, difficult, less-frequent but more secure innovations.

In a more aggressive sense, service innovation can obviously bring hitherto unexperienced benefits to customers and users. The benefits create new opportunities to obtain strategic advantage in for-profit markets and new welfare benefits in non-profit contexts. And when a sector accounts for so much of economic activity, like the service sector does, innovation-led growth is clearly going to be important to economic growth generally. After all, no service (or product) lasts forever. Customer needs, preferences and fashions change. Developments in core technologies or organisational principles offer the potential for superior performance and often act as an imperative for innovation. Competitors constantly seek new ways of capturing market share. Public sector guardians (political or civil) require better, or cheaper (or both) services. In fact, most of the motives for innovation are external in the sense that they derive from the environment in which the service operates. Service innovation is a driver of both growth and structural change across the whole of most economies. Only the steady development of new services, along with occasional radical developments, can satisfy all these external pressures. But, for most services, the environment is rarely stable and the service organisation is constantly subjected to change. Coping with these environmental challenges results in several broad categories of motives or imperatives for innovation:

- *Social change.* Increasingly, customers and the public at large are better informed about the social impact of types of economic activity, and more assertive in exercising their market power. Certainly, feedback from customers can shape innovations in both service and process characteristics. For example, the environmental impact on 'fast fashion' retailing caused some modification of these companies' supply practices.
- *Technological change.* Some technological changes can prompt radical innovation. The obvious example is the impact that the internet had, initially for B2C services and then in a far wider sense. In fact, often, when the new technology offers significant new benefits, the service organisation will have little choice but to adopt it.
- *Sustainability change.* Increased awareness of the impact that services can have on the natural environment can motivate innovation. For example, government regulation on the energy efficiency of heating and air-conditioning installations has prompted the development of new maintenance and control services in both domestic and industrial contexts.
- *Economic change.* Changes to input costs can make some bought-in supplies of products or services either more or less economic, and prompt innovation. For example, what were once in-house activities may be outsourced or taken over by service firms who can provide specialised services that are not economic for the commissioning organisation. Specialist forensic services that employ innovative techniques, for example, may not be viable for small police departments, yet can be provided economically by a centralised service.

Service innovation can reshape its supply network

An operation delivers and creates value by playing a role in a supply chain (as we explored in Chapter 10), adding value to the supply chain to create its services, and value to its customers. Many organisations go further – indeed the more successful organisations do not just *add* value, they *reinvent* it. Many services have been reinvented over the last few years. For example, internet and mobile banking has challenged and radically changed the value delivered by banks and received by their customers (see the case example on Monzo Bank).

Case example

Monzo Bank⁴

Monzo Bank Ltd was launched as a new concept in banking. On its launch (originally with only a digital, mobile service), it said that it was 'doing things differently', and that for too long banking has been 'harder than it needs to be'. Monzo was one of a group of small 'challenger' retail banks in the UK that aimed to compete directly with the longer-established banks in the country, often by specialising in areas underserved by larger established banks. Many commentators had argued that retail banking had been a promising arena for service innovation for decades. The industry had seen a gradual shift from branch

networks to centralisation and automation, which had prompted some innovation. The 'branchless' bank First Direct had proved to be a great success, both with customers and operationally. Its service concept was not dependent on an expensive branch network at all. Its emphasis was on high levels of 24/7 customer service, accessed via internet and telephone interaction. The essence of the service concept was, 'a bank with personality, whose staff were witty and warm, straightforward, informed and informing, and certainly not ordinary'. First Direct received many accolades for customer service, and at one stage was regularly rated first in customer-service surveys. However, after a restructuring by the bank's previously 'hands-off' parent, HSBC, its reputation declined.

Yet, the idea of a retail banking service with high levels of customer interaction was not dead.

Monzo's aim was to offer a new kind of bank, built for its clients' smartphones and designed for the way younger clients preferred to do business. Originally, the Monzo service was limited to a mobile app and a prepaid debit card. However, within two years its UK banking licence restrictions were removed and Monzo was able to offer a 'conventional' current (cheque) account. Monzo also offered many features not provided by traditional banks, such as free card payments overseas, app-based budgeting and saving tools and, critically, *the* communication method of choice for its young target market – a 24/7 chat facility.

One of Monzo's well-liked innovations was the 'pot'. This allowed customers to save for a holiday



M4OS Photos/Alamy Stock Photo

or a special purchase, for example, by channelling a sum of their money into a 'pot'. This led to the idea of the 'locked pot', which, if they choose, prevents customers from accessing those savings for a year. It may seem that this service option was actually reducing what a customer could do, but it was what customers wanted. However, in some ways, the core elements of the banking service were largely unchanged from competitors that used a branch network, telephone banking and existing mobile apps, but the service concept had changed significantly because of changes to both operational support and the supplementary services that allowed different forms of access to an account.

From a customer's point of view, new approaches to banking such as those pioneered by Monzo provided a new kind of value. In particular, Monzo eliminated traditional constraints of time and space, and the need for synchronous communication between service provider and customer. Customers could manage their accounts and move funds at any time of day or night and engage in long-form and complex communication without having to wait in a phone queue. It could be argued that Monzo's customers were doing more work in their newer service concepts than previously. However, generally its customers were willing to make this trade-off for the sake of added value through increased speed of access, scope of access and a reduced cost for the service overall.

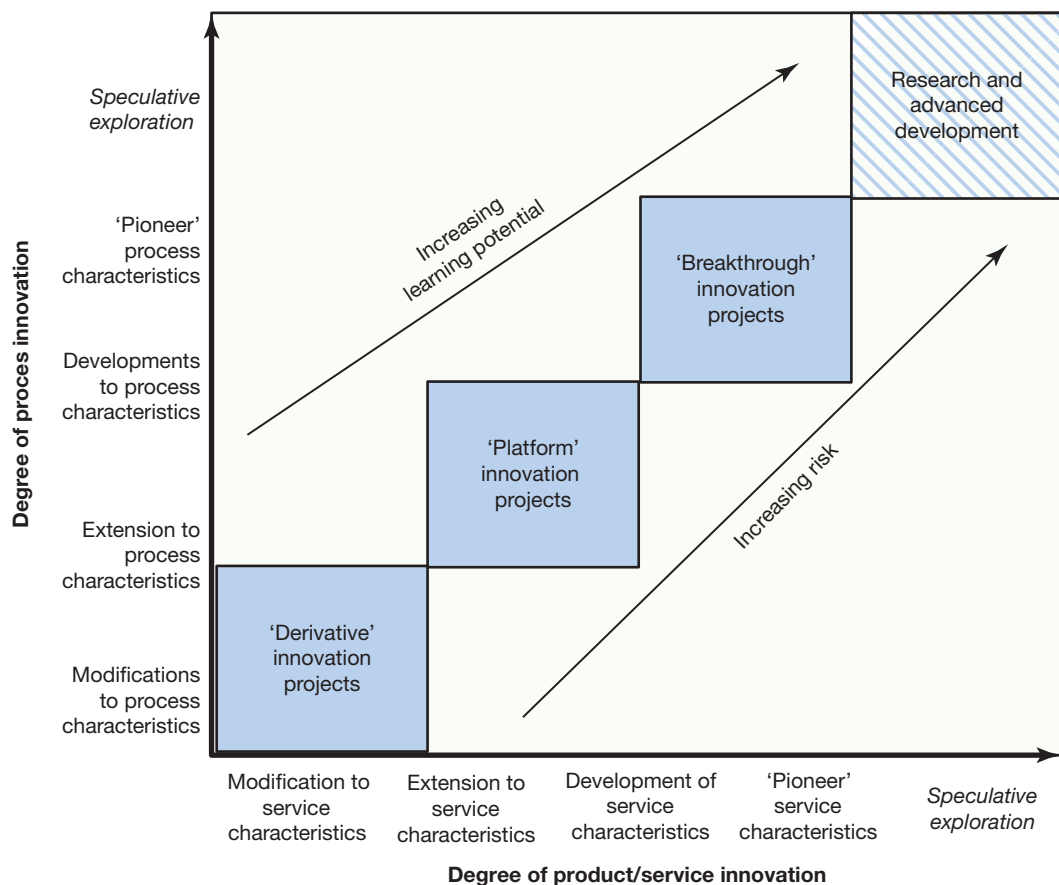
A portfolio of innovation projects

Earlier in the chapter we introduced the dilemma of service innovation: whether to focus on small, incremental, but easily copied innovations, or look to potential in more dramatic, difficult, less-frequent, but more secure innovations. The usual solution to this dilemma is for firms to try to balance incremental and radical service innovations. In other words, they develop a portfolio of innovation projects that spread innovation risks over time and over a specific number of projects. Not that this portfolio approach is necessarily easy. The risks that are associated with service innovations are related to the difficulty of fully gauging customer reactions prior to the introduction of even a relatively minor new service. Nevertheless, a mix of innovations will help to spread that risk. For example, an amusement park may, over time, introduce a number of innovations ranging from small enhancements to some rides (through a new IT system that can facilitate ‘fast track’ queuing for premium customers), to major on-site hotel accommodation. Similarly, the C&L hospitality group that was the topic of the case exercise in Chapter 4 effectively manages a portfolio of risk by developing some service types that are simple ‘variations’ upon existing themes, as well as a smaller number of more radical concepts.

The extent to which an innovation represents a risk is related to the degree of change to service and process characteristics, as we indicated in Figure 14.4. This conceptualisation of service change and risk provides a method of categorising innovations and is illustrated in Figure 14.5.⁵ The figure uses the same axes as previously:

- *Derivative innovation projects.* These are small changes and/or incremental improvements to either the characteristics of the service itself or the process that creates it. For example, a university adopts the e-learning products of an education publisher and bases its teaching and assessment on them by integrating them into its routine course administration.

Figure 14.5 Types of innovation projects



- *Platform innovation projects.* These involve significant changes and/or substantial improvements to either the characteristics of the service itself or the process that creates it. For example, a university develops its own learning platform that provides all direct learning resources, including online modules, assessment with personalised feedback and guidance, and chatbots to answer students' queries.
- *Breakthrough innovation projects.* Radical changes and/or fundamental improvements are made to either the characteristics of the service itself or the process that creates it. For example, a university adopts an artificial intelligence (AI)-based learning system that follows individual students' attainment and provides customised remedial learning and assessment.
- *Research and advanced development.* This entails exploration of, and challenges to, the fundamental principles on which previous service and/or process characteristics have been based. Activity in this area could build the knowledge that leads to innovation but *may not necessarily do so*. The purpose here is not to directly change either service or process characteristics directly, but to reveal knowledge that may ultimately (and perhaps indirectly) impact both. For example, a multidisciplinary research team start a longitudinal study into the psychological and social effects of the impact of AI-driven learning on learners' mental and physical well-being.

The decision for service organisations is how to divide their time, effort and resources among these types of innovation. While it may be desirable to invest in breakthrough innovation for the sake of long-term advantage, without a stream of shorter-term 'derivative' innovations, an enterprise may never reach the long term. The solution is to spread investment between short-term derivative, medium-term platform and long-term breakthrough projects. With regard to research and advanced development, it is not always possible for smaller organisations to invest in ventures that may only show benefits in the very long term. The obvious exceptions to this are those organisations that are subsidised by government for the sake of a country or region's future benefit, the small 'start-up' ventures whose research-based knowledge will be bought by larger companies who can exploit it, or services based on seriously disruptive technologies (for example, Amazon in its first ten years).

It is probably unwise to specify specific proportions of a service's total innovation effort and resources that should be allocated to each type of innovation project (although there are many consultants who do). The allocation of resources will depend on the strategic objectives and the capabilities of the individual organisation – most notably, the competitive objectives of an organisation. An organisation that competes explicitly on a strategy that emphasises novelty will tend to place more emphasis on platform and breakthrough projects than one that is a follower. For example, a food service company that competes on providing the very latest in food products and preparation methods will need to invest more in radical innovations than one that simply provides standard frozen commodity vegetables.

Case example

The Icehotel⁶

Sometimes, innovation can come from efforts to overcome what are seen initially as constraints. For example, Jukkas AB began as a company offering a range of outdoor activities, such as white-water rafting, fishing, reindeer and dog-sledding tours, cross-country skiing, snowmobile safaris and guided tours. The company, based in Jukkasjärvi, a small village in Swedish Lapland, lies 200 kilometres north of the Arctic Circle by the River Torne.

The problem for Jukkasjärvi was that visitors were few and far between in the long, dark winter months when the temperature drops to -40°C . But, Jukkas' manager, Yngve Bergqvist, saw these constraints as an opportunity when he invited a group of Japanese ice artists to Jukkasjärvi to carve sculptures from the crystal-clear ice that forms from the pure waters of the River Torne. Yngve then built a 60-square-metre cylinder-shaped igloo, made out of clear

ice blocks, to protect the sculptures. Visitors flocked to see the exhibits in his 'ice gallery', and one night, when no rooms were available in the village, Yngve was pressed by a good friend to find accommodation for ten colleagues. All Yngve could offer the visitors was space in his 'ice gallery' with sleeping bags on reindeer skins. In the morning the guests enthused about the 'warm and intense experience'. The Icehotel was born.

The temperature in the bedrooms is a (relatively) warm -5°C . Guests sleep on a bed of warm insulating reindeer hides in an ultra-warm sleeping bag. In the morning they can enjoy an early-morning sauna

followed by breakfast. Toilets are located in a small heated building adjacent to the Icehotel. In the evening, the guests drink in the 'Icebar' from 'Iceglasses' sculpted from the pure ice of the River Torne. During the day, guests eat in the restaurant 100 metres away and take part in the adventure activities such as dog sledding and snowmobile safaris.

In winter, the Icehotel covers approximately 5,000 square metres and is built out of 30,000 tonnes of snow and 4,000 tonnes of ice. The hotel has around 150 cold rooms and suites, a reception and bars. Icehotel also has its own Iceart exhibition and an 'Icechurch'. And since the hotel melts every spring, the number of rooms, as well as the exhibits, varies from year to year. This means that each year a new Icehotel is constructed by around 30 artists and builders before the arrival of the first guests in mid-December. Snow cannon are used to blast snow onto a frame of arched steel sections, and ice pillars are added for extra support. The walls are made from huge, clear blocks of ice, weighing almost two tonnes, cut from the frozen river with special saws and moved by front-loading tractors. Work on the interior starts in early December, when sculptors cut and work the ice to create windows, doors, pillars, beds, lamps and ice sculptures. Guest ice artists are invited each year to design the ice décor in some of the rooms. Every year, Icehotel typically receives about 120 proposals for 'Iceart'



lenisecalleja.photography/Shutterstock

installations, and in June announces the list of around 15 successful artists.

When April comes, the roof of the Icehotel begins to drip. The hotel is closed, and it slowly melts back into the river from where it came. The exception is 'Icehotel 365'. In late 2016, Jukkas opened a new permanent ice experience on the Icehotel site. Icehotel 365 has nine luxury suites, each with sauna and bathroom, and 11 'art suites' sculptured by selected artists. Icehotel 365 also has a large ice bar and an ice gallery. The refrigeration unit that keeps Icehotel 365 cold during the summer runs on energy from a solar cell facility, which is energy efficient because the solar cells take advantage of the nearly continuous daylight during the summer months. This means that they are able to produce roughly 75 kilowatts from April to September, which gives an energy surplus that can be used to run existing buildings, such as restaurants, offices and warm rooms.

Since its inception, Icehotel has continued to innovate, refresh and enhance the Icehotel service concept. Jukkas has also expanded the concept via brand extensions such as the Asolut Vodka Ice Bars, which are located in most large cities around the world. Perhaps the greatest affirmation of the Icehotel service concept is the number of imitations. In 2019, there were 12 similar hotels in Canada, Finland, Japan, Norway, Romania and Switzerland.

14.3 What is the process of service innovation?

There are two extremes of how service innovation can be characterised. At one extreme, service innovation is seen as purely a creative process, where a technical understanding of the mechanisms involved in the service is brought together with imagination, ingenuity and flair. In this view, the emphasis should be purely on creativity, novelty and invention. For all this to happen, the (presumably very creative) people involved must be given the space and time to be creative. Of course, the activity has to be managed, but not to the point where it interferes with originality. Typically, this view of service development sees the activity as a collection of, sometimes interdependent, projects. And although some aspects of project management may be relevant in guiding the activity, it should not be regarded as a 'process'. Processes are what produce services on a routine basis, whereas service innovation is the creation of original one-offs. Service innovation, therefore, must focus on its outcome and not worry too much about how that outcome is achieved.

The counterargument contends that, as with everything, output depends on process. Great ideas for services emerge from a process that makes them great. Therefore, of course, one should examine the process of service development. While no two innovation projects are exactly alike, there is sufficient commonality in all such projects to be able to model the innovation process and work on improving its overall performance. Moreover, such processes should be judged not only on the uniqueness or appropriateness of the innovations that they produce, but also on more mundane aspects of process performance such as the speed and dependability of how they produce innovative ideas, the flexibility with which the process can adapt to changed circumstances and (importantly) the cost of creating the innovative ideas. It makes sense, therefore, to apply similar approaches to improving service innovation processes as one would to any other process.

'Stages' in the service innovation process

The approach we take here is somewhere between the two extremes, but closer to the latter. Most research into new service development (which includes elements of innovation) has focused on how firms can formally organise the process effectively,⁷ the assumption being that formalising the process increases its efficiency and effectiveness. Because of this, both academics and practitioners have proposed many alternative models that attempt to show how service innovation and development is, or should be, organised to create new services. And, like all processes, the models tend to:

- define the steps in the process;
- examine how prospective service ideas 'flow' through the resources that act upon them;
- look for 'inhibitors' and bottlenecks that impede the development of potentially successful ideas;
- describe the resources necessary at each stage of the process;
- apply tests or filters for viability, feasibility, appeal, etc.

So far, so similar to any innovation process, irrespective of whether one is dealing with a product or a service innovation. So, how is the process of service innovation different? Several differences have been noted:

- In service innovation, the process tends to be less formal than in traditional product innovation and it is more difficult to identify separate discrete stages in the process.⁸
- Partly because of this, service innovation processes are less prescriptive. In fact, over-formalisation can result in negative effects on service innovation.
- Service innovation is more customer driven and less technology driven than product innovation. Not that customer characteristics are unimportant for product innovation, or that technology characteristics are unimportant to service innovation, but the importance of co-creation inevitably increases the role of customers.
- The degree of revision, recursion and recycling tends to be greater than in product design processes.

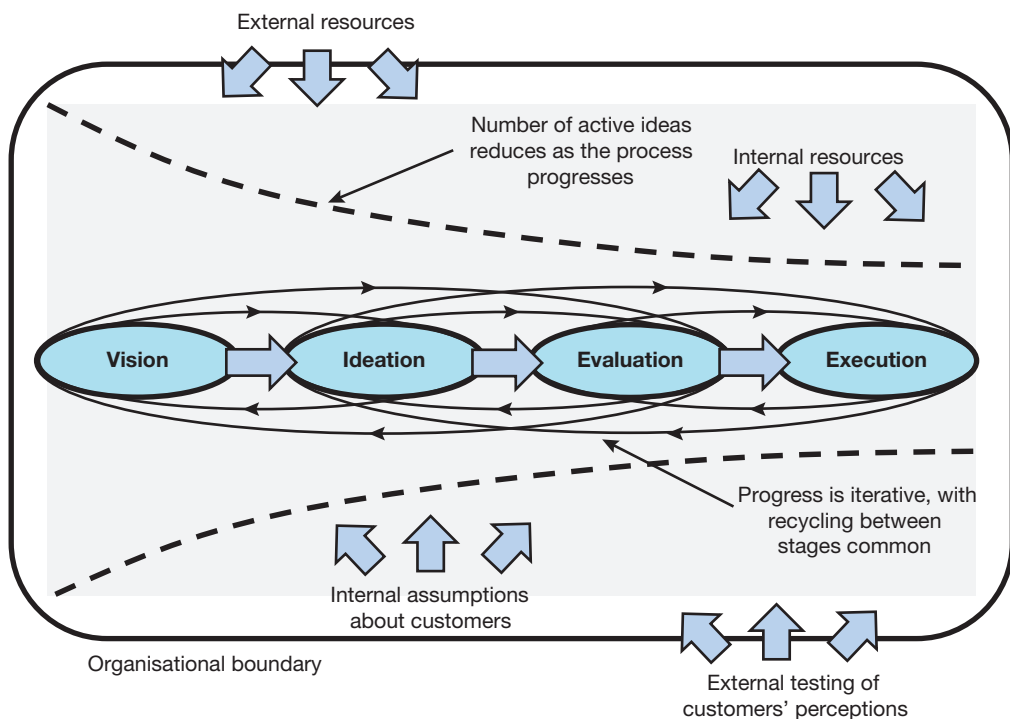
From service ideas to service design

Describing the way in which organisations develop services is problematic because different organisations will adopt different processes. Furthermore, what companies specify as a formal service innovation procedure, and what happens in reality, can be very different things. And, although there are many suggested stage models for the service innovation process, the models have several characteristics in common:

- The separate steps that they employ move progressively from broad objective setting, through the generation of potential service concepts and ideas, to an evaluation stage that tests for feasibility and acceptability, and to a final stage that executes and implements a detailed service design. (However, some suggested processes prefer these stages to form a continuous and never-ending cycle.)
- As the process moves through these stages, the number of separate service ideas being actively considered reduces, and the resource intensity per idea increases.
- There is some recursion or ‘recycling’ between the stages as ideas are developed, changed, re-evaluated or ‘spark-off’ new ideas.
- The resources required by the innovation process come both from inside and outside the innovating organisation.
- Although there may be a body of assumptions regarding customer behaviour and acceptance from the beginning of the process, eventually service ideas will need testing with real customers.

The innovation process model that we shall use is shown in Figure 14.6. It divides service innovation activities into four somewhat arbitrary but sequential stages: the establishment of a vision/objectives for the innovation; an ‘ideation’ stage from which service ideas emerge; an evaluation stage that assesses the ideas generated; and an execution stage that provides a detailed design.

Figure 14.6 The four stages of the service innovation process



The vision stage

It is rare, although not totally unknown, for a service organisation to start on an innovation process without any vision of what it wants to achieve. Certainly, in cases of continuous innovation, there is likely to be a well-articulated set of objectives and criteria to evaluate potential innovations. And even with discontinuous innovation, some kind of vision or mental image of what would constitute a beneficial innovation is worth articulating in the form of the strategic intent of any potential idea. Central to this stage is specifying a target market. This defines who the customers are, against which any potential innovations must be evaluated. At the very least, it is wise to examine, and question, any underlying assumptions regarding potential customers in this market.

Any organisation might discover a revolutionary innovation by sheer chance. But relying on luck alone is rarely a good idea. Far better to be systematic in searching for concepts that offer a stream of service innovations. Ideas for new service concepts may come from environmental scanning – generated from sources outside the organisation, such as expressed customers' needs or competitor activity, or from sources within the organisation such as sales staff and front-of-house operations staff or, more formally, from a research department. There are, of course, many market-research tools for gathering ideas (or the basis for ideas) in a formal and structured way from customers, including questionnaires and interviews. However, these techniques are usually structured in such a way as only to test out ideas, or check service ideas against predetermined criteria.

The ideation stage

Ideation means the formation of ideas. It is, therefore, at the very centre of the creative process. Which is probably why there are so many techniques, often variants of 'brainstorming', that have been developed to help the activity. The 'rules' of brainstorming are well known, the two most important being: (a) defer judgement, as no one should be denounced for proposing an idea, no matter how crazy; and (b) aim for as many ideas as possible, as quantity is important. This emphasis on the attributes of individuals' behaviour and attitudes is typical of how successful ideation is often characterised. Many innovation professionals see deliberately adopting certain characteristics, even if they need to be learned, as a vital factor in the process. They argue that all of us tend to stick to familiar thought patterns and will often use the same 'recipes' for solving problems. Irrespective of previous experience, everyone involved in ideation needs to be aware of and consciously adopt the personal characteristics that are likely to generate exceptional innovative ideas. These characteristics are not intended to come up with the 'right' idea, rather they help to generate the broadest range of possibilities.⁹ Exactly what these are depends on who is compiling the list, but usually include at least some of the following:

- Ability to change and adapt one's thinking as new information emerges.
- Ability to connect and see patterns or relationships between seemingly unrelated ideas or themes, so as to generate new ideas.
- Ability to challenge generally held assumptions or rules so as to reimagine orthodox conventions.
- Ability to ask uncomfortable or seemingly 'dumb' questions.
- Ability to articulate a different 'take' on reality that allows the implications of alternative realities to be explored.
- Ability to be interested in and to explore novel possibilities by testing out non-obvious ideas.
- Ability to explore and learn something new and different.

The evaluation stage

Important as the ideation stage is, its search for potentially valuable ideas contains something of a paradox. Searching for ideas often produces more potentially exploitable concepts than can reasonably be developed further or implemented. Not every idea can be fully assessed in the early stages of evaluation. Some kind of preliminary assessment is necessary, preferably against strategic objectives.

Not all concepts, or variants within a concept, have the potential to be developed through to market launch. The danger is that even organisations that value innovation can abandon radical ideas because they do not fit in with customary budget hurdles. This can mean that good ideas are destined to be mistakenly abandoned in the early stages of the innovation process – something that is especially true for discontinuous innovation. When continuous innovation projects are being considered, conventional assessments can be used, but for radically new concepts, evaluation is more difficult because fundamentally new ideas cannot be incorporated into old arrangements.

The purpose of evaluation is to take the ideas emerging from the ideation phase and evaluate their likelihood of being developed into workable service designs. In larger organisations using formal innovation processes, concepts may have to pass through many different screens, and several functions might be involved – each using different criteria to screen the proposals. Screening may be divided into three sets of criteria related to market positioning, operations/technical implications and financial evaluation:

- Does the proposed service occupy a market position that is both attractive in its own right and consistent with the organisation's overall marketing strategy?
- Does the proposed product or service exploit existing operations resource capabilities or help the operation to develop attractive new capabilities?
- Is the investment in the proposed product or service feasible, and is the return from this investment acceptable?

There is no shortage of well-tried techniques that can be used during the evaluation stage. In addition to the business analysis questions above, a more detailed understanding of how a service might operate in practice can come from techniques such as simulation modelling and service process mapping (also called service blueprinting, explained in Chapter 11 on service process design). Other techniques, such as scenario planning and failure analysis, are useful to test the resilience of service concepts to possible future states. And, although prototyping is normally associated with physical products, service prototyping attempts to produce a 'tangible' version of a potential service innovation. The purpose is to create a shared understanding of the service concept for all stakeholders. This helps to ensure a wider participation, and therefore more effective evaluation of a proposal.

The execution stage

After developing concepts for a new service, there may be further development of the concept to the stage where the new service can be implemented. This stage represents the beginning of detailed work on the service design. It includes defining what will go into the service. This will require the collection of information about such things as the constituent component parts that make up the service package. However, such development or detailed design may not always occur before implementation. It is not inconceivable that a service could be subject to detailed design during implementation by service providers. In fact, this is a common experience; many consumers are exposed to trial services for evaluation or market-testing purposes. So, the process of detailed design might be formal or implicit, with the outcome of the design process being respectively a full design or the service itself.

The detailed service design will include the specification of the 'offering' or the service provided, the customer experience and the intended service outcomes, as well as some explicit statement of value and pricing. In other words, the detailed service design 'fleshes out' each element of the service concept. As was indicated in the last section, it is rare that a new service works in isolation. A new service typically has to work in conjunction with existing services and will exploit a general suite of resources to realise its service concept. So, part of the evaluation work covered in the previous section has to take place also in detailed service design.

A major component of detailed service design is therefore an assessment of the impact of the new service on all existing resources and the services they support. Such work incorporates several phases in the execution stage for a new service. Initially, there will be an introduction stage wherein

the new service, because of learning curve effects in general unfamiliarity, will likely draw upon an excess of general resources. Gradually, as the service settles down into steady-state operations, the demands that it makes will be reduced. Detailed service design must therefore anticipate the excess demands of service introduction. The process design and value-stream mapping approaches explored in Chapter 11 can be useful in anticipating the ways in which a new service will draw on organisational resource.

A related issue to be addressed in the execution stage is scale and scalability. A service designed to work for 100 customers is not necessarily the same as that designed to work for several thousand. It would not be unusual to see essentially the same service relying on very different delivery resources and processes at the extreme ends of the volume spectrum. Ideally, a new service is designed to work at the intended scale, but in practice the capital requirements for high-volume service delivery will not be sanctioned without at least successful market testing, and more likely sustained success with internal and external pilot services. Of necessity, the pilot, while it might deliver the identical experience and outcomes to provision at scale, will be supported by bespoke and not necessarily efficient temporary resources.

While it is desirable to shift a great deal of feasibility and viability assessment into the pre-build/evaluation phase of service innovation, in practice the majority of learning about practical consequences of the new service will occur post-launch. A post-launch review of a new service should be designed into the organisational calendar at some point after the new service is deemed to have settled into steady-state delivery. It is pointless assessing performance during the learning curve.

Case example

McDonald's Innovation Centre¹⁰

Since it was founded in 1940, McDonald's has become the world's largest fast-food restaurant by revenue, serving around 70 million customers daily across 100 countries. Its growth and longevity are testament to how it has stayed on top of changing consumer demands for its products, services and the way they are delivered. From the moment the company introduced the first drive-through window, through to its latest designs for its restaurants, McDonald's continues to drive innovation in fast food. Some innovations are obvious to its customers, such as new products and store designs, but others are less noticeable, such as the innovations it makes to its kitchen equipment and methods of cooking.

Although one probably does not immediately associate 'McDonald's' with 'innovation', it has introduced many novel menu items and processes over the years. And, in the future, innovation will continue to be vital for the company, especially because the role of innovation has evolved within the company as the focus has moved away from simply being bigger in favour of being better. But,

however corporate priorities change, innovation is about remaining relevant to changes in operating conditions and customer preferences. It is concerned with trialling the incorporation of potentially beneficial technologies such as artificial intelligence (AI)-driven voice ordering (intended to reduce customer waiting times and make the jobs of employees more straightforward), deep-frying robots and automated beverage equipment before they are rolled out to selected stores. It is also about finding solutions to critical operational problems, such as how to add menu items without complicating operations.

An important part of the company's innovation effort is the responsibility of its 'Innovation Centre', part of a global function that is accommodated in a warehouse in the suburbs of Chicago. This is where the future of one of the world's most iconic companies is charted in detail, where new menu items are created, and where restaurants are designed. It is where restaurant layouts are mocked-up and the recipes for potential McDonald's menu items are tweaked. Within the centre, there is a firm idea of how its innovation process needs to work. At

McDonald's, innovation begins with clear objectives and success criteria (new products must taste good, be cost-effective and easy for its kitchens to prepare). McDonald's does not pursue 'blue sky' innovation, where it is just looking for ideas that might be interesting. Its innovation is more focused. In what is called the 'Alpha Phase', ideas are rapidly prototyped, designs developed and, within a clear framework of objectives, development teams create and test new ideas that potentially have practical benefits. Potential menu innovations need to be able to be prepared quickly (no food with long preparation times), fit within the company's supply-chain constraints, be scalable and be aligned with operational goals.

Customer feedback is vital to innovation at McDonald's. Real customers may be brought in as focus group participants to test potential new food products. The data from these tests is critical in deciding whether a product is developed further. Some innovations that seem logical and are popular internally fail to find favour with actual customers, which is why an 'early-and-often' approach to customer feedback is taken. If a new menu item passes this first test, it is piloted in a few selected stores for further testing and feedback. Only then might it be scaled up. But the influence of stakeholders outside

the company is not confined to customers. The company's franchisees are also important in the innovation process, as are outside design firms. Nor is McDonald's averse to acquiring assets that can help with its innovation strategy. It spent \$300 million to acquire Dynamic Yield, a decision-logic company that gave McDonald's the chance to create a more personalised experience by varying outdoor digital drive-thru menu displays to show food based on the time of day, weather, current restaurant traffic and trending menu items.

When potential innovations have been thoroughly tested in the Innovation Centre, they progress through the Beta Phase, where they are sent to be tested in target markets for rapid field tests. Here, the use of video analytics and experimental techniques allows this phase of the innovative process to be accelerated.

But the Innovation Centre's testing is not confined to new menu offerings and their impact on operational performance. It also looks at employee job designs that give optimal performance with the least amount of cognitive load and stress, equipment design and layout, information systems design and user interfaces, and how its service systems can be designed to work effectively under a wide range of operating conditions.

Recycling and interaction between stages

It is necessary to stress that an important feature of how we have characterised the innovation process in Figure 14.6 is the prevalence of recycling. It would be unrealistic and misleading to think that innovation is simply an ordered progression through each stage of the process in an uninterrupted sequence. The process is far less structured than that. Work at one stage often requires earlier stages to be revisited. The stages can overlap, with work being conducted on two or more stages simultaneously. Design decisions, once thought settled, may be fundamentally changed.

Also, by its nature, service innovation tends to be highly interactive (although more incremental and less formal than in manufacturing innovation), where the interaction between service operations staff and customers is particularly important. In this context, by interaction we mean some kind of engagement between the staff of a service operation and the environment in which a service innovation takes place. Yet, traditionally in service innovation, the role of the customers and customer-based advances are seen as only one source of innovation that must be combined with others, such as internal ideas. After all, it is argued, most customer interactions come from service staff's experience of customers and depends on their capability to manage the interaction. However, more recent views of service innovation have placed greater stress on the role of customers. This is related to concepts such as service dominant logic (SDL, see Chapter 2), which sees service as a 'resource' developed for, and with the cooperation of, customers. So, service innovation becomes a fresh resource that is made available to customers through the service operation's interaction with them. Moreover, the value of a service is not embedded in the service as such, but is created through the customer's use of the resource.

Counterpoint

The formalisation of the service innovation process into a series of stages may be appropriate for large firms with the resources and expertise to devote to the development of new services, but it is not necessarily feasible for firms with more limited means. This poses a problem to smaller firms, especially if one assumes that a formally defined new service development (NSD) process is a prerequisite for innovation. Moreover, the vast amount of research into NSD has assumed a formal development process. An alternative concept to formal stage models of NSD is that of 'bricolage'.¹¹ The intriguing idea behind bricolage is that, because of a scarcity of development resources, many firms have to 'make do' with whatever resources are available. Indeed, from a bricolage perspective, firms

can regard scarcity more as an opportunity than a problem.

The idea was originally introduced to contrast the behaviour of formal experts, such as engineers, with 'bricoleurs'. While engineers are trained to follow explicit actions to perform their work, a bricoleur is someone who uses 'whatever is at hand'. It is a concept that can be used to understand the development behaviour of either individual entrepreneurs, or whole organisations. At the organisational level, bricolage can be seen as creatively combining existing resources to create new services. This is not to dismiss more formal approaches to service innovation, but the bricolage idea does act as a corrective to the impression that only well-resourced large organisations can develop innovative new services.

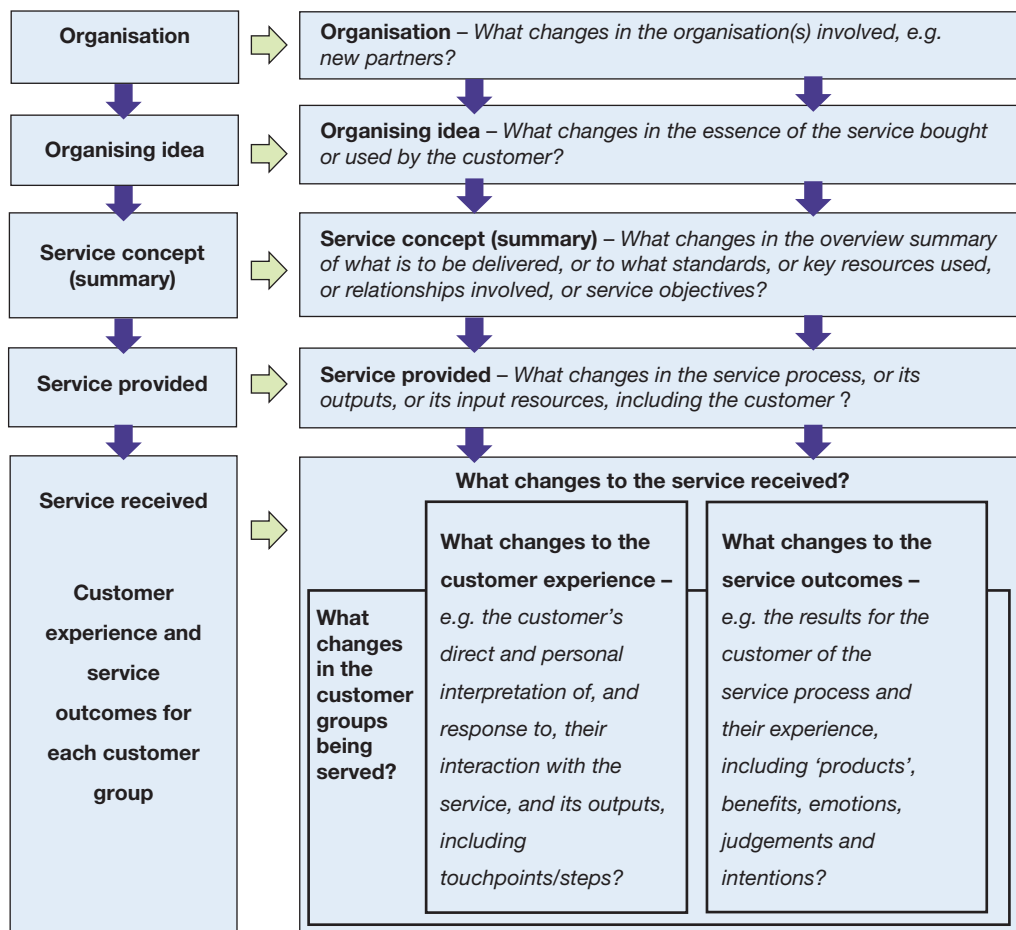
Progressively reducing options

A common method of describing the service innovation process is to liken it to a funnel. The mouth of the funnel, being wide, can accommodate many alternative designs for the service. Indeed, theoretically, there will always be an infinite number of ways in which the benefits required from a service can be delivered, even if some are only minor variants on each other. As the innovation process progresses, some options are discarded. There may be formal 'filters' at various points in the funnel whose sole purpose is to exclude some of the options. These filters often represent 'screens', which, as we mentioned earlier, evaluate alternative ideas against criteria of market acceptability, technical capability, financial return and so on. Eventually, only one option remains, which is then developed into its final form. The whole process moves from a broad concept capable of infinite interpretation at one end of the funnel to a fully formed and specified design at the other.

The role of the service concept

In Chapter 4, we outlined the idea of the service concept. We described it as a shared and articulated understanding of the essential nature of the service provided and received. It should provide a detailed explanation of what is to be done for the customer and how this is to be achieved. It is a particularly useful device for both the modification and development of existing services, and more radical service innovation. That is because a service concept provides a 'bridge' between the strategic intent of an innovation and its impact on the customer, as well as between the service operation's objectives and the design details of the service. The structure of the service concept can be used to 'map' the changes implied by any innovation, minor or radical, in a service. In effect, it acts as a checklist to make sure that changes to a service are coherently executed. Figure 14.7 illustrates this idea.

The service concept can also provide an ideal vehicle for challenging the status quo. The mere process of writing down the key elements of each service concept for different customer groups will encourage service managers to look at the key assumptions that may be implicit in

Figure 14.7 The service concept can map changes in service development

current service provision. Moving beyond a potential new ‘organising idea’ to identify changes to processes, outcomes and experiences allows the service operations manager to assess the viability/desirability of new services. This detail can not only help managers to understand their business, but also challenge them to view their business in ways that can make it stand apart from other organisations. By thinking carefully about the market, the different customer segments and the needs of the customers in those segments, together with an in-depth understanding of the core competencies of the operation, managers can enhance and develop new and innovative concepts that have great appeal to customers and give the organisation a significant competitive edge.

The case example that describes developments at the Singapore Zoo illustrates how a service concept, and the operational reality that it implies, has been developed in a way that would have been difficult for other organisations to emulate. The developments derive from an understanding of current operational competencies, together with an appreciation of the needs of foreign visitors, especially visitors on business in Singapore – a very large and lucrative market.

Case example

Singapore Zoo¹²

Singapore Zoo is no stranger to innovation. Forty years ago, the zoo started offering a new service: breakfast with an orangutan called Ah Meng. This breakfast developed into the 'Jungle Breakfast with Wildlife'. The morning attraction (held daily from 9.00 a.m. to 10.30 a.m.) begins with watching the elephants' morning bathing routine, followed by the chance to feed them with a selection of fruits. Guests then go to the Ah Meng Restaurant (named after Ah Meng, who died in 2008 at the ripe old age of 48) for breakfast and some close encounters with tamarinds, pythons and orangutans in the adjacent 'forest clearing'.

Wildlife Reserves Singapore (WRS) is a public limited company owned by the government of Singapore. It is the parent company of three award-winning attractions: Singapore Zoo, Jurong Bird Park and the world-famous Night Safari.

The aim of WRS is to create a memorable wildlife experience for visitors, with a focus on wildlife conservation and education. While the WRS vision is to be the foremost wildlife institution in the world, the mission is to inspire an appreciation of nature through exciting and meaningful wildlife experiences. WRS also helps to protect wildlife in their natural habitat, especially endangered species facing extinction. WRS visitors are not just looking for a great experience with their friends and family, and value for money; many of them also want to contribute to wildlife conservation. So, WRS tries to educate visitors through interactivity – interpretation boards, ranger talks and demonstrations, and the narrators on the trams that take visitors around the parks. WRS even trains non-zoological staff, such as food and beverage staff, so they are able to have interesting discussions with visitors about the animals and conservation.

Singapore Zoo was a pioneer of the 'open zoo' concept. Here, the animals are kept in spacious, landscaped enclosures, which try to recreate their natural habitat. Animals are separated from the



ROSLAN RAHMAN/AFP/Getty Images

visitors using psychological restraint techniques based on the animals' natural instincts for defining a territory as their own, or their natural fear of elements such as water. The water moats, for example, are concealed with vegetation or dropped below the line of vision. The result is a feeling of openness. Oppressive cages, which typify traditional zoos, are not used.

The use of psychological restraints requires a sound knowledge of the behaviour of the animals concerned. By providing the right habitat, privacy, stimulation, food and social structure, the animals turn the spaces into their homes and even though some could escape, they don't. Stimulation is provided by trying to recreate the natural stresses of the wild and bring out the animals' natural instincts and reflexes. For example, instead of throwing neatly chopped chunks of meat to the big cats, the keepers will put a hunk of meat in a 'gunnysack' packed with hay and smeared with blood and hang it in a tree. The cats have to compete with each other to get the sack, and to tear it apart before receiving their reward. Other animals are stimulated in ways that mirror the challenges in their natural habitat;

polar bears and fishing cats, for example, have to go fishing for their food.

One major innovation has been the Night Safari. Despite having a successful world-class zoo, the managers knew that a 'regular zoo' had limited appeal, in that the majority of the zoo's visitors were local residents. For the large numbers of tourists and business travellers on short stopovers, visiting a zoo, which they could easily do at home, was not a high priority. Another disincentive to visit is the fact that the Singapore weather is hot during the day, and so many animals are asleep or torpid in the daytime. For these potential visitors, the zoo offered little excitement compared to Singapore's famous shopping malls and superb food. The zoo needed a new service concept.

Following a rapturous response to a few night tours conducted at the zoo, and after four years of planning and three years of construction, Singapore's Night Safari was opened in May 1994 at a cost of S\$63 million. Though there are several copies today, the Night Safari was the world's first night-time wildlife park. The Night Safari, adjacent to the zoo, has its own entrance and facilities, and attracts 1.3 million visitors a year.

The Night Safari is nothing like an ordinary zoo. Visitors are 'transported' into a real safari experience. To give visitors this feeling of stepping into a very different place from modern Singapore, Bornean tribal performers perform attention-grabbing tribal dances (from 6.30 p.m. to 8.30 p.m.). They also provide blowpipe demonstrations and fire-eating displays.

Visitors enter via the 'Village of the Rainforest', and immediately feel that they are entering into a different world. There is music, dancing and performers, aimed at all of the senses. Visitors hear the music, see the performers and smell the rainforest and the food. They can dine by candlelight in a jungle setting, then go into the Night Safari to experience the wilderness and the animals in their 'natural' settings. The Night Safari also provides the opportunity to have close encounters with some of the tamer animals in the 'Creatures of the Night Show', where rangers talk about the animals, their habitat and conservation efforts. Memorable experiences often come from these small, personal encounters.

All facilities are consistent with the safari theme. Walkways from the car parks to the tram station are constructed from wooden boards with wooden handrails. The Ulu Ulu Safari Restaurant, where visitors can eat a wide selection of local favourites, such as the famous chili crab, maintains the jungle feel with its beamed ceilings and rustic rattan fans. The restaurant also has an alfresco eating area, where visitors can dine amid the sounds of cicadas, frogs and other night creatures, while a herd of Ankole cattle grazes nearby. The alternative Bongo Burger Bar provides high-quality burgers and alfresco dining close to the tribal dancers. Even the toilets have a safari feel – they are open to the sky and the washbasins are set in stone outcrops surrounded by jungle plants.

Quiet electric trams provide guided safaris for visitors around a 3.2 kilometre trail, which takes about 45 minutes to complete. The narrators on the trams educate and inform the visitors as they enjoy the ride, just as safari guides would do. During the ride, the landscape changes through eight geographical zones to provide appropriate settings for its animals, from the rocky outcrops of the Himalayan foothills to the grassy plains of Equatorial Africa and ending with the forests of Southeast Asia. Three walking trails, totalling 2.8 kilometres, are well marked and provide opportunities to see all of the animals at close range.

The 'open concept' is used to tremendous effect. Indeed, under the cover of darkness, the moats can be very effectively camouflaged using netting and shade. The less-dangerous animals, such as deer, roam freely in large areas bounded by cattle grids. Occasionally, the tram has to stop and wait for animals to move out of its way.

The right sort of lighting was a key element in the design of the Night Safari. There was a need to provide sufficient light so the guests could see the animals but without disturbing them or detracting from the ambience. The result is lighting that resembles soft moonlight, using a combination of mercury and incandescent lights, mounted on tall poles. Only selected areas are 'moonlit', as the dark background adds to the atmosphere and lighting the foreground would spoil the effect of the appearance of freedom. Flash photography is forbidden to ensure the animals are not disturbed.

14.4 What resources are necessary for service innovation?

From an operations perspective, service innovation involves ensuring that the operation has the appropriate resources and processes to support the innovation process. For example, the capacity of the operation's innovation processes needs managing over the long term, choices need to be made about whether some innovation activities are performed in-house or subcontracted, and the organisation of the innovation process is also a significant issue. Furthermore, behind each of these decisions lies the general objective of nurturing and exploiting the organisation's capabilities.

Service innovation capacity

As in any other process, the management of capacity involves deciding on the overall level of activity that an operation can support and also deciding how that level of support can be adapted in order to respond to likely changes in demand. In Chapter 13 we looked at capacity in the context of the whole operation. As with all capacity management, a key issue is how to cope with uneven demand. Even in very large companies, the rate of new service introduction is not constant. The need for service innovation is likely to be dictated by several complex and interrelated market factors. This may lead to some new offerings being introduced to the market close together, while at other times little development is needed – thus posing a resourcing problem. The capacity of a firm's innovation capability can be difficult to flex. Some of the expertise necessary for innovation is embedded within designers, technologists, market analysts and so on. It may be possible to hire-in some expertise as and when it is needed, but much innovation resource is, in effect, fixed.

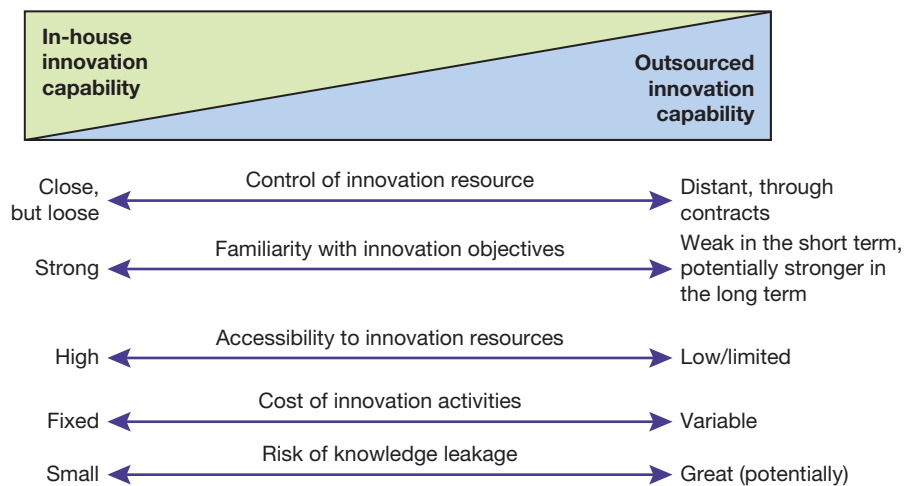
Such a combination of varying demand and relatively fixed innovation capacity leads some organisations to be reluctant to invest in innovation capacity because they see it as an underutilised resource. This may lead to a vicious cycle in which, although there is a short-term need for innovation resources, companies fail to invest in those resources because many of them (such as skilled staff) cannot be hired in the short term, which leads to innovation projects being under-resourced with an increased chance of project overrun or failure to deliver appropriate technical solutions. This, in turn, may lead to the company losing business or otherwise suffering in the market-place, which makes the company even less willing to invest in innovation resources.

Service innovation networks

We examined service networks in Chapter 10, but there is also an equivalent network, in which the objective is the exchange of service innovation knowledge and the integrating of suppliers into the innovation process. This network of knowledge exchange is sometimes called the 'innovation network', and in many ways the operations decisions concerning conventional supply networks are also reflected in innovation networks. Two decisions in particular do much to determine the effectiveness of innovation networks. The first is the extent of vertical integration – the decisions of how much development to do in-house and how much to subcontract. The second is how to manage the relationship between the 'players' (most notably, customers and suppliers) in the network.

Organisations can position themselves on a continuum of varying degrees of innovation engagement with suppliers. At one extreme, a firm may retain all the necessary innovation capabilities in-house, while at the other end it outsources all its innovation, acting only as a focal point for the coordination of the process. Between these extremes there exist options with varying degrees of internal and external innovation capability. In general, though, few companies operate at the extremes of this continuum (see Figure 14.8).

Innovation resources will be easy to control if they are kept in-house because they are closely aligned with the company's normal organisational structures, but control should be relatively loose because of the extra trust present in working with familiar colleagues. Outsourced innovation

Figure 14.8 The in-house–outsourced continuum for innovation

requires greater control and, because it has to be applied at a distance, contracts may be needed. However, contracts do not help to build long-term partnership relationships. In-house innovation has an advantage here because of its strong familiarity with the rest of the company's service range and market requirements. In contrast, outsourcing innovation can mean a weaker understanding in the short term, though if long-term relationships do develop, service familiarity will become stronger. The underlying capabilities built up through the innovation activity are generally assumed to be highly accessible when it is done in-house. It is more difficult to provide access to tacit knowledge when it is housed outside the organisation. The overall cost of in-house versus outsourced innovation will vary, depending on the firm and the development project. An important difference, however, is that external innovation tends to be regarded as a variable cost – the more external resources are used, the higher the cost will be. In-house innovation is more of a fixed cost. Indeed, a shift to outsourcing may occur because fixed innovation costs are viewed as too great.

Finally, a major driver of this decision can be the risk of knowledge leakage. Firms become concerned that experience gained through collaboration with a supplier of innovation expertise may be transferred to competitors. Again, there is a paradox here. Companies usually outsource innovation primarily because of the supplier's capabilities that are themselves an accumulation of specialist knowledge from working with a variety of customers. Without such knowledge 'leakage', the benefits of the supplier's accumulated innovation capabilities would not even exist.

The organisation of service innovation

Among the criteria that are used to assess the effectiveness of different organisational forms, two in particular are important to service innovation – specialisation and integration. Specialisation is important because it encourages the depth of knowledge and technical understanding that is required in a concentrated form during the innovation process. Because of the (normally) finite time allowed for service innovation, technical knowledge needs to be deployed in a concentrated manner during limited windows of opportunity. Clustering resources around technical specialists encourages the development of such concentrated knowledge. Integration is important because services are composed of smaller components or subsystems. Coordinating the efforts of developers in different parts of a project and integrating their technical solutions in such a way as to reflect the market priorities within the innovation project is clearly an important aspect of any organisational structure.

It is possible that several parts of an organisation will have some part to play in the decisions that will shape a final service. Yet, any innovation project will also have an existence of its own. The organisational question is which of these two ideas – the various organisational functions that contribute to innovation, or the innovation project itself – should dominate the way in which the development activity is managed?

In a purely functional organisation, all staff associated with the innovation project are based unambiguously in their functional groups. There is no project-based group at all. At the other extreme, all the individual members of staff from each function who are involved in the project could be moved out of their functions and perhaps physically relocated to a 'task force' dedicated solely to the project. A project manager, who probably holds the entire budget allocated to the design project, could lead the task force. Some members of an innovation team may even be from other companies. In between these two extremes there are various types of 'matrix' organisation, with varying emphasis on these two aspects. Generally, there is wide support for structures that fit towards the project rather than the functional end of the continuum. It is often argued that so-called 'heavyweight' project manager structures and dedicated project teams are the most efficient forms of organisation for shorter lead times and technical efficiency.¹³

Other studies, although sometimes more equivocal, have shown that, in terms of the best total outcome from the development process, structures from balanced matrix through to project teams can all give high success rates. Perhaps of more interest is the suitability of the alternative structures for different types of service development project. Matrix structures are generally deemed to be appropriate for both simple and highly complex projects. Dedicated project teams, on the other hand, are seen as coming into their own in highly complex projects.

Open innovation

For several decades, academics and practitioners have argued that the innovation processes should be more receptive to external knowledge and ideas. In so doing, organisations should also let some of their internal ideas and proprietary knowledge flow to outside innovation partners. This approach to innovation, often referred to as 'open innovation', has many parallels with the inclusive co-creation approaches we have explored in Chapter 1. One of the principles underlying open innovation is that exposure of innovations, innovation processes and proprietary technology opens up the firm to disruption. Innovations, technology and processes can be challenged by external parties and there is scope for external partners, and potentially competitors, to modify/remix innovations to the benefit of both the originating and the partner organisation. More generally, there is the idea that disruption is beneficial in that it helps organisations – should they be receptive to the disruption – to break away from tired old processes and solutions. Open innovation has several other benefits for organisations:

- The exposure of an innovation can allow customers and competitors to explore alternative markets or applications for innovations.
- Services can be refreshed if partners are able to exploit underlying processes and technology (that is, technology in the broadest sense of 'application of knowledge').
- Open innovation also helps establish an innovation community that can support customer engagement almost to the level of 'fandom'. The Harley Owners Group case example in Chapter 5 illustrates one such community.

Obviously, there are risks associated with exposing processes, technology and especially specific innovations. In the service sector, it is notoriously difficult to protect proprietary approaches by legal means such as patents, trademarks and copyright. However, organisations that engage in open innovation practices tend to be those with some degree of confidence. That is, although they understand that whatever they share with external providers could be easily copied, they also know that they are probably already several steps ahead in exploring the innovation. We shall return to this issue in Chapter 17. Generally, those service organisations willing to share and carry out practice benchmarking tend to be the most confident.

An example of open innovation was the 'Netflix Prize', promoted by Netflix, the video streaming service, which was for the creation of the best filtering algorithm to predict user ratings for films. The algorithm was required to be able to use customers' previous ratings of films, but would not have any other information on the film or the customer. Nor would customers be identifiable. Netflix had to open its existing technology and databases to anyone competing for the prize. The prize was a success and the resulting algorithm proved to be remarkably successful.¹⁴

Case example

NHS Innovation Challenge Prize – Breathe Arts Health Research¹⁵

The UK National Health Service (NHS) Innovation Challenge Prize encourages and rewards innovation in healthcare. The prize was originally designed for NHS staff, but has over the years become an open prize, encouraging sharing and diffusion of innovation between the NHS and external partners. One Innovation Challenge winner, Breathe Arts Health Research, won funding from the prize, plus a dedicated mentoring package to develop their 'Breathe Magic Intensive Therapy Programme' for young people who have hemiplegia (paralysis of one side of the body). The programme runs over two weeks in summer, and is based on the established 'Hand-Arm Bimanual Intensive Therapy' (HABIT) approach, which aims to improve the use and coordination of both arms in daily function. The Breathe approach involves intensive bimanual training, but the difference is that its programme is delivered as a training course in magic! The programme is both effective and fun, with many young people seeing an 80 per cent improvement in hand and arm function.

Breathe Arts Health Research is a social enterprise company – a spin-out organisation from Guy's

and St Thomas' Charity, and designs and delivers the Performing Arts Programme across Guy's and St Thomas' NHS Foundation Trust. The company's vision is to use the inspiration and power of the arts to improve health and well-being. Breathe designs innovative ways of using the arts and creativity in healthcare to improve clinical outcomes, the healthcare environment for all participants, and to develop individual and community engagement with health and well-being. Breathe's work is underpinned by robust and established methods, such as HABIT, but also includes an essential element of fun. The programme was designed, in part, to ensure high levels of engagement with a therapeutic approach – the HABIT method being critically dependent on patients' willingness to participate and work at the therapeutic exercises. The Breathe Magic Intensive Therapy programme was a product of open innovation. The NHS trust had a partner that it knew, and with whom it was willing to share existing approaches and processes. Breathe brought to the party its experience in using arts and creativity in healthcare environments.

Involving customers in innovation

No matter how creative or innovative a new service, it is unlikely to succeed in its market if it fails to meet the needs of customers. It follows, therefore, that an essential part of the innovation process is the involvement of potential customers. Moreover, most authorities stress that customer involvement should not be confined to the final stages of the innovation process, when 'customer reaction' to potential service features is tested.¹⁶ Customer involvement also has an important role in the early stages of the process, when customers can suggest ideas for innovative services. However, such involvement has to be deliberately designed into the innovation process, the difficulty of which depends on the type of service innovation. After all, few people know the merits and limitations of services better than the customers who use them.

An obvious source, then, of feedback on service performance will be those who regularly use (or have ceased using) a service. Different types of customers have the potential to provide different types of information. New users can pinpoint more attractive service features; those who have switched to a competitor's offering can reveal its problems. A particularly interesting group of customers are the so-called 'lead users'.¹⁷ Lead users have requirements of a service (or product) that will become more general in a market, but they are aware of these needs well ahead of the rest of the market. They are also users who will benefit significantly from finding a solution to their requirements. This may prompt them to develop or modify services themselves, rather than wait for them to become commercially available.

Some services with a high degree of customer interaction can potentially use the frequent individual interactions in order to learn from, and be inspired by, their customers. However, two conditions can make regular and informal customer involvement more difficult. The first is where direct contact with customers is not ‘built-in’ to the service. For example, asynchronous services (such as most online retailers) cannot readily engage in the type of intimate interaction that could lead to radically different new service ideas. Second, if a service is heavily technology-based, such as ‘software-as-service’ offerings, customers may have limited technological knowledge, and so not be able to articulate the types of innovative services that they might find valuable. Under these conditions, more formal types of interaction will probably need to be organised.

Case example

If one customer wants it, maybe more do?¹⁸

Back in the early 1970s, Patricia Lovejoy, who lives in Greenwich, Connecticut, in the United States, phoned Heywood Hill bookshop in London and asked if the shop could send a few books to her home in the US periodically. Remarkably, over 40 years later, Patricia still receives a book a month from Heywood Hill. She loves discovering books that she would otherwise never have read, and is so delighted with the shop’s service that sometimes she increases her reading intake to two or even three books a month. She says that Heywood Hill bookshop has consistently surprised and delighted her with its choices.

Yet Patricia has only been to the shop twice: once in 1999, when she called in with her young son Donald (who she says fell asleep on the books – Patricia loved the fact that no one minded) and again in 2012. The purpose of the last visit was to impress upon the present bookshop staff just how much the shop has meant to her throughout the past 40-plus years.

But Patricia turned out to be more than just a very satisfied customer – she gave the bookshop an idea. Why not formalise what they had done for Patricia (and occasionally other customers) and offer a customised book subscription service. Rather than customers having to decide what books they want to read, they can let the staff at Heywood Hill decide what they might like. After all, the staff are dedicated bibliophiles who read over 500 books a year and understand the importance of matching the right



David Bleeker – London/Alamy Stock Photo

book with the right person. The service is called ‘A Year in Books’, which Heywood Hill says is the most personalised book subscription service in the world. This is how it works. First, the customer can select the type of subscription they want: how many books, hardback or paperback, and how often books will be delivered. Choosing many hardback books obviously costs more per year than paperbacks. Second, the customer receives a ‘reading consultation’, either online, over the phone or face to face with their personal bookseller in the shop. This explores the customers’ interests and reading preferences. Third, each customer’s personal bookseller will choose books to suit their individual tastes, and send them to the customer’s home, attractively wrapped. This means that customers can build-up a collection of books they might not otherwise have found.

User toolkits

One practical means of bringing customers into the innovation process is by using user toolkits. User toolkits ‘bundle’ the functionality of a potential service design into easily understandable modules from which users can select functionality appropriate to their needs. Users can also bundle modules in sequences and specific configurations that suit their needs. The functionality could be actual or potential. If a service module proves to be popular, even though it has not been developed a compelling argument is provided for resource allocation to support development. An effective user toolkit will be such that potential users can, by trial and error, assemble a service that suits their needs. Obviously, therefore, the bundle of modules/tools within the toolkit must encompass most potential needs for that user group. Toolkits must respect the business vernacular of the customer, and therefore *their* design language. In other words, user toolkits need to be ‘user-friendly’ in the sense that there should not be a large learning burden before users can engage with them. The idea of user toolkits borrows heavily from software design in that, ideally, the toolkit allows users to select from large libraries of modules to build overall functionality. Finally, and hopefully needless to say, toolkits need to respect the capability of the service provider. Not that all functionality must be immediately available, but it must be within the development capability of the service organisation.

Case example

DHL innovation workshops¹⁹

DHL can be thought of as a company that ‘moves things around’ for other companies and individuals. DHL is very good at this task, and very good at logistics. Increasingly, DHL has found that its customers want to exploit its logistics expertise in improving their own supply chains and in turn improve business performance. DHL understands that innovation has to be customer focused. There will be no ‘one solution’ that can be exported from DHL to the customers’ own supply chains. One way in which DHL ensures that innovation support is customer focused is by bringing its customers, as well as

network partners, together in specially built innovation centres. At the centres, DHL runs workshops for service redesign. The workshops are hands-on and allow users to exploit technological toolkits. Moreover, the workshops allow exploration within engineered contexts that can reflect possible economic, sociopolitical and cultural changes. The design workshops start by looking very long term at how the



Guido Schiefer/Alamy Stock Photo

customer supply chain could evolve. The long-term view involves scenario planning and assimilation. The workshop team then moves backwards, closer towards the present day, to explore combinations of possible new service modules, business trends, new competencies and so on. From there, the development team designs solutions and approaches using the available bundles of service.

Counterpoint

Involving customers in the innovation process is not always a good thing, according to one team of researchers.²⁰ Although it has become increasingly popular for companies to cooperate with their customers, it may not be an effective approach if radical innovation is required. In the study, the researchers selected 284 real development projects that they divided into two main groups:

- *Incremental innovation.* 207 of the projects dealt with minor improvements of products or services.
- *Radical innovation.* The remaining 77 projects dealt with development of radically new products or services not previously known to the market.

For minor improvements to products and services it was advantageous to talk frequently with the customers and have two-way communication between the company and customers. The researchers also saw that it was wise to listen carefully to what the

customers actually said because users will often know better what is needed to make them even more satisfied. Customers will also be able to tell you what types of improvements they are willing to pay for.

However, when a company aims to develop a service (or a product) that is entirely new to the market (those projects classified as 'radical innovation'), a slightly different approach is needed. It may still be advantageous to talk frequently with customers as long as one does not listen too much to the customers' *specific* proposals. The researchers saw that companies that listened too much to what customers said were less successful with radical innovations than those that placed less emphasis on the contents of conversations. This was probably because customers base their views to a great extent on previous experiences, but the really radical solutions are difficult to imagine in advance based on experiences with current products.

User toolkits are a response to the difficulty that is common in service design – the frustration of having to understand service users' needs accurately and in detail. Given the nature of service and the unique way in which each recipient of service expresses their needs, service designers frequently struggle to cope with this complexity. User toolkits can effectively outsource to users some of the innovation tasks concerned with needs-assessment.

The use of customers in the design of services and products is not new. Marketing professionals are familiar with devices such as customer brainstorming sessions and focus groups. Similarly, technically competent customers – especially business customers – can make informed and useful inputs to the innovation process. The problem is that retail customers and, to some extent, users (rather than managers) in the business-to-business context may not have the detailed technical knowledge to fully envisage or sketch the outlines for new service designs.

14.5 Summary

What is innovation? – There are many definitions of innovation – the term is notoriously ambiguous and lacks a single definition. However, most definitions include the idea of novelty. The development of services relies on the management of three similar and interdependent issues: innovation, design and creativity. It is important to understand the relationship between these concepts. Creativity is the use of imagination or original ideas; it is an essential ingredient of innovation, which simply means doing something new. Innovation is transformed into a practical proposition by design, which defines the looks, arrangement and workings of services. One model of innovation (the Henderson–Clark model) distinguishes between knowledge of the components of knowledge and architectural knowledge. Other models distinguish between the degree of change involved in the characteristics, the innovation of the service characteristics and the degree of change involved in the characteristics of the process that delivers the service.

What is different about service innovation? – Although there are significant similarities between innovation generally, and service innovation specifically, there are also some differences:

- Service innovation is often more incremental and less radical than traditional product innovation. Service innovation is less driven by technology and not as reliant on formal research and development resources.
- In service innovation it is more difficult (but certainly not impossible) to separate product, process and organisational innovations.
- Service innovation is more interactive in that it involves the engagement of most internal actors (marketing and technical staff, back-office and front-office staff, etc.) and external players (suppliers, regulators and especially customers).
- Service innovations are easier to copy and more difficult to protect.

Service innovation is important because frequent service innovation reduces the chances that competitors are able to imitate one's offerings. Even small changes to services can have an impact on competitiveness. This creates new opportunities to obtain advantage in both for-profit and non-profit contexts.

What is the process of service innovation? – One view of service innovation is as a purely creative process. By contrast, another view is that it is a disciplined process with clearly recognisable stages, even if there is significant recycling between the stages. And, while there is no single model of the service development process as such, there are many stage models that attempt to define and describe the various stages that a process should include. Typical of these stages are the establishment of a vision or objectives for the innovation: an 'ideation' stage from which service ideas emerge, an evaluation stage that assesses the ideas generated and an execution stage that provides a detailed design. As innovations move through these stages, a common method of describing the service innovation process is to liken it to a funnel. The mouth of the funnel, being wide, can accommodate many alternative designs for the service. Indeed, theoretically, there will always be an infinite number of ways in which the benefits required from a service can be delivered, even if some are only minor variants on each other.

What resources are necessary for service innovation? – From an operations perspective, service innovation involves ensuring that the operation has the appropriate resources and processes to support the innovation process. For example, the overall development capacity of an organisation needs to be managed to reflect fluctuating demand for development activities; decisions must be made regarding the outsourcing of some, or all, of the innovation and development activity as well as the nature of the relationships with development 'suppliers'; and the resources used for development need to be clustered into some form of organisational structure. But not all innovation resources are exclusively internal to the organisation. Customers can be an important source of innovation ideas.

Discussion questions and exercises



1. Reread the case example on Singapore Zoo. The chief executive of Singapore Zoo is keen to continue developing the zoo. Try to develop a new service concept for the zoo.
2. In the case example of the Icehotel, where did the inspiration for the service come from? What lessons does this example have for the service innovation processes of other service organisations?
3. Using the diagram shown in Figure 14.4, how would you characterise the development of retail banking services from conventional branch banking, through the use of call centres, to internet banking and mobile banking apps?
4. A conventional method of judging the effectiveness of any process is to assess the quality of its output, the speed with which it responds, the dependability of its response, its flexibility and its cost/efficiency. How could these aspects of performance be used to judge the effectiveness of a new service innovation process?
5. Reread the case example 'If one customer wants it, maybe more do?', on the Heywood Hill bookshop and its subscription service. In what way is this service different from the algorithm-driven recommendations that are used by many online retailers, such as Amazon?

Case exercise

Developing the County Workhouse

This was one of the most interesting developments that we have ever been involved in. It was challenging in a number of ways. First, it was one of the largest projects we have ever been involved with. Second, we very much took a lead role rather than being a junior partner with other agencies. Third, we have undertaken to run the site once it is completed. Finally, it is not just a restoration project, it is the creation of a totally new facility that will provide a service for everyone who has an interest in social history.

(Dale Treemont, Director, the County Workhouse)

Dale was speaking as the County Workhouse was about to open to the public. She had overseen the restoration phase of the development (known as Phase 1) that had restored the buildings, and was looking forward to launching and running the facility (buildings and surrounding parkland) as one of the largest financially sustainable 'educational attractions' in the south-west of the UK (known as Phase 2). An archaeologist by background, Dale was recruited by The British Historical Restoration Society (BHRS) specifically to manage the restoration of the County Workhouse. The BHRS was formed in 1947 with the objective to provide the expertise that would help preserve places of historic interest permanently for the nation to enjoy. Originally a loose network of academic historians and enthusiasts, since the early 1980s it had formed itself into a society that partnered with other non-profit and local government bodies to assist in the restoration of historic buildings. Dale reported to an 'Oversight Board', with members drawn from senior officers of the BHRS, most of the funding bodies and the local government authority.

The County Workhouse

The County Workhouse was one of BHRS' more intriguing projects. Originally built in 1835 by the Reverend Enoch Hanwell in the county of Devon in the south-west of England, it played an important part in looking after the region's poor. Before 1834, in England poor people were supported (if they were lucky) by landowners and other wealthy people who contributed money for buying food and clothing. In 1834, The Poor Law Amendment Act ensured that no able-bodied person could get poor relief unless

they went to live in special workhouses where poor people who had no job or home lived. The idea was that the poor were helped to support themselves by doing jobs in the workhouse in exchange for their food and accommodation. Also in the workhouses were orphaned and abandoned children, the physically and mentally sick, the disabled, the elderly and unmarried mothers. Workhouse regimes were hard and, by today's standards, cruel. Families were split up, with women, men and children living and working in separate areas in the workhouse. Children's education was rudimentary or non-existent, and punishments could be severe. Residents were made to wear a uniform, so anyone allowed outside could be identified as a poor workhouse resident.

Although conditions improved (a little), it was not until 1929, when the Poor Law system was ended, that most workhouses were transferred to the control of local government authorities. Many were used as hospitals, or care homes for the homeless and elderly. In the case of the County Workhouse, the local authority used it to provide temporary homeless accommodation and a residential home for the elderly until the mid-1980s, after which it remained unused. Several proposals to develop the site were put to the local authority, including it being turned into residential flats. However, there was local opposition to the housing development schemes, and when a large donation from an anonymous source was offered in 2012, the site was sold to a consortium who promised to 'bring this important part of social history to a modern generation'.

Our task was to preserve the County Workhouse in order to aid the understanding of poverty for this, and future generations. Our vision was to take a building that originally nobody wanted to enter and create a heritage facility that anyone would want to visit and where everyone is welcome.

(Dale Treemont)

The restoration project

The conditions attached to the original donation, and supported by the project's other partners (such as local and national government, historical societies and various charities), stipulated that the site should be restored in an historically sympathetic manner, yet be run as an education-based attraction

that would not require substantial ongoing funding. In other words, it would need to be largely self-supporting.

We always knew that our main issue would be how to restore and run the site in the true spirit of what it represents historically, while providing an authentic educational experience for visitors and keeping the various funding bodies 'on side'. The funders cannot be forgotten. The project is funded by a variety of sources, who have subtly different motives for providing money. The funding bodies, like the main donor, have no direct executive control over how we develop or run the site, but it would have been foolish, as well as unethical, simply to take their money but do what we wanted, irrespective of their views.

(Dale Treemont)

In fact, the restoration project had progressed very well. It was a success partly because of the way that Dale had involved the various stakeholders in the development. Even while the initial technical survey work was being carried out, Dale and her team had drawn up a list of who they should involve in the project as it progressed, and who they set out to win over with their enthusiasm for the project. This list included the following groups:

- the funding bodies;
- the volunteers who would help to run the site once launched;
- the local population;
- BHRS members;
- traffic authorities and road builders;
- local media organisations;
- suppliers of audiovisual and other equipment;
- local government;
- other heritage groups advising the project;
- the builders restoring the building and preparing the site.

Phase 1 involved the sensitive restoration of literally irreplaceable buildings. We needed a clear vision of how to reconcile historical integrity with commercial viability, and had to make sure that we could rely on the support of volunteers, our members and the community. It isn't surprising that we needed to involve all stakeholders all the way through the project.

(Dale Treemont)

Managing stakeholders during Phase 1

During Phase 1, Dale and her team invited local people to attend meetings, explained the vision and took them to look round the site. Out of these meetings they met people with knowledge of the history of the site and sometimes with a personal connection with the building. A woman in her nineties had worked there as an assistant in the 1940s. More surprisingly, a woman had lived there as recently as the 1980s when her family were homeless. Finding these links allowed the project team to re-examine their interpretation of the building and incorporate real people's stories into the presentation of the building's history.

With the need for so much, often technically difficult, building work, another key group of stakeholders were the builders. Before work started, Dale took all the building staff on the same tour of the site as the various groups of VIPs who provided the funding.

Involving the builders in the project sparked a real interest in the project and the archaeological history of the site. Often they would come across something interesting and tell the foreman, who would involve an archaeologist and so preserve an artefact that might otherwise have been destroyed. They took a real interest in their work, they felt involved.

Dale was keen to make sure that, in order to avoid difficulties through Phase 1, and to maximise its chances of success, each stakeholder group should be treated appropriately rather than all treated the same irrespective of their connection with the project. The approach she took to managing each group was to distinguish between their power to influence the project and their interest in doing so. Groups who had the power to exercise a major influence over the project should never be ignored. At the very least, the nature of their interest, and their motivation, needed to be well understood. But not all stakeholders who had the power to exercise influence over the project were necessarily interested in doing so, and not everyone who was interested in the project had the power to influence it.

We tried to class each group on what we called the power-interest grid.²¹ We put most effort into involving groups who were both interested and powerful, while simply monitoring those groups who were not either. We made sure that those who could potentially harm the project, but were not always interested in it, were kept happy. Those with little power, but who were nevertheless interested,

we kept well informed. As a method of keeping people involved, it seemed to work.

(Dale Treemont)

The project was completed on time and within the original budget. But Dale was particularly pleased with the 'quality' of the finished project.

It may seem like a time-consuming and expensive activity to involve all stakeholders right the way through the project, particularly when they seem to have conflicting needs and interests. Yet, as with many of our projects, it is worth the effort. Looking back, identifying and involving the stakeholders not only allowed the project to be completed on time and within budget, it improved the eventual quality in ways we could not have anticipated.

Phase 2

Of course, we have been thinking about Phase 2 of the development from the start; it isn't a matter of 'OK, that was Phase 1, now for Phase 2!'. For example, the restoration of the buildings themselves will provide the 'servicescape' for the customer experience, after we open. We have already been installing audiovisual equipment into some of the spaces, even though we have not, as yet, commissioned the actual content. It was more convenient to install the equipment during the restoration. But now comes Phase 2 – designing the total customer experience.

(Dale Treemont)

It was always known that Phase 2 might prove both different and maybe more difficult than Phase 1. Both the scale of the site outside the buildings (15 hectares of largely wild grassland) and the nature of the development (BHRS was used to dealing with stately homes, not 'park areas'), made Phase 2 both complex and uncertain. Moreover, even more interest groups had expressed an opinion over how the parkland should be developed. It was clear that some decisions regarding the development of the parkland would have to be made as Phase 2 moved forward.

In fact, as Phase 2 was starting, it had already become clear that different views of how the overall customer experience should be developed were emerging. There had always been a variety of views, but these had been masked to some extent by the imperative of getting the restoration completed.

The issues during the restoration were largely technical, and most of us were happy to leave their resolution to Dale and her team of builders and restorers. The discussion around Phase 2 goes to the heart of what the whole project should represent, and it has opened up a lot of issues.

(Oversight Board member)

Most of the bodies funding the work were primarily concerned that the future of the County Workhouse would be financially secure. They tended to favour developing the parkland in such a way that would generate revenue.

The funders want tea shops, gift shops, plant sales, and I'm sure Ferris wheels and fairground rides if they thought they could get away with it.

(Oversight Board member)

The BHRS officers were most keen to ensure that the whole development was kept within the bounds of what they called 'sensitive restoration'. They wanted the parkland to be restored in a similar manner to the building, perhaps with local farmers working the land in an environmentally sustainable way. The local government representatives wanted the main emphasis of the whole site to be on education.

It is a unique opportunity to present 'living history'. We would like to see some of the space devoted to 'learning areas' for schools, courses run for amateur archaeologists and history enthusiasts, and some community activities.'

(Local authority representative)

Dale was starting to realise that Phase 2 would throw up a whole series of very different challenges.

Questions

1. Who are the main stakeholders in the development of this service, and what is their interest in it?
2. How would you position each stakeholder group on Dale's power-interest grid?
3. Why is Phase 2 of the development looking more difficult? What could have been done to reduce potential problems?
4. Specifically, how would you include the local population in the development of Phase 2?

Further reading



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Notes



- 1 Information taken from IDEO website, see <https://www.ideo.com/case-study/a-holistic-human-centered-approach-to-managing-diabetes-care> [accessed 20 April 2020]
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- 3 Sundbo, J. and Toivonen, M. (eds) (2011) *User-Based Innovation in Services*, Edward Elgar, Cheltenham
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- 5 These categories are based on an early investigation by Professors Steve Wheelwright and Kim Clark, see Wheelwright, S.C. and Clark, K.B. (1992) 'Creating project plans to focus product development', *Harvard Business Review*, March–April. Although it was an investigation into product development, the categorisations have frequently been used in a more general sense to distinguish between types of innovation.
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- 12 This example is based on visits to Singapore Zoo, discussions with staff and material from the zoo's website: www.zoo.com.sg [accessed 20 April 2020]
- 13 Clark, K.B. and Fujimoto, T. (1991) *Product Development Performance*, Harvard Business School Press, Cambridge, MA
- 14 The idea of an open innovation prize is not new; in fact, one could argue that Archimedes' discovery of displacement was a response to an open innovation prize challenge. Then we have the longitude prize, which was set by the British Government in the early 1700s. The Royal Navy wanted a mechanism to establish a ship's location using a sextant and a clock. Roll forward to the twenty-first century, and we have service

sector innovation prizes such as El Pomar Foundation's Awards for Excellence. The award is designed to encourage the creation of high-performing non-profit service networks.

- 15 The information on which this example is based is taken from <https://breatheahr.org/> [accessed 20 April 2020]
- 16 For example, see Kristensson, P., Matthing, J. and Johansson, N. (2008) 'Key strategies for the successful involvement of customers in the co-creation of new technology-based services', *International Journal of Service Industry Management*, 19 (4), 474–491
- 17 Von Hippel, E., Churchill, J. and Sonnack, M. (1998) *Breakthrough Products and Services with Lead User Research*, Oxford University Press, Oxford, UK
- 18 The information on which this example is based is taken from: the Heywood Hill website, www.heywoodhill.com [accessed 20 April 2020]; and Marriott, J. (2020) 'What happened when I took my friends to Heywood Hill for a books consultation service', *The Times*, 15 January
- 19 The information on which this example is based is taken from the DHL website, <https://www.dhl.com/gb-en/home/insights-and-innovation/innovation/innovation-centre.html> [accessed 20 April 2020]
- 20 Gustafsson, A., Kristensson, P. and Witell, L. (2012) 'Customer co-creation in service innovation: a matter of communication?', *Journal of Service Management*, 23 (3), 311–327
- 21 In fact, the power–interest grid is a common method of classifying stakeholders in development projects.

Chapter 15

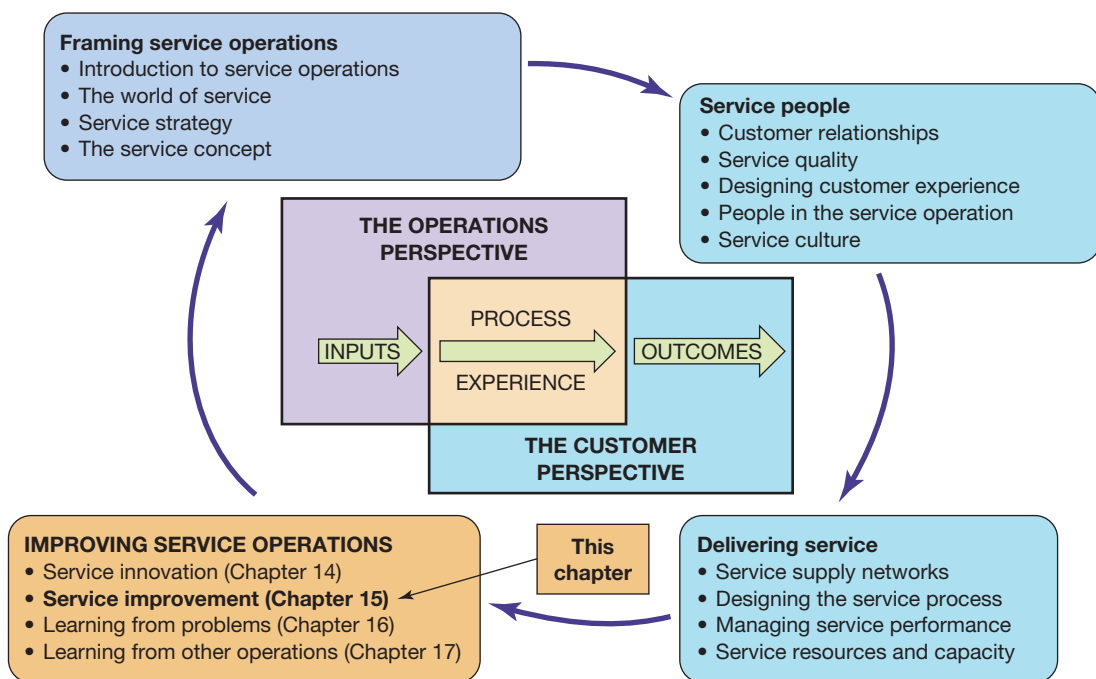
Service improvement



This chapter is about the importance of service improvement. It starts by looking at 'value' as a basis for improvement, and distinguishes between organisations that want to improve to be better than others, and those that want simply to be different. The specific nature of improvement in service operations is examined, together with some of the more common approaches to improvement. The position of this topic in our model of service operations management is shown in Figure 15.1.

Learning objectives

- To understand how 'value' can be used as a basis for improvement
- To be able to explain the difference between improvement to be 'better' and improvement to be 'different'
- To be able to explain the connection between 'better' and 'different' and continuous and radical improvement
- To identify some of the main approaches to continuous improvement
- To describe how improvement can be sustained

Figure 15.1 This chapter looks at service improvement

Introduction

Why would any service operations manager not want to improve their operation? Improvement means creating a better service for one's customers, or creating the service that is better for the organisation, or both. Which is why most service operations do want to get better, not just for the sake of excellence itself, although that may be one factor, but for the impact on customers and the organisation. The problem in giving improvement its true priority is that operations managers are often too busy simply running the operation to devote enough time to improvement. In other words, they are 'too busy doing stuff to think about how stuff is done'. Yet time and effort spent on improvement is an investment, and the good news is that all operations, no matter how well managed, are capable of being better.

It could be argued that the main reason for studying service operations management is that we can learn how to improve our operations. Surprisingly, though, improvement has not always been the central role of operations managers. At one time they were expected simply to 'run the operation', 'keep the show on the road' and 'maintain current performance'. But now the emphasis for the best operations has shifted, quite rightly, towards improvement being the central responsibility of service operations management. In part, this is because of a perceived increase in the intensity of competitive pressures, and in part because new uses of technology have opened up many improvement opportunities. It is also down to a more optimistic view of what is actually possible, and there is no shortage of advice on how operations can and should be improved. But that is also the problem. There is a sometimes bewildering amount of advice, hints, techniques, processes and beliefs that are put forward. There certainly is a whole industry devoted to it. So, it's not surprising that, along with an overload of advice, there is also no shortage of confusion around how businesses should position themselves in this 'universe of ideas'.

This makes the topic of improvement both particularly important and particularly confusing. Yet, an operation will never improve without its operations managers devoting some thought to

how improvement should be managed. Allowing improvement to happen in a haphazard manner can be a sure recipe for disaster. This chapter explains some of the issues that should feature in any service operations improvement efforts. This does not mean that improvement efforts need to be bureaucratic, or over-engineered. But it does mean that the ‘how’ and ‘why’ of improvement needs to be understood and shaped to fit with an operation’s particular circumstances.

Before we describe some of the main approaches to service operations improvement, it is important to consider the question of what is the purpose of improvement – that is, increasing value.

15.1 How can ‘value’ drive improvement?

One issue that occurs in discussion of the various approaches to improvement, is the idea that improvement should increase ‘value’ in some way. And that immediately leads us into definitional difficulties. The idea of ‘value’ has been the subject of debate in many academic areas. Ethics, philosophy, economics and sociology all have their own view of exactly what ‘value’ means. Here, we take the straightforward view that, in service operations, value simply means the ‘worth of something’. However, this still leaves two issues. First, how do we measure this ‘worth’ or value? Second, who is appropriating this ‘worth’ or value?

As far as measuring value is concerned, we have already indicated that service outcomes can be assessed in various ways. In Chapter 1 we defined outcomes as the ‘products’, benefits, emotions, judgements and intentions that a service can provide. In a purely commercial context, all of these will, in the long term, translate into financial benefits, both for customers (otherwise why would they continue to purchase a service?) and for the organisation (otherwise why would it continue to create the service?). In a non-profit context, (as ever) the measurement of value can be more complex and contentious, but still comes down to the idea that creating a service has ‘worth’ to some group of stakeholders. Which brings us to the second issue: who appropriates (gets) the ‘worth’ or value? The answer is that value can be appropriated by any of an organisation’s stakeholders. An improvement can be regarded as successful if it brings benefits to customers, stockholders, staff, suppliers, the environment, or society as a whole.

Ideally, of course, an improvement will bring benefits to all these (and any other) stakeholders. But that is ‘ideally’. In reality, improvement is often a matter of balancing its value across the range of stakeholders. For example, a railway company might upgrade the facilities in its passenger carriages with more comfortable seats, better entertainment and connectivity, etc. But, has this increased value? The passengers are getting a better service, certainly, and if prices are kept the same, customer value has increased. If, however, prices are increased to pay for the extra facilities, some customers may think that value has decreased – preferring the old, less-comfortable, but cheaper service. Similarly, the railway company might regard the improvements to the carriages as providing value only if, in the long or short term, revenues increase sufficiently to warrant the original investment.

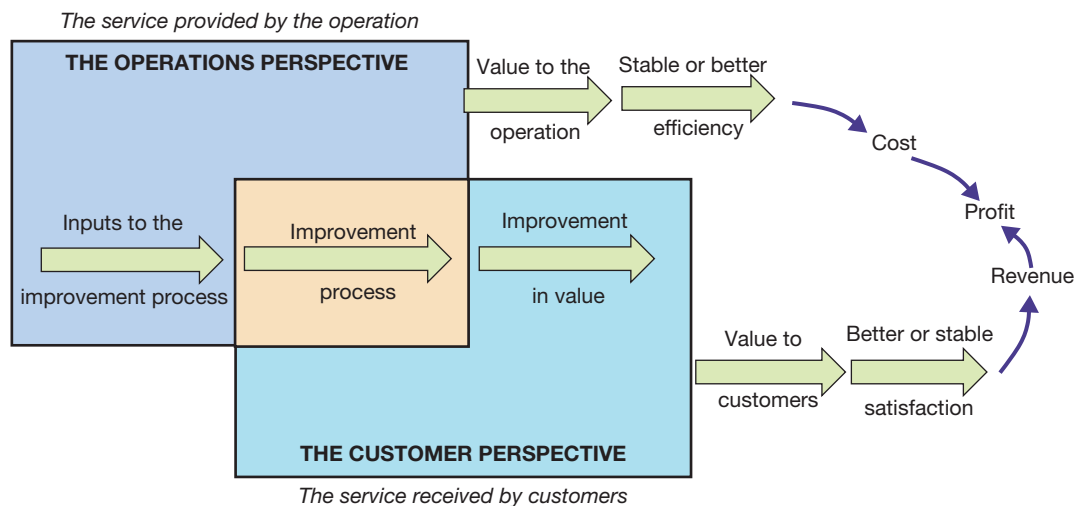
So, in the context of improvement, from both the customers’ and the organisation’s perspective, value is a comparison between the time, effort, cost and investment of making the improvement against the benefits received by stakeholders. Generally, the objective of service improvement is either to:

- increase the benefits to stakeholders, without an unacceptable increase in the effort, cost and investment required by them; or
- reduce the effort, cost and investment required without reducing the benefits to stakeholders.

Figure 15.2 interprets this idea from the perspective of the operation and its customers (a similar illustration could be performed for other stakeholders, but these are the main issues for most service improvement processes). The improvement process itself requires inputs of knowledge and resources from the operation. The process will involve the operation’s customers, either directly or indirectly (inevitably, if one accepts the principle of co-creation). The outcome, if the process is

successful, is an improvement in the value created. The value to customers will result in stable or increased satisfaction that will have a positive or neutral effect on revenues. While, from the operation's perspective, an increase in value will have either a stable or positive effect on efficiency, which will have a positive or neutral effect on cost, and hence profits. Admittedly this is a highly simplified set of causal statements. It does, however, highlight the idea of value as the measure of any service improvement, and reinforce the point that value can benefit both customers and the operation.

Figure 15.2 The improvement process and its intended effect on value, to the operation and its customers

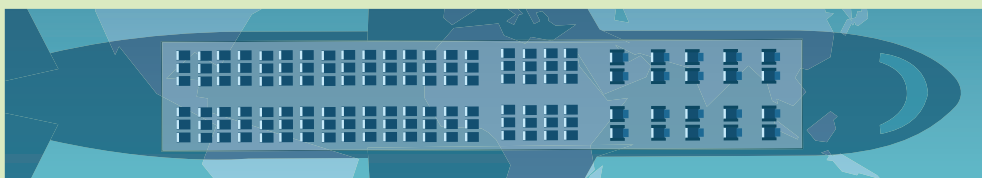


Case example

Using available passenger space in aircraft

Configuring the passenger area of airliners has always posed something of a dilemma for airlines. How many different classes of travel should they offer? How much space to devote to each class? How much space should they allocate to each seat in each class? Finally, how should they price seats in each class as the flight time nears? Underneath all these decisions are value trade-offs. More space for each passenger equals more potential value for customers but fewer seats, so less potential revenue value for the airline. The more classes of seat (first,

business, economy, etc.), the easier it is to segment demand, but at the cost and complexity of maintaining different levels of service (and charging embarrassingly different prices for the same type of ticket). Designing aircraft interiors is a constant trade-off. But at one time the problem was simpler. Most airlines operated a 'twin class' system – first class and economy class. Then came business class, with service standards placed between first and economy. Ideally designed for the burgeoning business travel market, it attracted customers from both the first



Feodora Chiosea/Alamy Stock Vector

and economy classes. British Airways' strategy was typical: on most non-European sectors, BA offered all three levels of cabin service to its customers, with first and business classes particularly popular on long-haul flights – the transatlantic route being the single biggest market. By the mid-1990s, the first class market seemed to be in terminal decline, with many airlines pulling out of the first class product entirely and, instead, concentrating on offering superior service in business class, or positioning a class in between business and first class, such as Virgin Atlantic's 'upper class'.

Sometimes, operations can reposition the value trade-offs of their services to leap ahead of the competition. The first airlines to introduce flat-bed seats in first and business classes discovered this. They figured that the most important factors associated with these classes of travel were, in fact, space-related. The main challenge was to create maximum passenger space within the existing area

and, simultaneously, boost revenues from this segment. Their answer – what some airlines advertised as the 'bed in the sky' seat – transformed itself into a completely horizontal bed. With the help of in-cabin technology, all control facilities were accessible within an arm's length of the passenger seat – audio/video, light switches, call buttons, etc. However, although service levels were enhanced with improved standards of cabin service and cuisine, the more spacious seats meant that cabin size, in terms of seating, was reduced. Service quality was improved, but the cost per passenger was higher. This meant that these airlines had to increase their seat utilisation in order to generate higher revenues from their improved service. In fact, they increased their market share, and revenues in the business and first class segments increased. They had traded-off cost efficiency (it went down) for service quality (which went up), but it paid off because of the extra revenue it brought.

Cost-based value and features-based value

A related idea, and a useful first step in understanding value, is to deconstruct value into cost-based value and features-based value. For example, an organisation could remove waste from internal processes and provide essentially the same service at reduced cost, thereby increasing customer value. Alternatively, the organisation could enhance the features and benefits of the service. The organisation can make the customer pay for these enhancements, but this need not always be the case. When trying to understand value there is also a need to take a 'whole system' perspective. Consider the local government authority that looks in isolation at the costs associated with processing domestic and trade waste. Domestic customers (citizens) could argue that they already pay for waste processing in their local taxes. Accordingly, local taxpayers receive weekly refuse collections and have ready access to local recycling units. In order to cut the costs of running the waste processing service, the authority could consider charging commercial customers a premium for either collection of waste or for dealing with it at recycling units.

An unintended consequence of such a decision is that commercial customers would have a greater incentive to dump waste inappropriately (and illegally). At the level of the whole system, then, we can see that the policy in regard to trade waste is itself wasteful and reduces value. This is because the policy provides an incentive for trade customers to dispose of waste inappropriately, thus resulting in additional rework (recovery of illegally disposed waste) and pushing up costs overall. It is an illustration of the advantage of taking a whole-system view, and of broadening the perspective of waste and, in turn, value.

Some academics recommend a more radical re-conceptualisation of value. For example, in healthcare processes, it has been claimed that often much of what is done is of little or no value to the patient.¹ Therefore, many activities are unnecessary and can be eliminated without negatively affecting patients. Many other activities, although not contributing directly to value are, however, necessary. But even here there are opportunities to reduce waste. For example, a blood test shows how this might work. If one asks the question, 'what really matters to the patient who is having his or her blood tested?' – is it the laboratory, or the technician, or the process? In fact, it is 'none of the above'. Patients actually care about accurate test results, just as they care about having a

thoughtful and experienced clinician interpret their test results so that appropriate treatment can be prescribed. That is the crucial part of the process for the patient. All other activities, from travelling to the lab, to waiting for the technician, to the needle stick, to waiting for the results, is of no value. Some of the process may be necessary, but everything else should be carefully examined to see if it can be eliminated.

Find out what customers value

Finding out what customers value is at one level straightforward but, again, there are potential pitfalls. The straightforward part is ‘asking’. We can ask customers in many ways what they want of our service; surveys and focus groups are examples of some of the approaches we could take. The art of surveying customers is relatively mature, and there is no need to repeat it here. However, one pitfall is worth a mention, and that is the selection of customers to survey. For example, it would be easy to survey current customers of a service to ascertain their notions of value, but these responses would not be as interesting – and valuable – to the service organisation as the view of non-customers. Existing customers, by definition, like what is offered currently, and satisfying them slavishly long term might take the service organisation up an ‘evolutionary dead end’. In many contexts, this problem is referred to as the innovator’s dilemma,² wherein organisations become trapped by the guarantee of revenue from current customers and ignore potential future revenues from non-customers.

One could ask non-customers to indicate why they don’t use a service and, in so doing, learn about ways in which one could modify the service concept to accommodate them. Another pitfall here is the ‘lack of vision’. Sometimes customers cannot internalise and understand a new value proposition until they engage with the ‘live’ service. The service organisation therefore has to at least pilot a new service to test the customer response, but also take a gamble now and then.

15.2 Should improvement aim to be better or different? Incremental or radical?

There can be fundamental differences between the strategic objectives that operations have as they shape their improvement efforts. Not necessarily in terms of the various aspects of performance that they may want to enhance, but rather in how they want to be positioned in comparison with the rest of the sector in which they are operating. There is an essential difference between whether an organisation wants to operate in broadly the same way as others (for example, its competitors) but do it better, or, alternatively, whether it wants to operate in a fundamentally different way.

Case example Four Seasons and Zara³

Both the Four Seasons Hotel Group and Zara, part of the Inditex Group, are successful service businesses. And both are successful largely because of the way they run their operations. But there is a clear distinction in the underlying philosophy between why and how these businesses have reached their market-leading status.

Four Seasons

The Four Seasons Hotel Group has properties all over the world. Famed for its quality of service, the group has won countless awards in this area. From its inception, the group has had the same guiding principle: ‘to make the quality of our service our

competitive advantage'. The company has what it calls its 'Golden Rule' – 'To treat others as we'd wish to be treated ourselves' – a simple rule that guides the whole organisation's approach to quality. 'We are always looking for better ways of serving our guests. All employees are empowered to use their creativity and judgement in delivering exceptional service and making their own decisions to enhance our guests' stay', says the company. Four Seasons believes that its greatest asset is its people. It pays considerable attention to selecting staff with an attitude that takes pride in delivering exceptional service. Extensive training programmes and career development plans are designed to support the individual needs of employees, as well as operational and business demands. The company's 'Guest History' database is vital in helping to achieve this: all preferences and specific comments about service experience are logged on the database. Every comment and every preference is then discussed and planned, for every guest, for every visit.

Zara

The fashion retailer is known for its 'virtual' vertical integration. It offers cutting-edge fashion at affordable prices because its operating model exerts control over almost the entire garment supply chain (retailing, design, purchasing and logistics). Low inventory in the stores means that they are reliant on regular and rapid replenishment of newly designed products. Zara minimises the risk of oversupply by keeping production volumes low at the beginning of the season and reacting quickly to orders as new

trends emerge. Design takes place at the company's La Coruña HQ, where design inspiration comes partly from its stores passing on customer reaction. Design teams work on next season's designs while simultaneously and continuously updating the current season's designs. Zara manufactures far more of its products than its competitors, in its own network of factories. Speed is an overriding concern for Zara's integrated logistics system, with fast feedback between its shops and its headquarters being of paramount concern.

Better versus different

Four Seasons is a very successful company, but it basically does the same thing as its competitors, *in broadly the same way*. Visit a Four Seasons hotel and it is, in its essentials, like any other hotel operation in that it keeps its guests warm and dry and looks after their various needs, but it has significantly refined the idea of what quality of service can mean for its target market. The company has succeeded in pulling away from competitors, not by being radically different, but by refining common operations practices. Contrast this with Zara. Again, it is successful largely because of the way it organises its operations. However, in Zara's case, the path to operations success was by breaking with what was common practice in the industry. It was convinced that it needed to be different from competitors, at least in its operations practice. If Zara has had a major effect on the whole of fast fashion, it has developed its (largely vertically integrated) supply chain in a way that no competitor has (yet) managed to emulate.

Better or different defines your improvement trajectory

This distinction between better and different is important, not only in a strategic sense but also in defining two approaches to how operations improvement can be tackled, and two types of improvement trajectory. Assuming that an operation is initially positioned as being neither better than nor different from its competitors, it has two choices. The first is to focus on being different from competitors, which will require it to take a radical path, challenging the underlying justification for how operations are organised and creating an original model of how operations resources and processes can be arranged and run. Alternatively, it could improve in a largely incremental manner, accepting that its fundamental way of working will remain essentially unchanged, but moving progressively towards a better use of its resources and processes.

Of course, like most radical change, there are inherent risks to the radical trajectory. The example we have used here, Zara (and we could also have included IKEA or Amazon, for example), has been successful in its attempt to create a novel operations model. But there are many attempts that we will not have heard of because they failed before they could offer any improvement. Their radical operations models failed. Of course, it may be possible for operations taking the more

incremental improvement path to finish up in the same place as a successful radical trajectory. Incremental improvement may succeed in moving an operation to the point where its superiority in performance over its competitors is so great that starting to radically change its operations model becomes less of a risk.

Cautious and continuous, or radical and innovative?

If an organisation's overall strategic objective stresses 'being better', it implies a more gradual, incremental type of improvement, with many relatively small changes. On the other hand, 'being different' implies a radical and innovative style of improvement with fewer, but larger, changes.

Cautious and continuous

Continuous improvement (CI) is often referred to as *kaizen*. *Kaizen* is a Japanese phrase that loosely translates as 'making things better'. In the context of operations, *kaizen* is about continual attention to and improvement of processes. The phrase is as much philosophical as it is practical. *Kaizen* had its beginnings in post-war Japan, and more widespread adoption of continuous improvement methodologies did not take place until the early 1990s. Continuous improvement involves modest but continual changes to an existing process, whereas step change seeks radical changes – indeed the total redesign of existing processes coupled with a significant improvement in performance. The benefits from small, successive continuous improvements are expected to be attained over a long period of time, unlike radical change, which aims to create major improvements in the short to medium term.

If an organisation chooses gradual, incremental improvement it may not be being cautious simply for its own sake. Rather, it sees small improvements as having one great advantage over more radical ones – that one can follow them relatively painlessly with other small improvements. If one treats improvement as truly continuous, it can become embedded as the 'natural' way of working within the operation. And although there is no guarantee that such small steps towards better performance will develop a momentum, the whole philosophy of continuous improvement attempts to ensure that it does. In fact, it is the momentum of improvement rather than the rate of improvement that is important. It does not matter if successive improvements are small; what does matter is that every month (or week, or quarter, or whatever period is appropriate), some kind of improvement is genuinely made. It is a style of improvement that essentially exploits the potential of the resources and processes that already exist. And because of this, its benefits tend to be relatively immediate and predictable, as well as fitting better into an existing strategic framework.

Radical and innovative

Choosing radical, innovation-based improvement is a very different proposition. It assumes that one's main vehicle of improvement is a major and dramatic change in the way the operation works. The impact of these improvements will be relatively abrupt and will represent a step change in practice (and hopefully performance). An organisation will be more concerned with the exploration of new possibilities and will have to search for, and recognise, new mindsets and ways of doing things. This type of improvement is rarely inexpensive, usually requires significant investment, often disrupts the ongoing workings of the operation and frequently involves changing processes and process technology. It will probably involve experimentation, and it can also be risky. Big change usually means moving to a new set of operating practices and/or technologies, which in turn means increased uncertainty, and introducing a whole pack of potential troubles and tribulations. Benefits are likely to be long term and possibly difficult to predict.

So, continuous improvement (*kaizen*) is an evolutionary approach to operational change, and radical change, in contrast, is a revolutionary approach concerned not with amending processes but totally reinventing them. Table 15.1 summarises the key differences between these two approaches.

Table 15.1 Key differences between continuous and step-change strategies

	<i>Continuous change</i>	<i>Step change</i>
Existing process	Little change	Redesigned
Improvement expected	Modest	Substantial
Benefits attained	Long term	Short term
Change driven by	Employees	Senior management
Senior management time/effort	Small	Substantial
Business risk	Small	High
Capital expenditure	Small	Substantial
Use of information technology	Little	Significant

Can improvement be both continuous and radical?

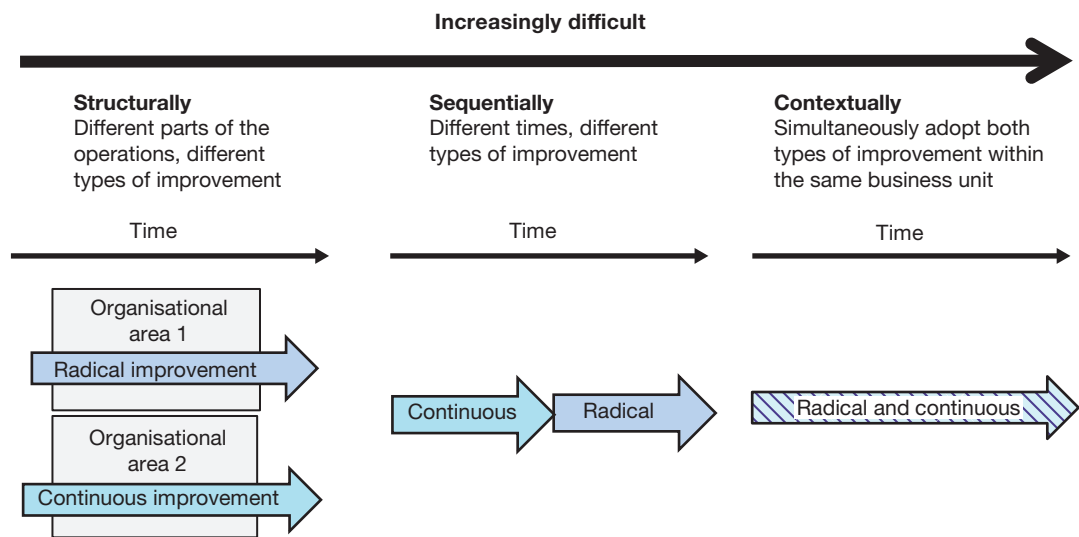
Can an organisation adopt a position in between the two extremes? Pure continuous improvement and pure radical improvement are clearly the two ends of the spectrum. Can an organisation be both continuous and radical at the same time? It is a question that has caused considerable debate, but the answer is, probably, ‘yes but it’s difficult’. The skills, attitudes and capabilities needed to be successful at the slow, patient and incremental approach to improvement tend to be different from those that are needed for the radical exploration of innovative ideas. In fact, the two interpretations of improvement may actively conflict. A focus on creating and thoroughly exploring totally novel choices will probably eat up the managerial time, effort and finance that could otherwise be used for continuously fine-tuning existing ways of doing things. Equally, if existing processes are incessantly improved over time, what is the motivation to experiment with new ideas? In other words, the two approaches to improvement may compete both for resources and for management attention. So, is it just not possible to have both a continuous and a radical style of improvement at the same time? This is where the idea of ‘organisational ambidexterity’ comes in.

Organisational ambidexterity

Organisational ambidexterity is the term that has been used to indicate an organisation’s ability to address two organisationally incompatible objectives equally well. In this case, it means the ability of an organisation to exploit existing processes in a continuous manner while exploring more radical innovative solutions as it seeks to improve.⁴ For example, a service may want to compete in mature markets where continuously paring away at costs by improving existing resources and processes is important. Yet, at the same time, it may want to be competing in new markets where novelty, innovation and experimentation are valued.

Three ways to achieve both types of improvement have been proposed (illustrated in Figure 15.3):

- *Adopting different types of improvement in different parts of the operation.* There is some evidence that those businesses that did succeed in achieving some degree of organisational ambidexterity tended to organise separate operations that had very different strategies, structures, processes and cultures, and which focused on either continuous improvement or radical innovation. It is sometimes called ‘structural ambidexterity’.
- *Adopting different types of improvement at different times.* The basis of this idea is that different times (and therefore conditions) will demand different responses from an organisation, and that means different types of improvement. Sometimes markets and competition require innovation,

Figure 15.3 Three potential ways of achieving organisational ambidexterity

and sometimes more steady consolidation. So, for example, as a product or service moves through its life cycle from its introduction through to maturity, it may move sequentially from depending on high levels of innovation and improvement at the beginning of its life, to progressively requiring more steady (and probably cost-based) continuous improvement as it matures.

- *Accepting the challenge of mixing both types of improvement simultaneously.* Both the previous approaches to mixing the two types of improvement rely on separating them, either organisationally or in time. This third idea (which is called 'contextual ambidexterity') accepts that sometimes organisations just don't have the luxury of compartmentalising the two types of input, so they must just have to get on with doing both at the same time. It will lead to conflicts in resource allocation and in attitude, perhaps, but this approach argues that one should 'embrace the conflicts'. Let the ambiguity and the paradoxes implicit in mixing both types of improvement provide the creative tension that improvement requires to succeed.

15.3 How is improving service operations different?

As with many topics in service operations management, the subject of improving service operations shares many issues with operations improvement in general. In fact, all the major approaches to improvement, as we shall see later in this chapter, apply equally well to service or any other type of operation. Yet, it is worth exploring some of those characteristics that apply to many service operations in particular and examining what implications they have for improving services specifically. Once again, the IHIP characteristics can help. Table 15.2 lists the IHIP characteristics and identifies some of the challenges and improvement-related issues that are implied by each characteristic:

- *Intangibility.* It can be difficult to define the 'boundary' of a service, so what is to be improved? Yet, if there is any confusion as to what is included in a service, there will be confusion as to what should be improved. So, the boundary between what is included in a service and what is not, and in what circumstances, becomes an improvement issue in its own right. For example, a lawn treatment service provides regular treatments to households (four times a year) for a set fee after each treatment; the operative gives advice to the householder, but how much? What is the borderline between offering a little general advice ('you're cutting it too short') and

Table 15.2 The IHIP characteristics and some of the implied challenges and improvement-related issues

IHIP characteristic	Challenge	Implications for improvement
Intangibility – output is largely non-physical	It can be difficult to define the ‘boundary’ of a service, so what is to be improved? Will ‘improvement’ simply lead to ‘creep’ in the definition of the service?	Where does the boundary of a service lie, and under what circumstances? Which has the most impact, improving the tangible or non-tangible elements?
Heterogeneity – high received variety, difficult to standardise	Some degree of standardisation usually required	The underlying principles of improvement often assume standardisation
Inseparability – production and consumption are simultaneous	Can have an effect on how long customers have to wait for service	Improvement often depends on demand–capacity balance
Perishability – output is difficult to store	Cannot ‘rework’ a pure service, correction depends on recovery	Utilisation can be a key issue

- a fuller consultation that could be charged for? Clarifying this decision is an improvement to the service. But so is simply increasing the amount of advice.
- *Heterogeneity*. When every service could be perceived as different for each customer, what does improvement mean? Does improvement in the service mean different things for different customers? To some extent, yes. Customers could ask for elements of service that are difficult to predict and may be outside the operation’s capabilities. The emphasis may have to shift to managing customer expectations in order to move their view of the service closer to that of the organisation. At the same time, staff will require training to cope with the possibly wide variety of requests. There may even have to be a mechanism to transfer ‘non-standard’ customers to a more appropriate service. In such circumstances it can be difficult to achieve significant cost efficiencies that result from standardisation.
 - *Inseparability*. When production and consumption are simultaneous, the level of service experienced by a customer is, to some extent, dependent on the balance between the demand for the service and the capacity of the operation to satisfy it. The implication of this is that the level of service received by the customer will always, to some extent, be independent of the skill and capability of the individual service provider. For example, a teller at a retail bank may have superb social and customer relationship skills, together with extensive knowledge of how to serve customers, but a sudden increase in demand could mean that customers have to wait a long time to be served. The perceived service (and therefore the focus of any improvement) is not a function only of the transaction itself, but also of the operation as a whole – particularly its capacity.
 - *Perishability*. If services cease to have value after a relatively short time (perishability), improvement often has to emphasise flexibility. After all, any improvement to the delivery of an individual service has little time to be applied. For example, a five-star hotel wishes to improve its occupancy rate (the proportion of rooms sold per night). As is common with this type of service, the reservations desk of the hotel may receive enquiries relatively late in the day, from potential customers willing to rent a room for a substantial discount. An improved set of decision rules for the desk, together with the authority and flexibility to make decisions, could significantly increase occupancy. But note, the improvement is again one of operations practice rather than any change in the design of the transaction *per se*.

Implications for service operations improvement

It is not only the increased effect of the IHIP characteristics that make service improvement distinctive. There are other factors, some derived from IHIP, some not, that should be taken into account.

Coping with high customer contact

The high degree of customer contact that characterises many service operations has a clear impact on improvement, if only because any change in service operations practice cannot ignore its impact on customers. Whereas operations managers in low-customer-contact operations, such as processed food manufacture, can legitimately focus on improving their internal processes more or less independently of the immediate impact on customers, high-contact service operations cannot. Of course, the processed food producer will not entirely ignore the impact of any change on its customers, but those customers would only notice a change if it changed the product. In high-contact services, the customer will probably see any change directly. This has two important implications for operations improvement.

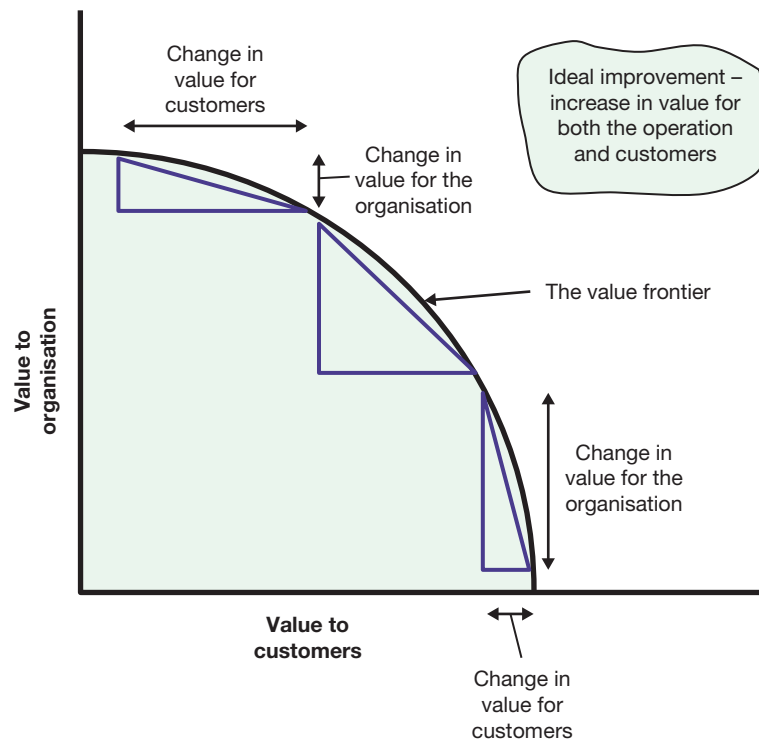
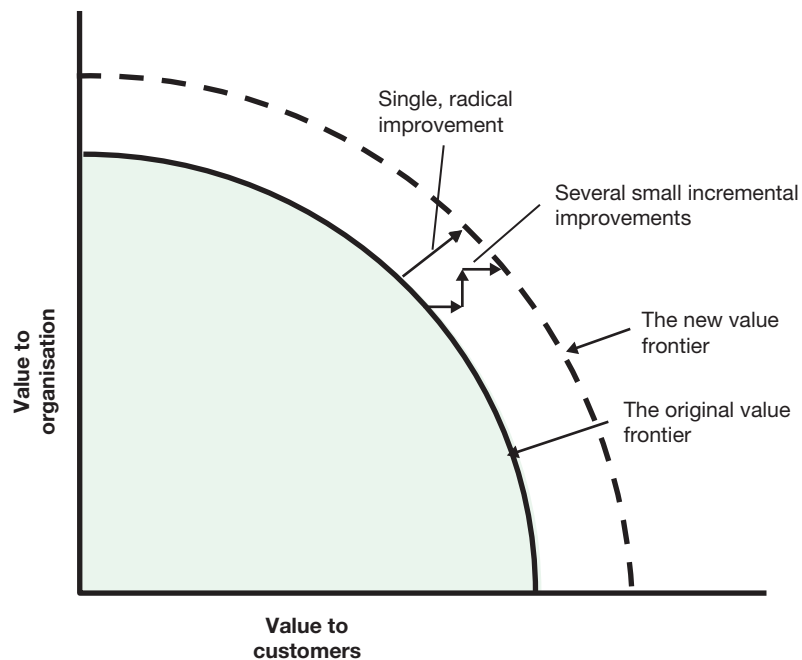
The first is concerned with the process of improvement itself. Any potential improvement to any process in a service operation must be evaluated in terms of its effects from both the operations and customer perspectives, as we illustrated in Figure 15.2. The risks of considering improvements to customer service without fully understanding their impact on operations efficiency, or considering improvements to operations efficiency without fully understanding their impact on customer service, are just too great. Even back-office processes are likely to have a closer impact on customers than, say, the food processing operation.

The second implication is that customers are likely to be aware of any changes *as they occur*. They can probably witness, first hand, the operation trying to improve. This is important, because very few changes to operations practice, even if they eventually give a superior service, go right at the very first try. Customers, therefore, will be witness to all the fumbles, mistakes, trials and learnings that are fundamental to making improvements. Our processed food producer can, to some extent, make its mistakes in private. It is a privilege not available in high-contact services. So, if customers will witness mistakes as improvements are implemented, service operations managers need to do two things. First, they must accept that implementation mistakes really will be visible and that customer perceptions are important. While apologising for ‘any inconvenience’, being honest with customers and taking them into one’s confidence and explaining the reasons for any disruption can help to defuse customer dissatisfaction. Second, this does not excuse a lack of planning prior to any implementation. Changes to high-contact services need effective and thorough implementation planning more than other types of operation.

Managing the trade-offs

This duality of objectives, incorporating both customer and operations perspectives, means that service improvement very frequently involves some kind of trade-off between value from the operations perspective and value from the customer perspective. But not always. The ambition of most service operations managers is to create some kind of ‘win-win’ between operations efficiency and value-added services. And it can be possible to discover ways to enhance the customer experience even while spending or investing less. For example, a motor vehicle insurance company might encourage its customers who are involved in an accident to report it at the scene. The company could immediately send out one of its (or, more likely, an agent’s) vans, both to assist the customer and to assess the damage. This both saves the company money in its claims department and provides customers with a high level of responsiveness.

However, many potential improvements to service operations do require trade-offs to be managed. This is shown in Figures 15.4 and 15.5. Figure 15.4 shows the nature of what is sometimes called ‘the value frontier’. Ideally, an improvement should give large increases in value for both the operation and its customers. However, the resource and process constraints present in all operations will impose a limit on how far an improvement can move value. At the extremes of the frontier, any improvement that requires some kind of sacrifice of one type of value for the other (which is the nature of a trade-off) either results in a large change in value for the operation with only a small sacrifice in customer value, or a large change in value for the customer with only a small sacrifice for the operation – both options that are likely to be attractive. Which is why operations managers might be tempted to go for a balance between operations and customer value, somewhere in the middle. Improvements of this type are repositioning on the value frontier.

Figure 15.4 Repositioning on the value frontier**Figure 15.5** Overcoming the trade-off, either by a single large-step improvement, or a series of smaller increments, possibly involving small improvements in either operations or customer value

By contrast, a more positive and ambitious approach to improvement is to attempt to achieve both, either through a single large-step improvement, or a series of smaller increments, possibly involving small improvements in either operations or customer value, as shown in Figure 15.5. In effect, this involves overcoming the trade-off that is implicit in the efficient frontier curve, as opposed to simply repositioning. This distinction between positioning on the value frontier and increasing operations effectiveness to reach the frontier is an important one. But so also is the distinction between overcoming the value frontier with a single or few radical improvements and doing so more incrementally – an issue that we examined earlier in the chapter.

Exploiting and coping with labour-intensive processes

Many service operations are often labour intensive. This makes them more susceptible to variability (dealt with next), but also provides a distinct advantage. Combine service staff with frequent contact with customers and you have a group of people who are particularly well placed to understand the type of trade-off we have discussed and (more importantly) how these could be overcome. Not only are front-line employees in service organisations often the first and only point of contact between the operation and its customers, their position also allows them to obtain first-hand customer information. For example, airlines such as Singapore Airlines and JetBlue are known for their use of front-line staff teams to generate improvement ideas. But generating such improvement ideas and moving them through to implementation needs organisational support. Staff need to recognise that their organisation is supportive of their values and welfare. Moreover, they need to be assured that their contributions are valued and likely to produce real improvement. The organisational culture should promote and value an exchange of new service ideas, suggestions and solutions.⁵

Variability

Variability is a particularly important characteristic of service improvement. As we noted earlier, labour-intensive service operations are prone to variation in both activities and performance. Because customers are often present when services are created, service failures or mistakes are difficult to disguise. Also, because services are intangible, customers may perceive variability of outcome even when there is none. Thus, heterogeneity means that all interactions between staff and customers will be subject to some degree of variability, which is important for service customers because it can produce service outcomes that fail to meet customer expectations. (Variability can also produce outcomes that exceed customer expectations, more of which later.) And variations can be complex to manage and, outside an acceptable degree of tolerance, can result in customer dissatisfaction. Combine this with increasing complexity in service delivery, for example services such as retail or banking being offered through multiple platforms, and delivering constant service quality over time and across all platforms becomes difficult.

So, because service variability may create uncertainty in the perception of the customer, it is possible that it will negatively affect the customer's view of service quality and the value of the service. The possibility of variability resulting in below-expectation outcomes is particularly problematic because customers' utility functions are normally steeper for losses than gains. In other words, customers feel worse about losses than they feel better about gains.⁶ Over time, this produces an aversion to risk and uncertain outcomes. Which means that services that fail to meet expectations are likely to have a larger negative impact on customers than services that exceed expectations. This is the justification for the control of variability being a key ingredient in service improvement. It is also why improvement approaches that stress the need to control variability (such as Six Sigma, which we shall deal with later) are particularly appropriate for services.

Sometimes service variability can be positive

In some contexts, service variability might be seen as a good thing; there are many services where an element of the customised and 'random' will be attractive to customers. Consider, for example, the context of a holistic therapy clinic. The clinic provides alternative therapy services such

as ‘hot stone massage’, reiki, NLP counselling and hypnotism services. If you are paying for a therapy session, then you might resent a standardised package. You will likely want the therapist to be responsive to your particular needs. This might mean that the therapist even makes the odd mistake in the ‘experimental’ dialogue that is the therapy. Far from being upset at the failed ‘experiments’, you might be pleased at the honesty of the ‘investigation’. By contrast, any variability in the appointment scheduling process might be something you will resent; you would want therapy to start promptly. The point here is that process variability with its associated service variability is a factor for all services, even ‘soft’ and human-centric services. Variability is not necessarily a bad thing either. The main lesson is that variability should be the subject of design choice, and not an accident. Service organisations need to look at their processes and make informed decisions about which to control, and to what extent.

Coping with variability

There are methods of reducing variability through control mechanisms of various kinds (see the later section on Six Sigma) but there are costs associated with controlling variability. It could be possible that the costs of accepting variability are much lower, especially in the short term. But, if an operation decides that variability should be controlled, standardisation is a common pursuit of service operations – it simplifies processes and makes them easier to manage (and improve). A common method of achieving this is the use of service process manuals that contain a set of instructions or directions for performing day-to-day operations. It is one of the most cost-effective ways of achieving a certain degree of process standardisation. Although not reducing human involvement, it avoids service staff digressing too far from prescribed process steps while delivering services.

While the expected benefits of service process manuals are clear in that they increase consistency of service outcomes, they can, if badly designed, be too limiting. Some degree of flexibility is usually needed (otherwise the operation might as well use an algorithm to interact with customers). The problem often lies in giving guidance to staff that provides some degree of consistency while also allowing some flexibility. Of course, if an automated solution is preferable and appropriate, using something like an algorithmic decision-making process may be preferable. Many service organisations have achieved process standardisation by using process automation. Such solutions as self-checking airline ticketing kiosks and voice response have standardised service delivery processes and eliminated variations in processes, while at the same time reducing staff costs and increasing productivity of service process.

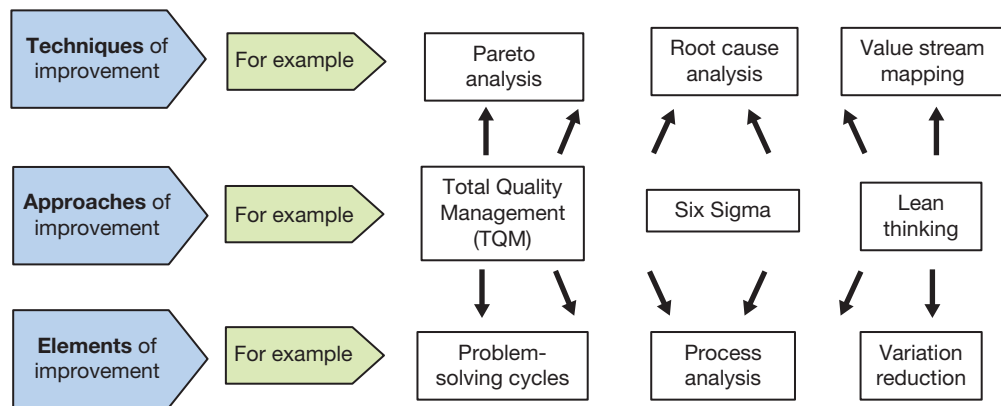
15.4 What are the main approaches to improvement?

One of the consequences of the interest in operations improvement is the plethora of advice available, which has led to some confusion. A good part of this confusion is because three distinct, but related, aspects of improvement are often mistaken for each other (see Figure 15.6):

- Broad *approaches* to improvement – these are the underlying sets of beliefs that form a coherent philosophy and shape how improvement should be accomplished – for example, Six Sigma and lean thinking. Yet, as we shall see later, these various approaches are not mutually exclusive. Very often they draw upon the same set of improvement elements.
- Improvement *elements* are the individual primary ideas of what improves operations. They could be called the ‘building blocks’ of improvement and include such ideas as reducing process variability, synchronising process flow, using problem-solving cycles and waste identification.
- Improvement *techniques* – there are many ‘step-by-step’ techniques, methods and tools that can be used to help find better ways of doing things. Some of these are mathematically based, but the most popular are usually more qualitative, such as cause–effect analysis, or brainstorming.

The distinction between the various approaches to improvement are not always clean. In fact, the approaches often have both elements and techniques in common, even if some are particularly associated with one approach or another. Yet, although different approaches may share some common

Figure 15.6 The various approaches to improvement share many of the same elements and techniques



elements and techniques, they each have their own individual set of attitudes to what is important in improvement. The following sections outline some of the most common approaches to improvement: total quality management (TQM), Six Sigma, business process re-engineering (BPR), lean thinking and lean Six Sigma. The intent is not to give an in-depth exploration of each approach; that is beyond the scope of this text. However, because these approaches are all used extensively in service improvement, it would be remiss not to provide an overview.

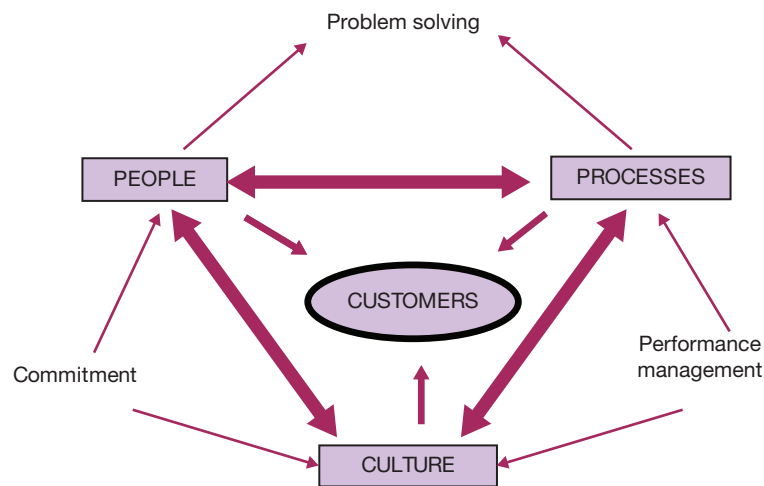
Total quality management (TQM)

Total quality management (TQM) is one of the best-known approaches to improvement and has had a major impact on organisations by putting the customer at the heart of quality decisions and improvements. TQM was developed in the 1950s by Armand Feigenbaum,⁷ although it has lost some of its cachet over the last few years. Its peak of popularity was in the 1980s and early 1990s, and it has suffered from something of a backlash in recent years, but it is a mistake to dismiss it too readily. The general principles embraced by TQM are still, quite rightly, hugely influential. In particular, the total (or holistic) view of TQM is both powerful and attractive. At its simplest, it provides an outline ‘checklist’ of how to go about operations improvement. It is also capable of being developed into a more prescriptive form.

It should be made clear, however, that TQM is not a ‘programme’ or an activity with a definitive start and end, but simply good management practice. However, TQM does require a ‘thought revolution’ in management.⁸ The two foundation stones of TQM are customer focus and total involvement:

- *Customer focus.* The TQM philosophy is centred on customers, meeting their expectations in order to retain those customers and capture others and thus enhancing profitability and meeting the strategic needs of the organisation. This necessitates identifying which customers the organisation wishes to serve, understanding their expectations and ensuring that all systems, procedures, activities and culture are focused on meeting those needs.
- *Total involvement.* The main difference between the more traditional approaches to quality and TQM is the word ‘total’. TQM is based on a culture of continuous improvement, which is shared and enacted by everyone in an organisation, all working with a single purpose of improving what they do.

TQM as a continuous improvement activity has a great deal to offer service organisations; many of its elements are now traditional activities of successful service operations, though not necessarily parading under the banner of TQM. The key elements are expressed diagrammatically in Figure 15.7.

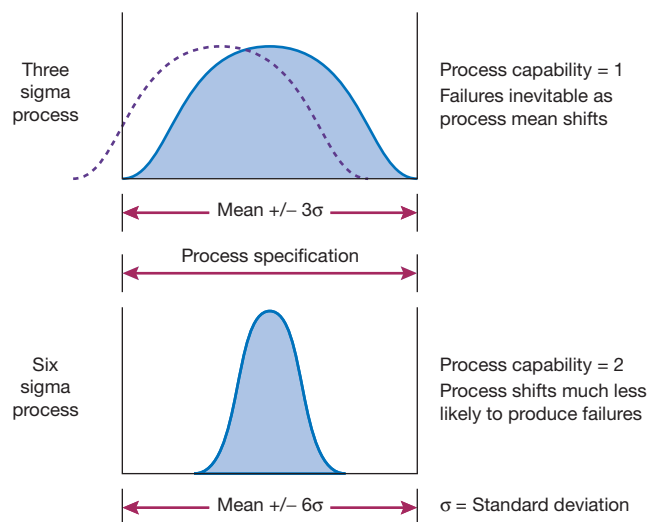
Figure 15.7 The key components of total quality management (TQM)

The three cornerstones of TQM concern people, processes and culture. People (employees) are responsible for and best placed to drive change, and this is encouraged by an appropriate people-centred, supportive and improvement-based culture. Employees are given the responsibility for improvement, and have an understanding of the processes to which they contribute. To support this, there is training in the use of quality tools and techniques – for example, process mapping and statistical process control (see Chapters 11 and 12). Performance management systems provide feedback on actions taken and information is provided at the level of the operator. Top-management commitment is essential to the successful implementation of TQM because it requires changes organisation-wide and a supportive and appropriate culture (see Chapter 9).

Six Sigma

Motorola Inc. is generally credited with the invention of Six Sigma.⁹ Bill Smith, an engineer in Motorola's communications division, introduced the concept in order to deal with increasing warranty claims. This continuous improvement approach was then championed by Bob Galvin, the CEO of Motorola, and Six Sigma has become part of the company's culture to the extent that the Motorola University provides training programmes as a major part of its activities. Alongside Motorola, Jack Welch and GE also became major advocates of the Six Sigma philosophy. These early users figured that the best way to eliminate errors and defects was to make sure that design specifications were tight and that processes exhibited little variability relative to design tolerances. The name Six Sigma was used to indicate that the natural variation of processes should be half their specification range. But the name proved far more attractive than its strictly technical interpretation. It has a 'scientific' feel to it.

However, since its introduction in manufacturing, Six Sigma has also been used extensively in service settings. For example, a local government agency reduced the time it took to complete the process to obtain a construction permit, by simplifying the online process in such a way as to reduce variability, and eliminating unnecessary steps. The process was speeded up, complexity reduced, quality improved and cost lowered. In essence, Six Sigma is focused on reducing variance in processes. The Six Sigma target is 3.4 defects per million opportunities (DPMO). Imagine you are running a contact centre with 6,000 customer transactions per day. With what seems like a low problem rate of 1 per cent, you will still be upsetting 60 customers a day. At the Six Sigma rate, in theory, you would upset just over one customer a year! The statistical basis for these figures is covered thoroughly in specialist publications, but summarised here in Figure 15.8.

Figure 15.8 Process variation – comparing three sigma and Six Sigma processes

Each process may have a specification. For example, a hotel may promise a room-service breakfast will be delivered between 7.00 a.m. and 7.15 a.m. rather than exactly at 7.10 a.m. This allows for variability in the process and fluctuations in supply and demand. A three sigma process (see Figure 15.8) means that the distribution of outcomes only just fits the process specification. In practice, this is not good enough, as the process distribution may shift – perhaps as new items on the breakfast menu are added, or new staff are employed. This explains the move to the Six Sigma target, because changes in the process are far less likely to impact on customers.

Clearly, there are some questions to be answered. It may not be technologically or physically possible to meet the Six Sigma ideal. Critics of Six Sigma suggest that it is not economically viable in many cases. That said, the approach is worth considering for customer-critical processes – those activities that have a significant impact on customer satisfaction. Service operations that have used this approach tend to be those with large volumes of standard transactions, such as back-office functions in financial services.

Superficially, Six Sigma is a set of tools and techniques aimed at understanding and improving processes. It has become a major industry in its own right, with clearly defined structures and training courses. It claims to be more oriented to business results than TQM, and is facilitated by those who have been through accredited training programmes to become master black belts (expert consultants who have completed a number of Six Sigma projects), black belts (who have completed at least two projects and have leadership and process training) and green belts (who are part-time project members, trained by the black belts).

Six Sigma is clearly more than a statistical process control approach. Motorola now refers to it as a ‘four-step high-performance system to execute business strategy’. These four steps are:

1. *Align.* Six Sigma projects must be aligned to business priorities driven by a balanced scorecard approach, focused on the organisation’s bottom line.
2. *Mobilise.* Customer-focused project teams are empowered to take action, sponsored by senior managers acting as process champions.
3. *Accelerate.* Project teams are coached and encouraged to ensure that their projects meet specified milestones, rather than allowing them to drift.
4. *Govern.* Leaders actively sponsor projects and share best practice with other parts of the organisation.

Case example

Six Sigma at Wipro¹⁰

There are many companies that have benefited from Six Sigma-based improvement, but few have gone on to be able to sell the expertise that they gathered from applying it to themselves. Wipro is one of these few. Wipro is a global information technology, consulting and outsourcing company, with 145,000 employees serving over 900 clients in 60 countries. It provides a range of business services from 'business process outsourcing' (processing for other firms) to 'software development', and from 'information technology consulting' to 'cloud computing'. (Surprisingly,

for a global IT services giant, Wipro was actually started in 1945 in India as a vegetable oil company.) Wipro also has one of the most developed Six Sigma programmes in the IT and consulting industries, especially in its software development activities, where key challenges include reducing the data transfer time within the process, reducing the risk of failures and errors and avoiding interruption due to network downtime. For Wipro, Six Sigma simply means a measure of quality that strives for near-perfection. It means:

- having products and services that meet global standards;
- ensuring robust processes within the organisation;
- consistently meeting and exceeding customer expectations;
- establishing a quality culture throughout the business.

Individual Six Sigma projects are selected on the basis of their probability of success and are completed relatively quickly. This gives Wipro the opportunity to assess the success and learn from any problems that have occurred. Projects are identified on the basis of the problem areas under each of the critical business processes that could adversely impact business performance. Because Wipro takes a customer-focused definition of quality, Six Sigma implementation is measured in terms of progress



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towards what the customer finds important (and what the customer pays for). This involves improving performance through a precise quantitative understanding of the customer's requirements. Wipro says that its adoption of Six Sigma has been an unquestionable success, whether in terms of customer satisfaction, improvement in internal performance, or in the improvement of shareowner value.

However, as the pioneers of Six Sigma in India, Wipro's implementation of the process has not been without difficulties – and, it stresses, opportunities for learning from these difficulties. To begin with, it has taken time to build the required support from the higher-level managers, and to restructure the organisation to provide the infrastructure and training to establish confidence in the process. In particular, the first year of deployment was extremely difficult. Resourcing the stream of Six Sigma projects was problematic, partly because each project required different levels and types of resource. Also, the company learned not to underestimate the amount of training that would be required. To build a team of professionals and train them for various stages of Six Sigma was a difficult job. (In fact, this motivated Wipro to start its own consultancy that could train its own people.) Nevertheless, regular and timely reviews of each project proved particularly important in ensuring the success of a project, and Wipro had to develop a team of experts for this purpose.

A central element of Six Sigma is the DMAIC problem-solving cycle approach to continuous improvement. This acronym outlines the Six Sigma approach:

- Define the business problem.
- Measure the current state against the desired state.
- Analyse the root causes of the business gap.
- Improve the process using Six Sigma tools.
- Control the long-term sustainability of the solution.

One of the challenges faced by all organisations adopting Six Sigma or similar improvement methodologies is to ensure that any training delivered as part of a change initiative is truly embedded in the operation's culture. Some organisations have found the structured approach of Six Sigma – for example, the 'belt' system described previously, borrowed from the world of martial arts – very helpful in this regard. In order to qualify for a belt, employees must undergo training to the appropriate level, and then deliver financial benefits through an improvement project.

Business process re-engineering

A well-known radical approach to improvement and change is business process re-engineering (BPR).¹¹ BPR is about the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in performance. The main principles of BPR involve the following:

- *A cross-functional approach.* BPR recognises the need to take a cross-functional approach to improvement, since most processes cut across traditional functional boundaries. It is therefore only through the creation of cross-functional teams working together on their processes that these processes can be radically redesigned.
- *Out-of-the-box thinking.* BPR is meant to be radical and so requires radical thinking. To do this, traditional beliefs and views need to be challenged – indeed, put aside – to allow total redesign starting with a clean sheet of paper. BPR is about rejecting the conventional wisdom and received assumptions of the past to create something new and very different.
- *Simplification.* BPR attempts to discard wasteful activities and focuses on simplicity and logical ordering. However, the often-significant use of IT to enable radical changes can create a source of complexity that can undermine improvements.

Implementing BPR requires the formation of a high-level team with a champion to coordinate action.¹² It requires a clear understanding of current processes, facilitated by process mapping (see Chapter 11). Redesign is then a key activity for the team, involving both visioning and detailed concern for measurements and control, to ensure not only the efficacy of the new process but also its improvement.

BPR is clearly a risky activity, both because current processes are rejected and also because of the high capital expenditure required and frequent reliance on IT. It is not surprising, therefore, that many BPR activities – as many as 70 per cent – fail to meet their original objectives.¹³ Another key factor in their failure is that, because of their emphasis on business processes, systems and structure, the 'people factor' tends to be overlooked, ignored or underestimated.¹⁴ Indeed, because of the job losses incurred in such radical change, BPR has become synonymous with downsizing.

Lean thinking

Lean thinking, or lean operations, has become another 'banner' under which a cluster of improvement activities can take place. Originally known as 'just-in-time', the idea of lean operations spread beyond its Japanese (and manufacturing) roots and became fashionable in the West at about the same time as TQM. And although its reputation had not flagged to the same extent as TQM, some of the enthusiasm once associated with the approach had waned a little. But now, lean has undergone something of a renaissance as an approach that can be applied in non-manufacturing and internal operations.

The essence of lean thinking is to clarify what adds value for the customer and/or the organisation and to strip out all other activities. In particular, the idea of waste elimination has become the most significant part of the lean philosophy, waste being any activity that does not add value. In fact, some interpret the lean approach as consisting almost exclusively of waste elimination. The objective is to ensure that the customer, or the task being carried out on behalf of the customer, flows through the system as quickly as possible, without non-productive waits, thus reducing costs and improving customer satisfaction.

A home loan provider employed this approach to good effect. The existing end-to-end process was mapped from the time the customer requested a loan to the point that the transaction was completed. It was found that the total elapsed time was nearly eight weeks, compared to the 'value-adding' time of just under two hours. Clearly, there were periods where the company could not do anything itself – for example, when it was waiting for surveys or for solicitors to act; however, this investigation spurred it into action. The home-loan/house-buying process also raises many anxieties for customers. The numbers of enquiries about the progress of the loan rise exponentially as time goes on. If the time is reduced, with an equivalent increase in dependability, there will be fewer customer enquiries and fewer employees devoted to this expediting process. By applying the principles of lean thinking, the home loan provider reduced the end-to-end time to four weeks, with a value-adding time of just over an hour.

Case example

St Göran's Hospital¹⁵

The ideas behind 'lean' operations practice have become particularly influential in healthcare. Take, for example, Stockholm's St Göran's Hospital, which is run by the private company, Capio. It is the setting for one of the more successful examples of lean management in healthcare services. Britta Wallgren, the hospital's chief executive and an anaesthetist by training, admits that she never heard the term 'lean' when she was at medical school. Yet now it is the central philosophy driving St Göran's approach to organising its medical care. The hospital's lean concept is based on the two lean principles of



Jose Luis Pelaez Inc/DigitalVision/Getty Images

'flow' and 'quality'. It has reduced waiting times by increasing throughput. Everything is done to try to 'maximise throughput' so as to minimise cost and 'give taxpayers value for money'. Nor should hospitals be in the hotel business, they say, so to minimise the time patients spend in hospital they invest in preparing patients for admission and providing support after they are released. Before the adoption of lean principles, doctors and nurses used to 'work in parallel'; now they work together in teams. No longer do staff concentrate exclusively on their field of medical expertise, they are also responsible for

suggesting operational improvements. The drive to save costs also runs to how patients are treated. The hospital has been called the medical equivalent of a budget airline. There are four to six patients to a room and the décor is 'institutional' rather than opulent. Similarly, staff are included in establishing improved working practices, many of which are relatively 'low tech'. For example, staff used to waste valuable time looking for equipment such as defibrillators. Then someone suggested marking a reserved space on the floor with yellow tape and insisting that the machines were always kept there.

An internet service provider could experience similar benefits. For example, using the lean philosophy could be applied to managing the process from customer request to installation, dramatically cutting lead times. The main benefits of lean thinking include:

- reduced process times and/or lead-times;
- reduced processing costs per item/customer through increased productivity;
- increased customer satisfaction, leading to repeat business and word-of-mouth advertising;
- reduced costs resulting from a higher completion rate (avoiding customers getting part-way through a process and leaving because they perceive that the service is too slow);
- better communication with all the parties in the chain;
- reduced customer anxiety;
- reduced costs resulting from lower levels of complaints or enquiries.

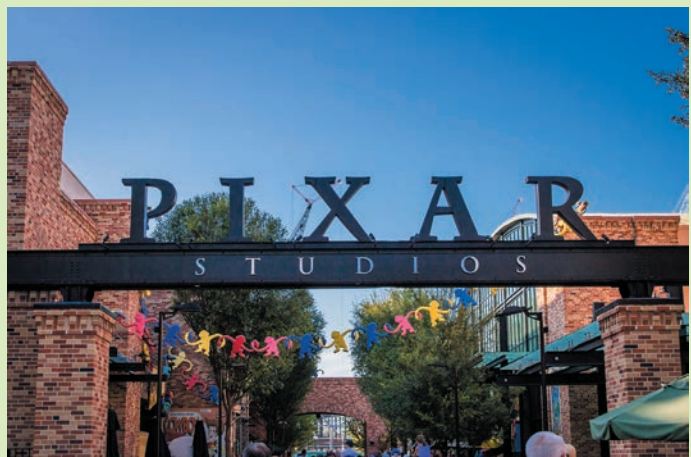
Case example

Pixar's creatives use lean principles¹⁶

Although as a philosophy and an improvement approach lean started in Japanese manufacturing (it was developed to be an important improvement approach by Toyota, among others), it can also be applied in creative industries. In fact, lean principles (or at least some lean principles) can be applied even to the most unlikely of processes. This includes Pixar Animation Studios, the Academy Award-winning computer animation studio and maker of feature films that have resulted in an unprecedented streak of both critical and box office success, including *Toy Story* (1, 2, 3 and 4), *Monsters, Inc.*, *Finding Nemo*, *The Incredibles*, *Ratatouille*, *WALL-E*, *Up*, *Onward* and *Soul*. Since its incorporation, Pixar has been responsible for many important breakthroughs in the application of computer graphics (CG) for filmmaking. So, the company has attracted some of the world's finest technical, creative and production talent in the area. And such 'knowledge-based' talent is notoriously difficult to manage; certainly not the types of processes that are generally seen as being appropriate for lean thinking. Managing creativity involves a difficult trade-off between encouraging the freedom to produce novel ideas, yet making sure that they work within an effective overall structure.

Nevertheless, Pixar did get the inspiration from Toyota and the way it uses lean production – in particular, the way Toyota has encouraged continuous advice and criticism from its production line workers to improve its performance. Pixar discovered

that the Japanese had found a way of making vehicle production a creative venture that involves all its staff. Moreover, Japanese manufacturing had the potential to teach valuable lessons about building a creative environment. Pixar realised that it could do the same with producing cartoon characters. Adopting constant feedback reveals problems before they become crises, and provides creative teams with inspiration and challenge. Pixar also devotes a great deal of effort into persuading its creative staff to work together. In similar companies, people may collaborate on specific projects but are less good at focusing on what's going on elsewhere in the business. Pixar, however, tries to cultivate a sense of collective responsibility. Staff even show unfinished work to one another in daily meetings, so they get used to giving and receiving constructive criticism.



Joe Hendrickson/Alamy Stock Photo

Removing waste – *muda*

Lean thinking is generally held to have originated through the work of Toyoda and Ohno at the Toyota Motor Company in Japan.¹⁷ The Toyota production system has been studied and copied by both manufacturing and service companies throughout the world, who wish to reap the benefits of reduced costs as well as an organisational culture that believes in the possibility of continuous improvement throughout the supply chain. The essence of lean thinking is to drive out *muda*, the Japanese word for waste, which is defined as anything that creates no value for the customer. Ohno identified seven sources of *muda*:

- overproduction ahead of demand;
- waiting for the next process step;
- unnecessary transport of materials;
- overprocessing of parts due to poor technology or process design;
- excessive inventories;
- unnecessary movement of employees;
- defective production.

Although developed for manufacturing operations, these all apply to many service operations, particularly those that have factory-like back offices, and those that have the supply of physical product as part of the concept. It is also worth applying Ohno's classification to the service process, considering a customer as the unit of material. This would encourage thinking about the cost to the customer in time or money when dealing with a particular service provider. A reduction in cost for the customer would almost certainly equate to an increase in value, which is the essence of lean thinking.

One of the major benefits of applying lean approaches, or indeed any of the tools and techniques discussed in this chapter, is the opportunity to engage the employees in the process. Indeed, the original philosophy of the Toyota production system was focused on the efficient use of materials and the humanisation of work. This second aspect was largely forgotten in the original translation into 'just-in-time' in the West, but has fortunately been rediscovered!

The five principles of lean thinking

There are five principles of lean thinking:¹⁸

1. *Specify value.* As indicated at the start of the chapter, the ultimate customer must define value. It is so easy to revert to a 'producer' (inside-out) mentality that assumes that because the provider thinks that the product is good, it must represent value. Airlines, for example, have not always understood value in these terms, providing executive lounges and extra facilities on flights when what passengers really want is rapid, safe travel to their destination without having to wait at airports.
2. *Identify the value stream.* The value stream is the set of actions required to bring the service to the customer. The total supply chain, from securing the inputs through to service delivery and use by the customer, must be understood in order to identify where activities at particular points in the chain in reality create no value for the customer, but have always been carried out because nobody had an overview of the total chain. When analysing the whole value stream, three types of activities can be identified:
 - those that create value for customers;
 - those that create no value for customers but cannot be eliminated because of current technology or process constraints;
 - those that create no value and can be removed.

It should be noted that the second of these categories of activities, those that create no value but cannot be removed, must be closely examined to see if this assumption is, in fact, correct. It may be that the activity persists simply 'because we have always done it this way', and so the activity may be eliminated.

3. *Create flow.* The essence of lean thinking is that work/customers flow continuously and smoothly through a 'pipeline' without stopping. In other words, the tendency to create batches of work/customers that occur when the hand-offs from department to department are not well managed has to be reduced. These discontinuities in the flow of work create the possibility of errors; they slow down the response to customer demand, and create a requirement to manage the workload that could be avoided. Batched work/customers create queues, with the need to manage priorities and to expedite work that, as it gets more delayed, becomes ever more urgent.

This work-flow thinking has been applied with great success to the back offices of many financial services companies, particularly as many have reorganised around customer processes and dismantled the traditional departmental or 'silo' mentality.

4. *Pull not push.* Traditional production systems produce in the hope of selling their wares. This creates *muda* in terms of overproduction and therefore excess cost. The challenge of lean thinking is to have operations schedules governed by demand pull rather than production push. Pull systems are essentially replenishment systems working on the basis of 'sell one, make one'. A good example is provided by McDonald's in its replenishment of burgers as customers buy them. The task for the organisation is to monitor and adjust the replenishment levels as demand patterns vary.

Pull systems require a major shift in operational culture, since it means that work in progress is significantly reduced and there is not the comfort factor of piles of work in progress in the system. The challenge for service organisations is to find ways to manage the total supply chain in similar ways to the manufacturing examples.

5. *Strive for perfection.* This fifth principle of lean thinking flows from the other four. As partners in the total supply chain apply the lean thinking philosophy, many of the problems are addressed, but, more importantly, a culture of both significant and continuous improvement develops.

Some managers claim that lean principles don't easily transfer into service operations. While this is often used as an excuse, we believe it has little foundation in fact. Most service operations will benefit from building the flexibility into their operations to match customer demand in the short term. A simple example is provided by Japanese sushi restaurants (see the case example on kaiten-zushi restaurants).

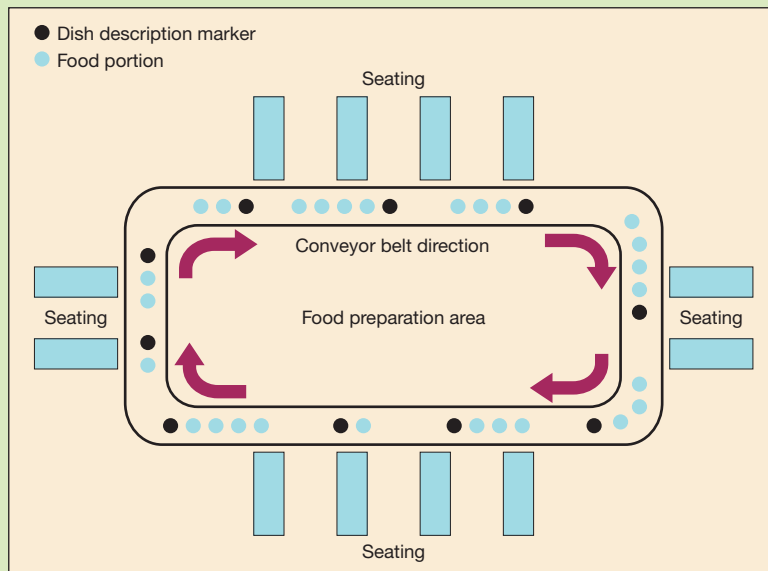
Case example

Kaiten-zushi restaurants

The traditional sushi restaurant is a perfect example of demand-driven service delivery. A kaiten-zushi restaurant is a sushi restaurant that is organised around a conveyor belt (see Figure 15.9) that winds through the restaurant carrying individual portions of the most commonly requested options on plates whose colour indicates the price of the dish. Customers are seated on the outside of the conveyor belt and can take the dishes they require as they pass by on the belt, although they can also place special orders. At the end of the meal, they are charged for the number and type of dishes they have consumed.



david pearson/Alamy Stock Photo

Figure 15.9 A kaiten-zushi restaurant layout

Some kaiten-zushi restaurants may use more elaborate 'plates', such as model locomotives or boats, running on tracks or a 'canal' instead of a conveyor belt, but the principle is the same.

The chefs are situated inside the circular conveyor belt and can immediately see which dishes are popular and which dishes are not selling. They are therefore able to match their production directly to customer demand. In those restaurants where customers are able to order special dishes, they will of course have to wait longer and will pay more for the privilege. Larger restaurants may also have tags on

the dishes, or other mechanisms, to ensure that an individual dish does not circulate for too long.

Sushi restaurants are a perfect example of lean operations. Production is exactly matched to the customer demand rate, as a dish is replaced as it is consumed, with inventory of dishes on the belt kept to a minimum. Because the 'throughput time' from production to consumption is minimised, customer satisfaction is high because the fish is fresh, and costs are reduced because waste is virtually eliminated. The chefs are also able to test the acceptance of new dishes at virtually no cost or risk.

Value stream mapping

Value stream mapping (VSM) is an extremely useful lean-thinking tool. Teams map their processes, tracking jobs or customers through the system, identifying the total elapsed time in the system and identifying the (few) points where value-adding activity takes place. This tracking of 'as-is' process is a useful starting point to create a leaner 'to-be' process. Value stream mapping is usually undertaken at a broader level than process mapping (Chapter 11) and is a helpful starting point in finding waste and identifying its causes in a process.

There are five key stages to VSM:

1. Identify the value stream to map; this might be an operation, a process or a supply network.
2. Map the process showing the information, material and customer flows. Document the times taken at all the various stages to process the job or customer and the total throughput time. This is the 'as-is' process.
3. Identify where value is added and the various types of waste (*muda*). Time taken can be a helpful indicator of waste.
4. Discuss and create a leaner 'to-be' process.
5. Implement and check that the process/operation/network delivers the required improvements.

Worked example

Value stream mapping at PoPaws¹⁹

PoPaws was a chain of veterinary centres. The PoPaws service concept was to provide a good standard of veterinary care, but at a considerably lower cost than had traditionally been possible in the pet care sector. Its business model relied upon the organisation delivering a range of veterinary services at around 20 per cent lower cost than was typical for the industry. Veterinary surgeon time represented the highest cost category involved in running the service. The operations model for the practice was critically dependent upon restricting the input of veterinary surgeons only to those activities that required their specific skill set. Mark Leddy was employed by PoPaws as a veterinary surgeon, but also with a specific remit of improving the efficiency of the service while maintaining service quality. PoPaws customers were generally happy with the service provided, though they often complained about waiting times. The knock-on effect of long waiting times was unnecessary stress for customer, companion animal and service providers.

When Mark began work with PoPaws he found considerable anecdotal evidence that, at many of the company's centres, the precious time of veterinary surgeons was not being used efficiently. However, there was also considerable variation among the service centres. Part of Mark's work would involve looking at the exemplars of service, with a view to benchmarking and translating practice into the poorer-performing centres.

What he did

In order to compare the performance of the various centres and learn something about what made the better centres more effective, Mark decided to carry out a value stream mapping exercise. In doing so, Mark recognised that there were at least two categories of service pathway and, moreover, that the organisation was very good at dealing with one pathway but not the other. Routine treatments for healthy animals (attending, for example, for preventative care such as vaccinations and worming) were addressed perfectly well and efficiently. However, animals that presented as sick went down a different pathway, where the service was more complex and harder to anticipate. The 'sick' pathway had a high degree of variability and there were early signs that in this pathway, value was 'leaking'.

Mark's first step in assessing operations was to carry out the value stream mapping of all consultations. The mapping would record what activities occupied consulting vets' time and their duration, and would also make a judgement on whether the activity was 'value-adding' or otherwise. One critical assessment was to judge whether the activity could be carried out by pet healthcare advisors (PHA) and veterinary nurses (VN), rather than an expensive consulting vet.

Part of the mapping involved breaking down and codifying the consulting service into standardised activities (see Figure 15.10) These activities were then

Figure 15.10 Waste categorisation

Activity	Lean categorisation (vet doing it)	Waste type	Notes and definitions
Advice/discuss options – non routine	y		Advice/treatment plan around the presenting complaints
Advice/discuss options – routine	y		E.g. fleas, wormers, diet
Call-in owner	n	Waiting	
Clean-up working area	n	Waiting	Clean table, etc.
Clinical procedure – vet needed	y		E.g. ultrasound, fine-needle aspirate
Clinical procedure – VN needed	n	Talent	E.g. take blood sample, radiography
Consent – get consent from owner	y		Explaining and getting signature
Consent – produce form	n	Talent	Type-up and print
Doing something not related to the case	e		Consult interrupted

Figure 15.10 (Continued)

Activity	Lean categorisation (vet doing it)	Waste type	Notes and definitions
Estimate – explain and agree	e		
Estimate – produce one	n	Talent	
Examination – vet not required	n	Talent	E.g. check for fleas, nail length, etc.
Examination – vet required	y		
Get materials ready for something	n	Talent	E.g. blood sample, skin scrape, clean wound
Handover from another staff member – e.g. PHA	e		
Handover to another staff member	e		E.g. night vet or PHA
History taking and examine animal synchronously	y		Ask further questions while doing examination
History taking and note writing synchronously	y		Both activities done by vet
History taking – while not examining animal	y		i.e. vet not doing both at once
Imaging – radiography	n	Talent	
Imaging – ultrasound	y		
Injection IM/SC	y		
Injection IV	y		
interpret results	y		
Look for and/or chase-up results	n	Motion	E.g. of blood sample
Look for equipment	n	Motion	
Look for meds doses and options	e		
Look for other information (not on meds or lab results)	n	Motion	
Move between locations (solo)	n	Motion	
Non-clinical procedure	n	Talent	Could be done by a PHA – e.g. nail clipping, shaving, set-up O2 cage
Notes – dictate and review notes	y		
Notes – write-up notes	n	Talent	Actually typing-in the details, includes pricing, consultation and meds, booking on opops list, etc.
Process lab sample – other required	n	Talent	E.g. bloods – many staff know how to do this
Process lab sample – VN/vet required	n	Talent	E.g. skin scrape
Review clinical history	y		Pre or during consult
Second opinion	y		Advice etc. from another vet
Submit sample for processing	n	Talent	
Take temperature	n	Talent	
Transport animal	n	Motion	E.g. to prep, to x-ray, etc. or back to consult
Waiting for owner	n	Waiting	General – e.g. waiting for owner to leave so can move animal
Waiting for staff member	n	Waiting	
Weigh animal	n	Talent	

y = value added; n = non-value added; e = non-value added but essential

Figure 15.11 An analysis of a 'complex' consultation

ID no.	630286	Date	24.7.18		Presenting complaint	Fight, swollen around eye		
Vet	Majeic	Start time	19:08		Outcome	Old fight wound, very swollen conjunctiva, ? Sting?		
Location	Coventry hosp				No. clients waiting	Admit surgery	Admit meds/obs	Outpatient procedure
Species	Feline				1			Y
Activity	Who	Start	End	Who else present	Notes	Value add?	Vet essential	Time spent
History		00:00:00	00:01:06		No PHA present	Y	Y	00:01:06
Exam		00:01:06	00:02:37			Y	Y	00:01:31
To prep		00:02:37	00:03:18			e	n	00:00:41
Waiting for nurse		00:03:18	00:03:27			n	n	00:00:09
Exam		00:03:27	00:03:55			Y	Y	00:00:28
Fluorescein stain		00:03:55	00:04:47			Y	Y	00:00:52
Exam		00:04:47	00:06:21			Y	Y	00:01:34
To consult room		00:06:21	00:06:41			e	n	00:00:20
Advice		00:06:41	00:07:47			Y	Y	00:01:06
Write-up notes		00:07:47	00:09:07		PHA could have done most of work here	e	Y	00:01:20
Searching for steroid meds		00:09:07	00:10:43		Left consult to see what topical steroid meds available	n	n	00:01:36
Demo giving meds		00:10:43	00:11:21			Y	n	00:00:38
Write-up notes		00:11:21	00:12:39		Vet could just review notes if already done	Y	n	00:01:18

categorised using a variation on the lean 'wastes'. The categories used were waiting and motion, which are familiar to lean practitioners, but there was also a category called 'talent waste'. Talent waste was defined as activity that was being performed by a member of staff who was overqualified for the task.

Mark's initial suspicions were correct in that the non-value-added time was relatively small in the predictable consultations. However, in the complex consultations, the mapping identified that approximately 25 per cent of all consultation time was categorised under 'talent waste'. In other words, there were considerable opportunities to shift aspects of service delivery from vets to other service providers. Two of the larger categories of talent waste were transport and preparation of the consulting room. In the application of lean value stream mapping, preparation activities are often referred to as 'set-up penalties'. Significant attention has been devoted over the years to addressing this type of waste. Figure 15.11 shows an example of a value stream map for a complex consultation.

What was most revealing was an assessment of the impact of the waste on the cost of consultations.

Remembering that the service concept was essentially 'low-cost veterinary service', cost of vet time was an important factor. For complex consultations the maximum cost saving if all activities could be reallocated optimally was approximately £1.64 per consultation. This compared to approximately £0.53 for predicted consultations. The changes in the cost of the service seem relatively small in absolute case terms, but they amounted to 27 per cent. PoPaws offered a high-volume service, so when rolled out over the large volume of consultations, the changes could have a significant impact. If work could be shifted to less-qualified (but appropriately qualified) staff, then time savings could be invested in effectively increasing capacity of the service and reducing queue times.

Mark's recommendations were to make changes to the consultation service. These would include allocating at least one PHA per consulting vet. The PHAs would also write the vet's notes while the vet dictated them during the clinical examination. It was probably impractical to allocate a dedicated nurse to each consulting team, but if nurses were available in a pool then this would also effectively reduce talent waste.

Lean Six Sigma and other approaches

There are other approaches to improvement other than those very briefly explained here. For example, some service organisations are putting Six Sigma and lean operations together, creating what has become known as 'lean Six Sigma'. The justification is simply to get greater responsiveness through faster throughput (lean operations) combined with the drive for greater quality through reduced variance in service delivery (Six Sigma). As with all initiatives, there is always the risk that this will be just another programme among many other approaches and will not receive sufficient attention from senior management. The challenge is not to understand the theories, but to ensure that they are deployed effectively across the organisation.

The experience of many services is that there are some significant stumbling blocks to be overcome in successfully adopting any of these approaches. These include:

- *Not budgeting sufficient resources for implementation.* There are major benefits to be realised but significant resources must be released to support deployment.
- *Ensuring the measurement system will encourage the right behaviours.* We work with many organisations that will not realise the benefits of a lean Six Sigma implementation because managers are totally focused on short-term goals.
- *Too many meetings.* It is tempting to arrange more and more project meetings, communication events and so forth. The usual result is that there is no time to do anything! The Japanese approach of 'go see', where short meetings are held at the point in the process under review, is a sound principle and deters long meetings isolated from 'real life'.
- *The challenge of standard operating procedures.* A prime aim of lean Six Sigma is to reduce variance. Creating a consistent process, often using standard operating procedures (SOPs), can be helpful but may also evoke resistance, which can be anticipated and dealt with.

15.5 How can managers sustain continuous improvement?

Improvement is not easy to sustain. The various approaches to the improvement activity and all the improvement techniques are, of course, important, but ensuring that their effective use continues is a more difficult issue. Not all improvement initiatives, often launched with high expectations, will go on to have a major impact on performance. Academic research on improvement looks at this issue of sustainability in some detail. This is due largely to the scepticism resulting from the failure of many organisations to successfully implement continuous improvement methodologies. For example, one report consolidated some companies' disillusionment with their experiences.²⁰ Quoting from several surveys, they found that, for example:

- Only a fifth of 100 British firms surveyed believed their quality programmes had achieved tangible results.
- Of 500 US companies, only a third felt their improvement (total quality management) programmes had significant impact on their competitiveness.
- Of those quality programmes that had been in place for more than two years, two-thirds simply ground to a halt because of their failure to produce hoped-for results.

What promotes improvement sustainability?

The extent to which improvement can be sustained so as to have a significant impact upon bottom-line performance will vary from context to context. Some authorities stress the importance of mechanisms underpinned by a culture of long-term staff development.²¹ For example, organisations would need training in basic problem-solving techniques, training in continuous improvement tools and techniques, the setting up of organisational 'vehicles' such as improvement groups, the development of idea capture systems, reward systems and so on. Development in each of these areas is simple in principle, but to develop effective capacity takes time. Certainly, it is not the stuff of an overnight 'quick fix', but is an issue of longer-term cultural development that promotes improvement.

Organisational culture and improvement are clearly related. A receptive organisational culture that encourages a constant search for improved ways to do things nurtures improvement. At the same time, the organisation's view of improvement is an important indication of its culture. But what is meant by 'an improvement culture'? One view of the various elements that make up an improvement culture comes from Bessant and Caffyn,²² who distinguish between what they call 'organisational abilities' (the capacity or aptitude to adopt a particular approach to improvement), 'constituent behaviours' (the routines of behaviour that staff adopt and which reinforce the approach to improvement) and 'enablers' (the procedural devices or techniques used to progress the improvement effort). The authors write specifically about continuous improvement (CI), but their points apply more generally. They identify five generic organisational abilities, each with its own set of constituent behaviours. They call these: getting the improvement habit; spreading the word; improvement on the improvement system; walking the talk; and building the learning.

Again, are services different?

Earlier in this chapter we concluded that the characteristics of many service operations (as distinct from manufacturing operations) created some specific challenges to carrying out improvement activities. We can perform a similar analysis regarding the issue of the sustainability of improvement by referring to the Bessant and Caffyn criteria. Table 15.3 looks at the Bessant and Caffyn criteria for two types of operation – a 'closed', relatively low-customer-contact, production-type, back-office environment, such as an internal finance department or IT helpdesk, and a more 'open', high-customer-contact, front-office environment exposed to customers, such as a retail operation or a service engineer who visits customer premises.

Table 15.3 Comparison of the feasibility of the Bessant and Caffyn criteria in 'closed' and 'exposed' operations

Organisational ability	'Closed' production/back-office environment (e.g. internal finance department or IT helpdesk)	Exposed open/front-office environment (e.g. retail operations or service engineer)
Getting the improvement habit Developing the ability to generate sustained involvement in improvement, using formal problem-solving cycles and improvement tools and techniques	Can usually take time out of routine/direct activities in order to plan improvement and use problem-solving techniques	Open work environment in view of customers much of the time or possibly away from colleagues, in customer's workplace; more difficult to create time and bring staff together for improvement discussion away from customers
Spreading the word Generating the ability to move CI activity across organisational boundaries	Needs to be formalised, but both possible and necessary because of the importance of internal supply network	Again, needs formalising, but both possible and necessary if there are clear internal supply network relationships
Improvement on the improvement system The improvement system is continually monitored, developed and managed strategically	Possible if management is committed and has time away from routine activities	Possible if management is committed and, again, can take time away from routine activities and bring staff together for improvement discussion away from customers
Walking the talk Management style reflects its commitment to improvement	Possible if management is committed	Possible if management is committed
Building the learning Everyone learns from their experiences, both good and bad	Important, and possible because much of the activity will be routine and so subject to improvement through learning	Important, but more difficult because of the heterogeneity of high-contact service activities

One can deduce from the table that the high-customer-contact nature of some services does make some aspects of improvement sustainability more difficult (assuming one accepts the criteria used). Broadly, this is a matter of staff logistics. If the staff, who are those that understand how improvements could be implemented (or not), neither have the time away from customers, nor can be brought together, then forming improvement groups can prove difficult.

Counterpoint

One of the defining characteristics of business over the last two or three decades has been the number and popularity of the types of improvement approaches described in this chapter. Many of these improvement approaches have captured popular management imagination, at least for a short while. But there are (at least) two dangers in adopting such approaches. The first is that they can be used as a substitute for a service

operations strategy. If the response to the question 'what is your operations strategy?' is 'we are trying to make our operations as lean as possible', or 'we are re-engineering our operations to avoid organisational silos', then beware. These are perfectly legitimate improvement objectives, and they may fit into operations strategy implementation, but they are not 'strategies' in themselves. Service operations strategies are far more fundamental considerations, as we

discussed in Chapter 3. The improvement approaches are sometimes confused with 'strategies' because: (a) they are an easily understood and relatively simple way to tackle the complexities of modern operations; (b) they seem to have worked in other organisations; (c) they sound as if they are new and, by implication, therefore must be better than what went before; or (d) they have been sold the idea by a consultant (or read about it in a book) and it's worth trying something new because many other things have failed to bring improvements. The second danger is that a particular approach may be adopted because it has become fashionable – it is a 'fad'.

One study²³ examined the huge volume of management literature that deals with such fads, and plotted how interest in them grows and (often) falls over time. The study identified eight common characteristics or warning signs that most of the short-lived fads had, but the more enduring did not:

- *Fads tend to be simple.* The ideas are straightforward, easy to communicate, easy to understand and reduced to a small number of factors or characteristics. Simple solutions are suggested.
- *Fads promise results.* Fads have no false humility. They promise outcomes such as greater control and efficiency, more motivated and productive workers, more satisfied customers, or some other desired consequence.
- *Fads are universal.* Fads propose solutions that work for all types of operations, functions, tasks and cultures. They claim universal relevance.
- *Fads have 'step-down capability'.* Fads can be implemented in straightforward ways, often without having much effect on existing organisational practices.
- *Fads are in tune with the zeitgeist.* Fads are in tune with the major trends or business problems of the day. They respond to challenges that are broadly felt and openly discussed.
- *Fads are novel, but not necessarily radical.* Fads may question existing assumptions, criticise widespread practices and point to fresh new ways of doing things. However, this novelty is often the repackaging of older ideas or approaches.
- *Fads gain legitimacy via gurus and well-known examples.* Fads are supported by high-profile publicity from gurus and success stories from excellent companies, rather than by solid empirical evidence.
- *Fads are lively and entertaining.* Fads are almost always presented in a way that can be described as concrete, articulate, bold, memorable and upbeat. They make use of catchphrases, lists and acronyms, anecdotes and corporate 'war stories'.

Stability and improvement

One aspect of the organisational setting that is likely to promote sustained development of an improvement capability is organisational stability. If strategies, priorities or organisational structures are continually changing, exploiting any learning is difficult. Uncertainties such as an impending sale/flotation, a change of senior management or large-scale restructuring are obviously likely to have a negative impact on the potential success of the improvement programme. Similarly, at a more operational level, process instability as evidenced by such symptoms as out-of-control processes, queuing, rework and so on, would need to be put under tight control before beginning to improve the operation.

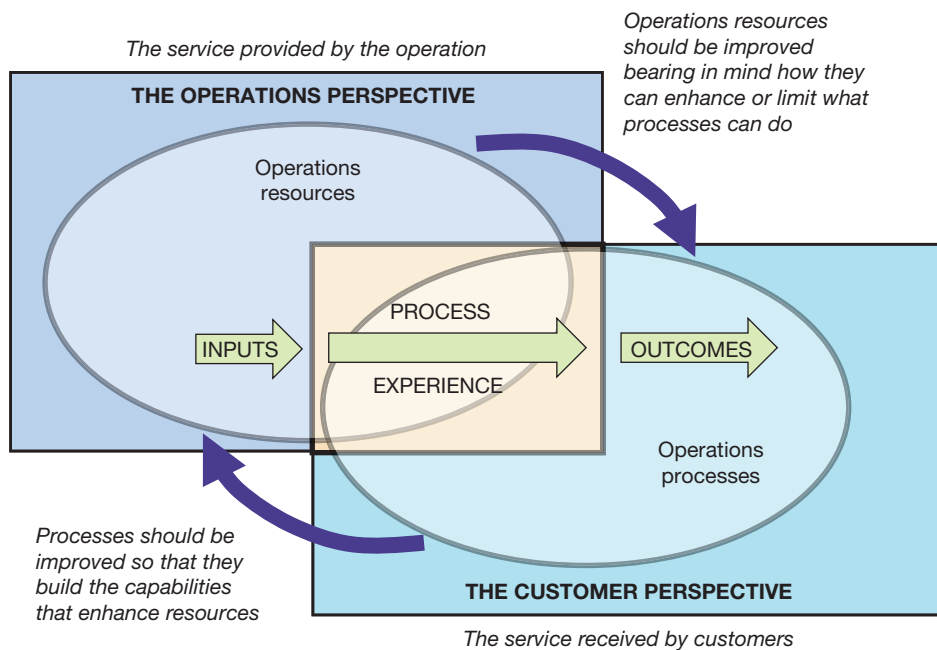
Another type of instability concerns improvement itself. New ideas and concepts are continually being introduced, and sold as offering a new and/or better way to improve business performance. Of course, the idea of fashion – what is new, novel and different – is a powerful driver of what we find attractive (see the Counterpoint). Fashion feeds our need for novelty. Given that improving operations is a complex and difficult business, novel ideas can be embraced with, sometimes embarrassing, enthusiasm. We tacitly accept fashion in music, movies, food or clothing. No one is immune. So it is not really surprising that the same applies to management generally, and operations improvement specifically. Yet, it is a mistake to be too cynical about the role of fashion in improvement. There is nothing intrinsically wrong with fashion. The problem lies not so much with the new improvement ideas themselves, but rather with how some managers become a victim of the process. They seem to actively want some new idea to entirely displace whatever went before. They become 'fashion victims'. The truth is that most new ideas, even when stripped of the hype, do have something useful to say.

Operations improvement depends on the relationship between resources and processes

The focus of operations improvement (and of this chapter) is often the mechanisms, techniques and approaches to improvement. But it is also worth remembering the more abstract effects of the improvement activity. Back in Chapter 1 we described operations management as shaping the resources and processes within the operation. And what makes operations improvement so important is that it has an impact on these two vital ingredients for any organisation. As a reminder, resources are the assets that the operation has, processes are how the operation uses those resources. Both resources and processes are fundamental to how any enterprise creates value. But, resources and processes are not physically separate; they are simply a way of thinking about what goes on in the operation. Moreover, resources and processes impact on each other. They can be both mutually supportive and mutually limiting. An operation's resources will constrain what its processes can do. Just as important, the experience gained over time by an operation's processes can add to the capability of its resources.

That is the context in which operations improvement happens. Improvement has an impact not just on the nature and extent of resources and processes, but also the interaction between them (see Figure 15.12). That a change to resources will limit what processes can do is obvious. Technology, people or systems with inappropriate abilities or skills will restrict what processes can do. What can be forgotten in the demands of operations improvement is that how one makes changes to processes can enhance one's resources. Processes should not simply 'do what they do' without learning from what they do. Every process transaction is an opportunity to learn. All transactions are a series of cause–effect activities. And linking cause and effect is what learning is all about. All improvement should consider the ability of resources and processes to reinforce each other.

Figure 15.12 Improvement implies some change in resources and/or processes; each can reinforce or limit the other



15.6 Summary

How can ‘value’ drive improvement? Improvement should increase ‘value’ in some way, hence the importance of a focus on what adds value for customers and the organisation, and what emphasises greater responsiveness as well as cost reduction. Value simply means the ‘worth of something’. In a commercial context, value translates into financial benefits, both for customers and for the organisation. In a non-profit context the measurement of value can be more complex, but is still based on the idea that creating a service has ‘worth’ to some group of stakeholders. It is helpful not only to find out what customers value, but also non-customers, i.e. potential customers. Generally, the objective of service improvement is either to increase the benefits to stakeholders, without an unacceptable increase in the effort, cost and investment required by them, or reduce the effort, cost and investment required without reducing the benefits to stakeholders.

Should improvement aim to be better or different? Incremental or radical? There is an essential difference between whether an organisation wants to operate in broadly the same way as other similar operations, but do it better, or, alternatively, whether they want to operate in a fundamentally different way. This distinction between better and different is important, not only in a strategic sense, but also in defining two approaches to how operations improvement can be tackled and two types of improvement trajectory. If it is trying to be different, it will want to focus on taking a radical path, challenging the underlying justification for how operations are organised, and creating an original model of how operations resources and processes can be arranged and run. Alternatively, it could improve in a largely incremental manner, accepting that its fundamental way of working will remain essentially unchanged, but progressively moving towards a better use of resources and processes. A strategic objective of ‘being better’ implies a more gradual, incremental type of improvement, while ‘being different’ implies a radical and innovative style of improvement. Pure continuous improvement and pure radical improvement are the two ends of a spectrum, so can an organisation be both continuous and radical at the same time? This is called ‘organisational ambidexterity’. Three ways to achieve this have been proposed: adopt different types of improvement in different parts of the operation; adopt different types of improvement at different times; or accept the challenge of mixing both types of improvement simultaneously.

How is improving service operations different? All the major approaches to improvement apply equally well to service or any other type of operation. Yet there are differences in how improvement is carried out and, again, the IHIP characteristics can help identify them. Intangibility can mean confusion as to what should be improved. Heterogeneity means that every service could be perceived as different for each customer, so improvement in the service may mean different things for different customers. Inseparability means that, to some extent, the level of service received by the customer may be independent of the skill and capability of the individual service provider. Perishability may mean that improvement has little time to be applied. The implications for service operations improvement include customers seeing any change directly, always having to evaluate the impact of any improvement on customers, always trading-off operations efficiency against customer service and coping with variability.

What are the main approaches to improvement? Three distinct, but related, aspects of improvement should not be mistaken for each other. The broad approaches to improvement are the underlying sets of beliefs that form a coherent philosophy and shape how improvement should be accomplished. The improvement elements are the individual primary ideas of what improves operations. Improvement techniques are the ‘step-by-step’ methods and tools that can be used to help find better ways of doing things. There is a widespread misconception that the various approaches to improvement are different in all respects, but they have both elements and techniques in common, even if some are particularly associated with one approach or another. Commonly used improvement approaches include:

- Total quality management (TQM), which emphasises customer focus and total involvement.
- Six Sigma, which emphasises high levels of control, systematic evidence-based problem solving and the use of ‘martial arts’ terminology.

- Business process re-engineering (BPR), which emphasises cross-functional, radical creative simplification.
- Lean thinking, which focuses on value-added activities, waste elimination, pull control and synchronised flow.

How can managers sustain continuous improvement? Many improvement initiatives are launched with high expectations but do not have a major impact on performance. Sustainability is underpinned by a culture of long-term staff development including training in basic problem-solving techniques and continuous improvement tools and techniques. Other factors include: getting the improvement habit; spreading the word; improvement on the improvement system; walking the talk; and building the learning. Some of these ‘prescriptions’ can be more difficult to practise in high-customer-contact services. Organisational stability also enables the sustainability of improvement.

Discussion questions and exercises



1. Think about the last time you used a high-customer-contact service such as a clinic, a hotel, or a restaurant. Sketch the service process, and try to determine which elements were subject to high levels of control. Were there any elements of the service that were not subject to control, but should have been? Why was this so?
2. A transport services company provides a whole range of services to railway operators. Its reputation for quality is a valuable asset in its increasingly competitive market.

We are continually looking for innovation in the way we deliver our services because the continuous improvement of our processes is the only way to make our company more efficient,

said the company's CEO.

We use a defined set of criteria to identify critical processes, each of which is allocated a 'process owner' by our quality steering committee. This is helped by the company's 'process excellence index' (PEI), which is an indicator of the way a process performs, particularly how it is designed, controlled and improved. The PEI score, which is expressed on a scale of 1 to 100, is calculated by the process owner and registered with the quality department. With this one figure we can measure the cost, reliability and quality of each process so that we can compare performance. If you don't measure, you can't improve. And if you don't measure in the correct way, how can you know where you are? Employee recognition is also important. Our suggestion scheme is designed to encourage staff to submit ideas that are evaluated and rated. No individual suggestion is

finally evaluated until it has been fully implemented. Where a team of employees puts ideas forward, the score is divided between them, either equally or according to the wishes of the team itself. These employee policies are supported by the company's training schemes, many of which are designed to ensure all employees are customer-focused.

- (a) What seem to be the key elements in this company's approach to improvement? (b) Do you think this approach is appropriate for all operations?
3. Some organisations believe that the well-known approaches to improvement (such as TQM, etc.) are, in fact, pre-packaged 'solutions' made up by selecting from a set of common ingredients. So, does this mean that anyone can simply pick out whatever elements appeal to them and construct their own improvement approach?
4. Reread the case example on Four Seasons and Zara. In terms of being either 'better' or 'different', how would you classify IKEA, the most successful furniture retailer ever, and Amazon, with whose website (almost) everyone is familiar? Justify your judgement.
5. Lucy is the COO of an outsourcing business that provides 'back-office' services to a range of companies. She believes that:

everything we do can be broken down into a process. It may be more straightforward in a manufacturing business, but the concept of process improvement is just as powerful in service operations. Using this approach our team of black belts has achieved 30 per cent productivity improvements in six months. I think Six Sigma is powerful

because it is the process of comparing process outputs against customer requirements. To get processes operating at less than 3.4 defects per million opportunities means that you must strive to get closer to perfection and it is the customer that defines the goal. Measuring defects per opportunity means that you can actually compare the process of, say, a human resources process with a billing and collection process.

(a) What are the benefits of being able to compare the amount of defects in a human resources process with those of collection or billing? (b) Why is achieving defects of less than 3.4 per million opportunities seen as important by Lucy? (c) What do you think are the benefits and problems of training black belts and taking them off their present job to run the improvement projects, rather than the project being run by a member of the team that has responsibility for actually operating the process?

Case exercise

Fermat Numérique²⁴

Fermat Numérique (FN) provided landline phones, mobile phones and broadband internet across the Occitanie region of south-west France. The company was headquartered in Toulouse and had grown from being a small provider of mobile phone services in the 1990s to a general digital media company today. The French telecommunications industry had not yet been completely deregulated, and France Télécom was the sole provider of landline phone lines and numbers. A customer, after setting up with France Télécom, would, however, be able to move to an alternative provider, and similarly with broadband internet. After moving to other providers, to retain their phone number subscribers would continue to pay the subscription fee to France Télécom.

FN had been incredibly successful as a reseller of telecom services. The company excelled in customer service. One of the distinguishing features of the company was that it helped customers deal with sometimes difficult interactions with France Télécom. In 2019, FN acquired Éditions Audrey Pradier (EAP), which was one of the smallest cable TV companies in France. EAP was also based in Toulouse but served customers beyond Occitanie in Hautes-Pyrénées, Gers, Tarn-et-Garonne, Tarn, Aude and Ariège. EAP had approximately 90,000 customers for its cable service. The EAP digital TV service offered 120 channels including all terrestrial services as well as subscription services such as Sky Sports, Sky Movies, Netflix and so on.

EAP also owned a 49 per cent share of Équipe 25. Équipe 25 was a small but much-viewed sports channel, which aired several important national and international competitions in road cycling, rally, motocross, basketball, judo, biathlon and volleyball. EAP was also one of the largest promoters of

sports events in France, and its promotional banners were familiar sights at the Tour de France, the Paris–Roubaix cycle races, the Dakar Rally, the Paris Marathon and the Open de France golf tournament. The majority shareholder of Équipe 25 was Audrey Pradier, after whom the EAP network was named.

The acquisition of EAP was not without risk. EAP was languishing after its temporary acquisition by Philadelphia Media in the US. Philadelphia Media acquired EAP in 2015 and immediately attempted to take costs out of the business. EAP had over a decade of exemplary customer service. In a world where cable TV customer service was generally poor, the EAP telephony centres in Toulouse, Bayonne and Perpignan were friendly, knowledgeable and achieved exemplary scores from customers. When Philadelphia Media acquired EAP, one of its first moves was to shut down two of the French call centres (Bayonne and Perpignan) and move customer service operations to the Philippines and India. (The Bayonne and Perpignan centres mainly covered installations and ongoing customer support, whereas Toulouse covered sales.) Normally, French companies outsourced to former French colonies in North Africa, and the offshoring destinations chosen by Philadelphia Media surprised many industry observers.

Complaints began almost immediately. Customers regularly complained that what should have been a five-minute service call would take 20 minutes. More often than not, the call handler got things wrong. There were many areas of failure in package configuration (customer change requests regarding their portfolio of channels), the timing of maintenance work, installations and so on. One of the big problems was that the call centre handlers could not appreciate the nuances of the French language and did not

understand local constraints and conditions. The call handlers tended to rely on scripts, but the scripts were relatively unsophisticated. Philadelphia Media could conceivably have transferred operations back to France and restarted the two call centres. However, rumour had it that Philadelphia Media had only bought EAP as a means of eventually acquiring all of Équipe 25. Unfortunately, Philadelphia Media ran foul of French government rules on foreign media ownership, and the deal to buy the remainder of the company from Audrey Pradier was quashed. Pretty soon, Philadelphia Media lost interest and sold EAP to FN at what was rumoured to be a considerable loss.

Cindy Moreau, chief executive of FN, thought that the acquisition of EAP would be a good way to learn the ins and outs of the cable TV business, as well as being a way to acquire talent that could assess and construct leveraged bids for more cable TV companies. However, Operations Director Alain Viret had some reservations.

EAP operations consisted of sales, network operations and installations. Alain was perfectly comfortable that the FN sales teams could be effectively merged with the remaining EAP teams in Toulouse. FN had clear strengths in the area of sales operations, as did the EAP team. Network operations and installations were new, to FN, however. Media production was obviously new, but the Équipe 25 team was independent, relatively successful and, if necessary, could simply continue to run with the existing leadership team.

EAP received a lot of customer complaints about its network performance. Broadband, cable TV and phone outages for EAP customers were way above the figures for regional competitors such as Bouygues Télécom, SFR and Alice. Alain decided he would investigate network operations as soon as possible. However, there were hints that the complaints might not be down to problems in the network overall. Installations were subject to an uncomfortably large number of customer complaints too.

Installation bookings. Toulouse sales teams would pass on new customer contacts to the off-shore installation booking teams, who would then contact the customer via email, text or phone to arrange an installation. Because access was needed to the customer's property, and usually there was a requirement to drill holes in walls, dig under lawns and pathways, etc., an adult had to be present at the property while the installation was in progress. Installations typically took about two hours but there was considerable variability in the installation time.

Complaints about installation teams. Customers routinely complained about the competence and common sense of engineering teams. What was striking was that the typical customer knew very little about digital telecoms but their complaints often pointed to obvious technical failures. Customers would complain that cables were kinked too tightly and inferred that as a reason for signal interruption. Customers also complained about the mess made by teams when they had to lay cables under lawns, hedges and pathways. Customers complained that they were frequently asking for installers to remove muddy footwear before entering their houses. Installers would leave offcuts of cable on the floor and did not clean up after drilling holes in walls.

In theory, the teams had access to quite sophisticated and non-invasive cable diggers and threading machines but often the installation engineer would not have access to this capability. When cable digger capacity was compared with demand for their services overall, there seemed to be few problems. However, what generally happened was that there was a failure to properly assess the customer site and ensure that, if needed, the cable digger was available. Other complaints related to the lack of common sense in laying cables from street cabinet or 'drop' to the customer residence. Summers in the south of France were very hot and pavement asphalt would often become soft. As a result, an improperly laid cable could be subject to movement and stress, and might break during the hot summers. Another problem was that in the winter the region had a surprisingly high degree of rainfall, and improperly weatherproofed connections were easily subject to water ingress damage, which again resulted in frequent callouts to repair outages.

Attitude. Finally, there was a category of complaint that could be best described as 'attitude-related'. Customers often complained that service and installation teams looked scruffy, smoked on their properties, stank of smoke when they entered their houses, left dirt on the floor and so on. And not that it mattered directly to customers, but they also observed that sometimes two or three people turned up, with two just looking on while one person did the work.

Alain concluded that the installation operation probably needed attention. He commissioned FN's internal operations improvement team to assess installation operations. The team had no prior

expertise in physical installations but Alain thought that this was no bad thing, as a fresh set of eyes would perhaps reveal areas for improvement.

The operations improvement team sent observers to look at 60 installation operations. The team carried out a value stream mapping exercise in which the installation was broken down into several stages and each stage assessed for its degree and nature of value-add. The team also looked at different kinds of waste in evidence.

After observing about 15 installations, the team noticed that there were two clear categories of installation. Category A was the mainstream and straightforward installation, which usually required just a simple connection from the street distribution cabinet to the residence. Many of these installations were able to utilise existing connections and cable runs

from street cabinet/drop to house. Complex installations, or category B installations, were those that required major ground works or sometimes external attachment of cables over several floors of apartment buildings. The ground works would typically involve laying cable under long runs of various surfaces to the customer's residence. In apartment buildings, where possible, the installers tried to use existing common cabling. However, this was not always possible. Ground works of any length required specialist machinery, which EAP engineers had access to, but this was not managed particularly carefully. Similarly, to work at height on the apartment buildings required high-lift platforms, and often permission was required from the landlord of the apartment building.

Tables 15.4 and 15.5 show value stream maps for simple and complex installations respectively.

Table 15.4 Value stream map for a simple installation

Steps	Activity	Who?	Average duration (min)	Standard deviation	Notes	Value-add? Yes/No/Partial	Waste
	PRE INSTALLATION						
PI1	Installation survey (phone)	Manila CCC/ Hyderabad CCC and customer	4	0.2	On the basis of the initial installation survey, installation would be scheduled, or a site visit scheduled and the installation would then become a 'complex' installation	Y	
	INSTALLATION DAY						
ID1	Preparation (check schedule)	Installation engineer	5	4	Time amortised over several installations	Y	
ID2	Make up installation kits	Installation engineer	45	5	The installation engineers have for many years requested pre-prepared kits to be loaded into their vans according to the next day's schedule	P	Expertise
ID3	Load installation kits into van	Installation engineer	10	1		P	Expertise

Table 15.4 (Continued)

Steps	Activity	Who?	Average duration (min)	Standard deviation	Notes	Value-add? Yes/No/Partial	Waste
	ON-SITE						
OS1	Connect cable to cable drop/cabinet	Installation engineer	10	1		Y	
OS2	Cut cable channels if necessary	Installation engineer	15	10	For approximately 25% of simple installations, the cable installation proved to be beyond the scope of the installation engineer. The engineer would typically call the equipment depot and try to book a digger or high-lift platform as necessary. If none was available, the installation was halted and re-booked as a complex installation	Y	
OS3	Run cable to residence (simple)	Installation engineer	10	5		Y	
OS4	Set up grounding box	Installation engineer	4	1		Y	
OS5	Terminate network cable and connect to grounding box	Installation engineer	2	1		Y	
OS6	Prepare cable to run inside residence	Installation engineer	4	1		Y	
OS7	Drill holes in residence wall	Installation engineer	8	6		Y	
OS8	Install cable	Installation engineer	4	3		Y	
OS9	Install splitter for multiple destinations	Installation engineer	2	1	Some customers would order two or more DVRs, and if so, on-site steps 10–15 would be repeated as necessary. All durations and standard deviations assume one DVR installation	Y	

Steps	Activity	Who?	Average duration (min)	Standard deviation	Notes	Value-add? Yes/No/Partial	Waste
OS10	Run cables within residence to selected cable box location	Installation engineer	10	7		Y	
OS11	Fasten cables with staples	Installation engineer	10	2		Y	
OS12	Fit internal wall jack(s)	Installation engineer	10	2		Y	
OS13	Connect cable to wall jack(s)	Installation engineer	1	1		Y	
OS14	Connect DVR to wall jack(s)	Installation engineer	1	1		Y	
OS15	Set up DVR(s)	Installation engineer and Manila CCC/ Hyderabad CCC	10	7	All DVRs needed to be activated by the CCC. The high variation in task duration is primarily because of varying waits on the phone to the CCC	P	Time
OS16	Customer demonstration	Installation engineer	10	8		Y	
	On-site total		111				

Table 15.5 Value stream map for a complex installation

Steps	Activity	Who?	Average duration (min)	Standard deviation	Notes	Value-add? Yes/No/Partial	Waste
	PRE INSTALLATION						
PI1	Installation survey (phone)	Manilla CCC/ Hyderabad CCC	4	0.2	On the basis of the initial installation survey, installation would be scheduled (simple installation), or a site visit scheduled and the installation would then become a 'complex' installation	Y	
PI2	On-site survey	Area foreman and customer	18	14		Y	

Table 15.5 (Continued)

Steps	Activity	Who?	Average duration (min)	Standard deviation	Notes	Value-add? Yes/No/Partial	Waste
PI3	Book cable digger (if necessary)	Area foreman and Manila CCC or Hyderabad CCC	5	4	All equipment bookings go through Manila CCC or Hyderabad CCC. Foremen usually had to wait in queue for two or three minutes	P	Time
PI4	Book high-lift platform (if necessary)	Area foreman and Manila CCC or Hyderabad CCC	5	4	All equipment bookings go through Manila CCC or Hyderabad CCC. Foremen usually had to wait in queue for two or three minutes	P	Time
	INSTALLATION DAY						
ID1	Preparation (check schedule)	Installation engineer	5	4	Time amortised over several installations		
ID2	Make up installation kits	Installation engineer	45	5	The installation engineers have for many years requested pre-prepared kits to be loaded into their vans according to the next day's schedule	P	Expertise
ID3	Load installation kits into van	Installation engineer	10	1		P	Expertise
ID4	Check digger schedule	Installation engineer	5	4	Engineers were in theory required to go via Manila CCC or Hyderabad CCC, however, they generally called the equipment depot directly	N	Inspection
ID5	Check high-lift schedule	Installation engineer	5	4	Engineers were in theory required to go via Manila CCC or Hyderabad CCC, however, they generally called the equipment depot directly	N	Inspection

Steps	Activity	Who?	Average duration (min)	Standard deviation	Notes	Value-add? Yes/No/Partial	Waste
	ON-SITE						
OS1	Connect cable to cable drop/cabinet	Installation engineer	10	1		Y	
OS2	Cut cable channels if necessary	Digger driver and installation engineer	60	50		Y	
OS3	Set up high-lift platform if necessary	Platform driver and installation engineer	20	10		Y	
OS4	Run cable to residence (complex)	Driver(s) and installation engineer	60	20	The digger driver would often hang around just in case further trench or hole cutting was needed. If the cables were being run outside an apartment building then the high-lift driver would wait until the cable was run into the residence (step 9)	P	Time and Expertise
OS5	Set up grounding box	Driver(s) and installation engineer	10	8	For complex installations the grounding box was occasionally difficult to mount because of working at height	P	Time and Expertise
OS6	Terminate network cable and connect to grounding box	Driver(s) and installation engineer	2	2		P	Time and Expertise
OS7	Prepare cable to run inside residence	Driver(s) and installation engineer	8	3		P	Time and Expertise
OS8	Drill holes in residence wall	Driver(s) and installation engineer	20	8		P	Time and Expertise
OS9	Install cable	Driver(s) and installation engineer	15	5		P	Time and Expertise

Table 15.5 (Continued)

Steps	Activity	Who?	Average duration (min)	Standard deviation	Notes	Value-add? Yes/No/Partial	Waste
OS10	Install splitter for multiple destinations	Installation engineer	2	1	Some customers would order two or more DVRs, and if so, on-site steps 10–15 would be repeated as necessary. All durations and standard deviations assume one DVR installation	Y	
OS11	Run cables within residence to selected cable box location	Installation engineer	20	10		Y	
OS12	Fasten cables with staples	Installation engineer	10	2		Y	
OS13	Fit internal wall jack(s)	Installation engineer	20	2		Y	
OS14	Connect cable to wall jack(s)	Installation engineer	1	1		Y	
OS15	Connect DVR to wall jack(s)	Installation engineer	1	1		Y	
OS16	Set up DVR(s)	Installation engineer	10	7	All DVRs needed to be activated by the CCC. The high variation in task duration is primarily because of varying waits on the phone to the CCC	P	Time
OS17	Customer demonstration	Installation engineer	10	8		Y	
	On-site total		279				

Questions

1. What should be Alain's priorities for strategic improvement?
2. The acquisition of EAP and Équipe 25 was intended to provide Fermat Numérique with several advantages in terms of strategic positioning. What were the possible disadvantages to the acquisition?
3. Assess the value stream maps for the simple and complex installations. What improvements would you suggest to Alain?

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Chapter 16

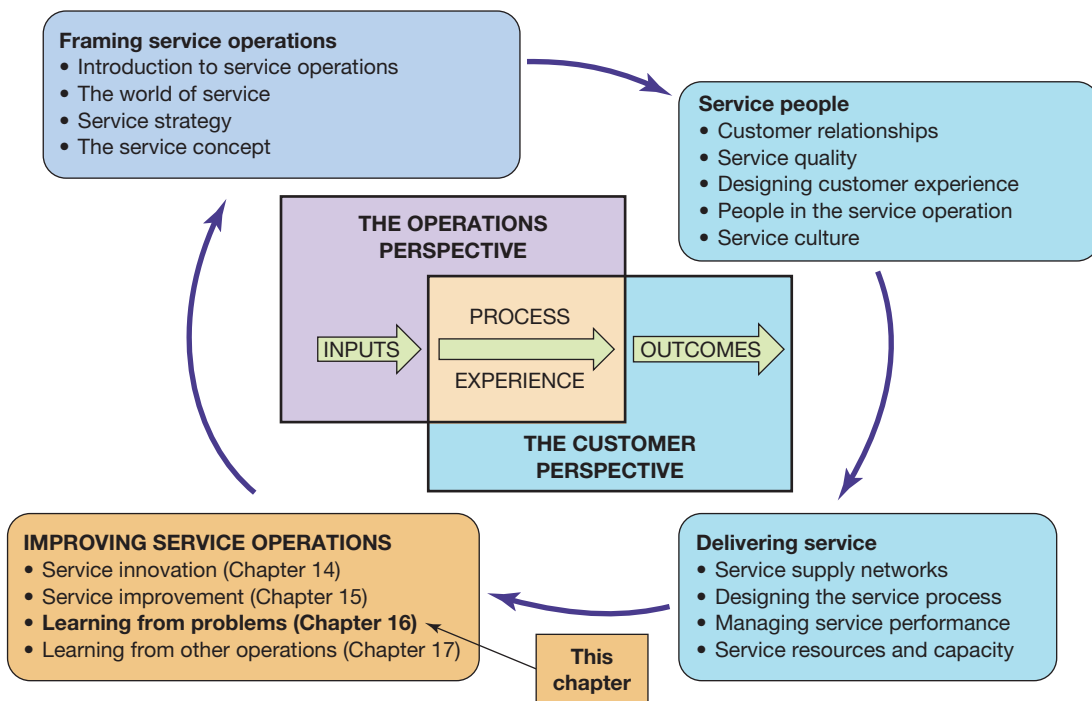
Learning from problems



This chapter is about how services can learn from the everyday problems that all types of organisations suffer, in order to improve an operation's performance and the way its services can be developed. Figure 16.1 shows where this topic fits in our model of service operations management.

Learning objectives

- To understand the main causes of service problems
- To be able to describe the process for handling customer complaints
- To gain an appreciation of how problems can drive improvement
- To be able to identify the main ways service operations managers can prevent problems occurring

Figure 16.1 This chapter looks at learning from problems

Introduction

No service gets everything right all of the time. Even in the best-run operations, mistakes happen, problems occur. The danger is that problems, such as people making mistakes or things going wrong, will be seen as being wholly damaging. But rather than viewing errors in an entirely negative light, we want to show that problems (difficult situations needing a solution) are naturally occurring events in service operations and should be welcomed because they give us much-needed insight into what we need to improve and how to do it. The critical point is that problems must lead to improvements. Mistakes are really disguised opportunities. Of course, improvement should not rely solely on problems occurring, which is why the previous chapter provided a range of tools to help operations managers build a culture of improvement.

Yet, how we can learn from problems does deserve a chapter in its own right, because dealing well with problems is important. It exposes issues and drives improvement in the operation. It is the good way of creating delighted customers. Indeed, some people would say this is the best way that people learn how to improve what they do. Unfortunately, many organisations don't seem to be able to learn from their problems and have a culture of fear, or at least mistrust, where problems are covered up. In these situations, problems will continue to reoccur with no individual or organisational learning, or improvement, taking place.

16.1 Why do problems occur?

Service operations can be complex. They are processes that rely on a wide range of inputs – staff, technology, facilities, and the additional variable, the customer, whose inputs are not always as predictable or consistent as we might like. So, it is not surprising that, despite one's best efforts to design operations well, problems such as errors, mistakes and failures are simply inevitable. And

when problems do occur, they have two types of consequences: operational consequences and customer consequences. The operational consequences of things going wrong can vary from minor delays or costs to major disasters. A member of staff turning up late for work may lead to some short delays in service. A colleague spilling a drink onto a computer keyboard will lead to some additional costs. However, a breach of computer security in a bank or a highly infectious disease being found in a hospital could lead to far more serious consequences. These operational consequences lead to customer consequences, from customers complaining about the delay in service, to the death of a patient and legal action from relatives.

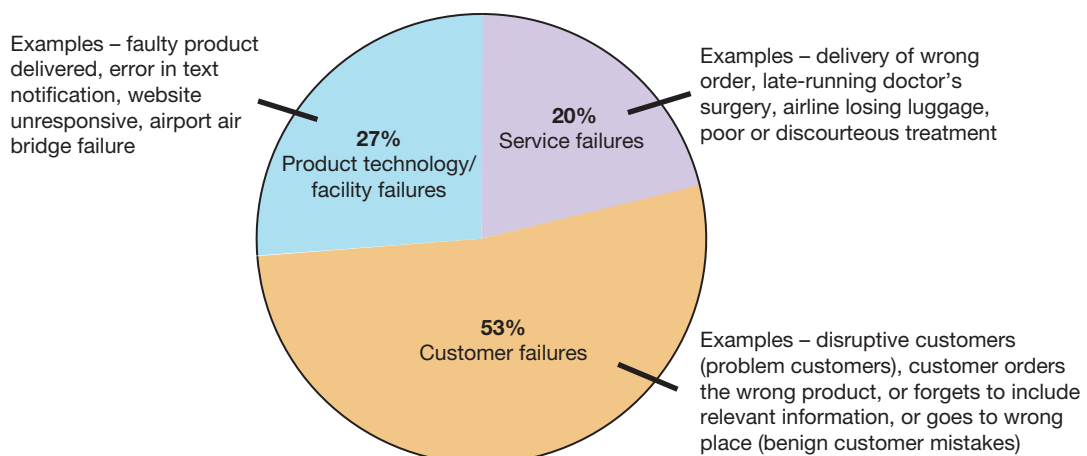
When things do go wrong, customers are increasingly willing to complain, or to take other forms of action. Organisations such as holiday firms, train companies, police services, health services and local government have reported year-on-year increases in complaints of between 8 per cent and 80 per cent. This may be because the quality of some services has declined as organisations have squeezed operating budgets. Alternatively, it may be the quality of services as perceived by customers that has declined. Customers may be increasingly service aware and more intolerant of poor service, possibly because of increased pressure on their time and budgets. Additionally, there has been a growth in consumer movements, comparison websites, social media activity and government initiatives, which have alerted people to their consumer rights and the obligations of organisations in delivering good service. Whatever the reasons, finding and dealing with problems – what we refer to as service recovery – is becoming an increasingly important task for service organisations.¹

Types of service problems

Some ‘service’ problems and failures are clearly the direct result of problems with the service process itself – for example, when the wrong order is delivered to one’s house because of a picking error in the fulfilment centre, or a late-running doctor’s surgery, or an airline losing luggage, or a supermarket with a lack of availability of products, or poor or inappropriate treatment being given to customers.

Other problems may be the result of faults in any product or service technology that may be involved in the service – for example, the right product is delivered but it is faulty, or the delivery firm’s automated text service sends the wrong delivery time, or the failure of websites, or faulty air bridges in an airport causing problems for staff and customers. A further category of ‘failure’ is where the customer makes one or more mistakes. One estimate of ‘service’ failures² estimates that the cause of most are due to customer errors, with the smallest category being direct service failures (see Figure 16.2). Customer failures can be divided into two types: those caused by ‘problem customers’ and the more benign mistakes caused by customers. Problem customers are those individuals who are involved in serious offences, such as staff abuse or drunkenness.³ Customers

Figure 16.2 Categories of ‘service’ failures with estimates of proportions



who make mistakes, on the other hand, make simple and often inadvertent errors, such as when a customer orders the wrong product by mistake, or forgets to bring relevant documents to an appointment, or turns up at the wrong time or the wrong place.

From a customer's point of view, a failure is any situation where something has gone wrong, irrespective of responsibility. For example, if a courier is late with a parcel then the customer is likely to blame the courier. The courier may have been late because of roadworks (the local authority's fault) or because there were problems at the originating company's despatch unit or the manufacturing process may have delayed the despatch of the delivery (the supplying company's fault). The root causes of many service problems, as seen by the customer, may seem to be failures in areas not directly controlled by the organisation delivering the service. There is usually someone else to blame.

However, there are two particularly important points to make here. First, one could argue that the root causes of almost all service problems are direct service failures of one kind or another. For example, if a website goes down (nominally a product/technology/facility failure), it is likely to be as a result of some kind of direct failure, either by a firm's internal media technology staff or an external service provider. Similarly, what is nominally a customer mistake in, say, entering the wrong information onto a website, could be explained by confusing instructions, or a lack of failsafe procedures on the site. Second, there is a potential downside to classifying service problems by allocating blame. Blame creates a culture of denial, and denial gets in the way of learning. Each and every problem, irrespective of responsibility, provides an organisation with an opportunity to recover. In other words, it is better to focus on learning from the problem, solving the problem (if possible) and making things better for the future.

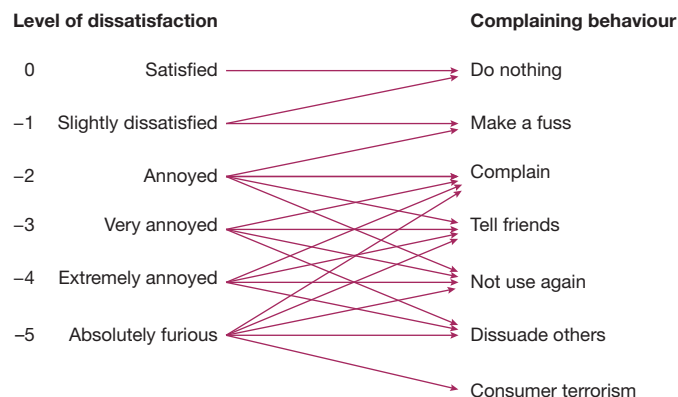
However, before we discuss how we can learn from problems, we need to spend a little time explaining how operations managers and their staff can deal with the complaining customer who has been on the receiving end of a problem.

16.2 How can complaining customers be dealt with?

How customers react to problems will depend upon the severity of the problem. It will also depend on the type of person they are and their attitude to complaining, the perceived likelihood of successful redress, and their age and sex.⁴

By scaling consumer dissatisfaction (see also the satisfaction continuum in Chapter 6) from 0 to -5, where 0 is not dissatisfied (i.e. satisfied), through extremely dissatisfied, to customers who feel absolutely furious, we can obtain a picture of their likely responses to failures (see Figure 16.3).⁵ It should be noted that many other connections are possible. For example, an extremely dissatisfied customer may exhibit only a mild reaction, and vice versa.

Figure 16.3 Customer complaining behaviour



The more dissatisfied a customer is, the more types of complaint behaviour they will exhibit. For some people, a problem or failure may have little effect (level –1) – they may be tolerant or expect poor service. Others, level –2, may just store up a black mark for future recall when something else goes wrong. Others may make a fuss – not quite a complaint, more of a verbal warning: ‘I’m not complaining but ...’. Complaining formally, verbally or in writing is the next level, which, like all the others, will not necessarily be mutually exclusive (some customers may exhibit several behaviours!). Dissatisfied customers may tell friends and colleagues, or indeed may go further and actively dissuade them from using the service. Others may go to the extreme of becoming a ‘consumer terrorist’ (level –5) and campaign against the organisation by putting up signs, putting material on websites, seeking legal redress and sometimes undertaking illegal acts. (One farmer in the UK was so incensed by the treatment he received from his bank that he dumped 10 tons of manure outside its door.)

Word of mouth and word of mouse

While figures abound about how many people a dissatisfied customer will tell, it has been shown that the number they tell will depend upon their level of dissatisfaction.⁶ Slightly dissatisfied customers tell, on average, three other people, whereas extremely annoyed customers tell over 15 each, with absolutely furious customers telling sometimes hundreds of people.

A dissatisfied customer telling other people (by word of mouth) a bad story about an organisation may have limited reach. But many highly dissatisfied customers now resort to word of mouse, which is much more powerful. Stories put on the internet have global reach and can be shared with hundreds if not millions of people – customers and potential customers. The stories are more lasting as they can be seen and referred to over and over again. The internet also provides opportunities to use other media besides the written word. Customers’ stories about an organisation that has provided dreadful service can be captured in pictures, songs and videos.

There are now many websites and social media channels bringing together communities of disaffected customers, either generally disaffected or sites for particular organisations. There are also many websites, both official and unofficial, with reviews of books, hotels, restaurants, etc. One such report for a four-star hotel that one of us was thinking about staying in read:

Dirty stained carpets. Dripping ceilings. Powdered orange juice in disposable plastic cups for breakfast. The coffee shop looks depressing. In a residential location that’s far from the metro or any decent shopping centre. Old TV sets and phones that don’t work. Bedsheets that smell weird. Lousy service. I requested for an adaptor that never arrived . . .

Social networks such as Facebook and video-sharing sites such as YouTube abound with stories from aggrieved customers who have had bad service and/or a poor experience.

Why do customers complain?

An important insight into how to deal with complaining customers comes from asking the question, why do they complain? Yes, something has gone wrong and they have encountered a problem, but complaining was just one route open to them. People tend to complain for a number of reasons:

- To have the problem sorted/corrected.
- To prevent it happening to others (have procedures investigated and changed).
- To get an explanation.
- To have someone disciplined.
- To get financial compensation.
- To feel better.

Interestingly, financial compensation, or a pay-off, is often well down the list of reasons customers give for complaining. Indeed, one study found that the offer of free products or services following poor service was deemed important by less than 5 per cent of those questioned.⁷ The main reason why people complain is to have the problem sorted (for them) and, importantly, to ensure that it doesn’t happen again – that the organisation learns from the problem. We need to return to this critical point later.

Dealing with complaining customers

An important point to consider is that while problems, mistakes and errors are inevitable, dissatisfied customers are not. It is not usually the problem itself that causes dissatisfaction. Yes, customers are aggrieved, annoyed even, that it has happened. But most, though not all, customers do accept that problems sometimes occur. (They are far less forgiving if it happens again, of course.) However, it is the way an organisation responds to and deals with the problem that causes dissatisfaction if handled badly, or delight if handled well. Interestingly, it has been found that those customers who complain and then find that the organisation deals well with the situation experience higher levels of satisfaction (i.e. delight) than customers who experience a normal, good, day-to-day service. This is called the recovery paradox.

The service recovery paradox

The importance of recovering from service failures is highlighted by what has become known as the 'service recovery paradox' (SRP). This is defined as when post-recovery customer satisfaction (or customer loyalty) is greater than it was prior to the service failure, when failure recovery is of a particularly high level. In other words, when recovery is performed well, customer satisfaction can actually be higher than it was before the service failure. The idea of the SRP was first suggested back in the early 1980s when, based on anecdotal evidence, Etzel and Silverman suggested that customers who receive 'gracious and efficient' handling of their complaint may become a company's best customers.⁸ Or, as others have put it, a good recovery can turn angry, frustrated customers into loyal ones. The service recovery paradox is often illustrated as in Figure 16.4. It demonstrates the gap in customer reaction between effective and ineffective service recovery when compared with no service failure.

Essentially, good complaint handling consists of three key operational activities: dealing with the customer, solving the problem for the customer and dealing with, and learning from, the problem within the organisation.

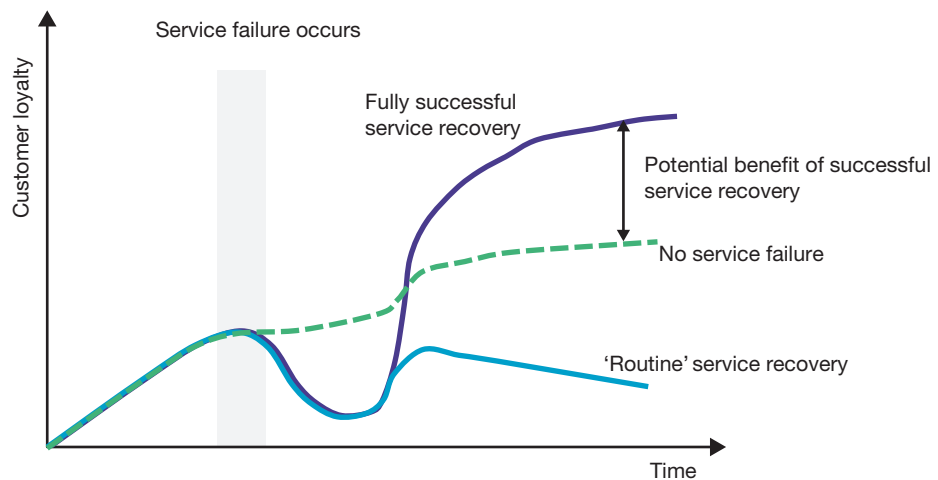
The first of these activities, 'dealing with the customer', involves five key activities:

- *Acknowledgement.* Acknowledge the problem has occurred. For some customers, if staff are dismissive of the problem it can create a good deal more dissatisfaction and bad will.
- *Empathy.* Following on from acknowledgement, try to understand the problem from the customer's point of view and express some sympathy for their position.
- *Apology.* For some people at dissatisfaction levels -1, -2 or -3, an apology may be enough to satisfy them. Some managers may have difficulty in allowing their staff to say sorry because they may be concerned that it implies fault, thus opening the way for litigation. In such circumstances, words similar to 'I am sorry this has happened to you' may do the trick. A written apology or a verbal follow-up call from management may delight customers at the lower end of the dissatisfaction scale but will be expected by customers at the highly dissatisfied end.

Counterpoint

If the service recovery paradox seems counter-intuitive (which a paradox is going to be), it is not surprising that it is not universally supported. Not only is there an intuitive objection based on the belief that service recovery can, at best, only moderate the negative aspects of service failure, but research into the SRP shows mixed results. Some studies do support the existence of the paradox, but many have either not found significant evidence for its existence, or have found only partial

support. For example, one study found that exceptional service recovery could indeed have a positive effect on customer satisfaction, but had no significant effect on any decision to repurchase a service, or on 'word-of-mouth' behaviour, or the business's reputation.⁹ Because of these reservations, most authorities stress that service operations managers should make every effort to prevent failures in the first place, rather than simply relying on superior service recovery.

Figure 16.4 The service recovery paradox

- *Owning the problem.* A member of staff can give the customer some confidence in the process for dealing with their complaint by getting hold of the problem and assuming clear ownership, and reinforcing this to the customer. The sense of relief felt by a customer may lead to them appreciating the efforts made by the member of staff, increasing both their levels of satisfaction.
- *Involving management.* For more severe cases (customer dissatisfaction levels -3 and below), customers often expect that a more senior person will deal with their problem. This should be part of the process, even if the original employee is perfectly competent to deal with the problem.

Solving the problem for the customer involves two key activities:

- *Try, or at least appear to try, to fix it.* For customers who are -3 and below on the dissatisfaction scale, staff may need to be seen to be putting themselves out to fix a problem and ‘jumping through hoops’. At the -5 end of the scale, the fixing may need to be seen to be done (or at least overseen by) someone in higher authority.
- *Provide compensation.* Some organisations seem overly keen to dispense compensation or tokens, assuming that this alone will appease customers. Often, customers simply want the problem fixed and dealt with so that it does not happen again. It is important to note that providing compensation without fixing the problem can lead to even greater levels of dissatisfaction. Token compensation may be unnecessary for level -1 and appreciated by level -2 . Level -3 and -4 customers may require equivalent compensation, a refund and a token gesture. Whereas level -5 customers may need ‘big-gesture’ compensation – either monetary, products or services, or acts of contrition by management.

Case example

Where are my bags?

If you are travelling by air, it’s a dreadful feeling: you are one of the last people waiting for your bags at the airport conveyor belt and coming to that slow realisation that they aren’t coming. It can be highly irritating, but how many bags do get lost? Research

from SITA, which produces an annual report on the state of baggage handling around the world, found that the number of bags mishandled (that is, either lost or temporarily mislaid) is, in fact, going down, even though the number of people travelling by air

is going up. Since 2007, the number of bags lost has fallen by half, while global passenger numbers have risen by a third. This has reportedly saved the industry \$2billion.¹⁰

But why do bags go missing? The same research found that of all the bags that were mishandled, 47 per cent went missing because of what is called 'transfer mishandling'. This is when passengers make connecting flights. Sixteen per cent went missing because of 'failure to load', 15 per cent due to a 'ticketing error' and the remainder due to a mix of tagging, loading and other errors on departure. Arrival mishandling accounted for 4 per cent of delayed luggage.

And, of all mishandled bags, only a very small proportion (7 per cent) were lost or stolen, never to be reunited with their owners. Yet, even temporary 'mishandling' is a problem for the airlines who have to deal with angry customers. Which is why most airlines have detailed processes for dealing with customers' complaints of lost baggage. However, no matter how well-thought-through is an airline's complaints procedure, without constant sensitive handling of individual customers, complaint handling can make things worse. For example, British Airways, when it was attempting to defend its service to an angry customer, accidentally revealed the number of bags that it had lost.¹¹ When replying to a lost baggage complaint on social media, it admitted that of the 15 million bags it transported between



Neustockimages/E+/Getty Images

January and June that year, 1 per cent were delayed or lost. Quite reasonably, it said that revealing this figure would not mitigate the inconvenience of having a delayed bag. However, the tweet had an unforeseen effect – it prompted other customers to take to social media and complain. British Airways did apologise and point out that on the rare occasion that baggage is delayed, it is returned to the owner within a few hours in the vast majority of instances.

In fact, British Airways is correct. It is very rare for a bag to remain lost. But if, after 90 days, no one has been able to link a bag with a particular passenger, it will probably finish up like much of the other lost property that turns up in airports. An auction house will sell the luggage and its contents (dirty clothing mainly), with any profits going to charity.

Dealing with customers who don't complain

Surprisingly, many customers do not complain when something goes wrong and, as a result, the problem may go unnoticed, and therefore unsolved, by the organisation. The proportion of customers not complaining varies significantly between organisations. It also depends on the nature of the person involved, the seriousness of the complaint and the intensity of dissatisfaction felt.

Unfortunately, many customers tell others about poor service rather than tell the organisation's staff, who might be able to appease the customer and fix the problem. Research suggests¹² that customers often feel that complaining is just not worth the effort and, more significantly, that if they did, the organisation would not actually change anything (see Table 16.1).

If services are to encourage feedback, complaints and helpful suggestions from customers, they need to make it easy for customers to provide feedback and to ensure, and assure them, that things

will change, that the organisation takes the feedback seriously and acts on it. The MTR Corporation in Hong Kong for example, goes to great lengths to solicit customer feedback (see the case example ‘MTR Corporation, Hong Kong’).

Table 16.1 Reasons for not complaining

Reasons for not complaining	Percentage citing those reasons
Did not think anything would change	50
Too much effort	17
Did not want to cause trouble	17
Too busy	8
Too stressful	8

Case example

MTR Corporation, Hong Kong¹³

The MTR Corporation operates ten railway lines serving Hong Kong Island, Kowloon and the New Territories. In addition, a light rail network serves the local communities of Tuen Mun and Yuen Long in the New Territories, while a fleet of buses provide convenient feeder services. The corporation also operates the Airport Express, a dedicated high-speed link providing the fastest connections to Hong Kong International Airport and the city’s major exhibition and conference centre, AsiaWorld-Expo. It was established in 1975 as the Mass Transit Railway Corporation, with a mission to construct and operate an urban metro system to help meet Hong Kong’s public transport requirements. With an average weekday patronage of about 5.9 million passengers, it is one of the most heavily used mass transit systems in the world. MTR is regarded as one of the world’s leading railway operators for safety, reliability, customer service and cost efficiency. Besides running a mass transit system, the corporation is also actively involved in the development of



picturelibrary/Alamy Stock Photo

key residential and commercial projects above existing stations and along new line extensions.

MTR is also known for its emphasis on continually developing its network and its services to customers. The corporation’s mission is to develop and manage a world-class railway, together with property and other related business, to enhance the quality of life in Hong Kong. Customer service is one of the

corporation's core values. In order to help the company understand how it can better meet the changing needs of passengers, it makes enormous efforts to listen to its customers' concerns and needs. Managers undertake annual passenger surveys, home interview surveys, biannual customer service surveys and focus group discussions. The company

also runs a customer telephone hotline, has station suggestion boxes and even holds station coffee evenings and the occasional radio phone-in. The MTR is obsessed with how customers feel and with developing its services and facilities to meet their needs. It says that it listens (to its customers) and it acts (on what it hears).

There are a variety of methods for encouraging feedback. These include:

- *Comment cards.* These should give customers the chance to air their views about the service (What did you like? What went wrong?), ask how the customer thinks the service could be improved (What could we do better?) and ascertain information about whether they will return (Will you use us again? Will you recommend us?). Some organisations also use incentives, such as prizes, to encourage both positive and negative feedback.
- *Notices.* Notices are useful in explaining to customers the process for making a comment or complaint. Freephone numbers may help encourage those who would otherwise not provide feedback. A small number of organisations are trying to demonstrate how seriously they take feedback by involving senior managers or sometimes even the chief executive, by providing their contact numbers or email addresses.
- *Websites.* While the number of 'unofficial' websites is increasing (where highly dissatisfied customers 'voice' their opinions about organisations), other organisations are taking the proactive step of capturing feedback via their own websites.
- *Staff feedback.* Front-line staff are often the people who pick up the small comments or grumbles and are usually in a position to provide feedback to managers. Sadly, few organisations seem to harness this information stream by having formal or informal feedback and improvement mechanisms, whether they be unit meetings, or paper or web-based systems.

Online/computerised complaint systems

Some aspects of complaint handling, like many other 'routine' procedures in the business of managing ongoing operations, can be helped by the use of information technology. Computerised complaint management systems can perform at least part of a complaint process. One advantage of computerised complaint systems is that they can conveniently manage complaints that come through multiple channels. Especially in large organisations, customer complaints can come through several channels, such as through customer contact staff, social media, phone calls, online, email and so on. They all need to be recorded, tracked from submission to resolution, and handled according to the organisation's processes. Automating these processes means that all complaints can be grouped together into one system, enabling the collection, storage and analysis of data, which can reveal trends and thus help to prevent future complaints (and maintain compliance with regulatory authorities, where appropriate). A further advantage of such systems is that complaints can be easily directed to whichever part of the organisation is best placed to handle them, then track them to make sure that they are dealt with promptly. Complaints can also be prioritised (called complaint triaging), so that particularly urgent issues can be dealt with as a priority.

Online citizen complaint handling

A particularly important variant of computerised complaint management systems is where an organisation has a wide variety of services to deliver to a large number of people. Local and national governments are perhaps the most extreme example of this. Any service operations managers in,

Counterpoint

There is an important caveat that should be applied to computerised complaints management. Although there are advantages in automating and standardising complaints handling to some extent, a particularly important part of the experience, from a customer's point of view, is the degree of empathy and contrition shown

by an organisation after a service failure. It could be argued that automating even parts of the process will inevitably affect the behaviour of service staff, who could be driven to 'follow the process' rather than 'treat the customer's specific needs' – leading to some erosion of the 'personalisation' of the encounter.

for example, a local government or municipality have to cope with citizens reporting their concerns and complaints, from roadworks delaying traffic to potholes on main roads, from refuse collection concerns to disputed property tax assessments, and from planning permissions to weather-related school closures. Notwithstanding such a variety of services and many different stakeholders, there is often a regulatory requirement to comply with complaint-handling standards. Under these circumstances, the advantages of an effective online complaint-handling system are obvious. Some local government authorities have deployed 'citizen reporting systems' that make it easy to report concerns.¹⁴ Here, the objective is not only to provide a better service for the public, but also to promote an environment that encourages people to care about the state and well-being of their local area.

16.3 How can managers use problems to drive improvement?

Given that problems are always going to happen and customers are going to complain, organisations need to be able to use this information in a constructive way to learn from the problems and drive improvements through the organisation. We refer to this activity as service recovery.

Service recovery

Many people use the term 'service recovery' to mean dealing with the customer after something has gone wrong – that is, apologising to them, fixing the problem for them and maybe providing compensation (as we covered previously). However, we define service recovery as the action of seeking out and dealing with problems and failures in the provision of service in order to improve the service, as well as operational and organisational performance. This definition expands service recovery away from complaint management by another name to the activity of finding failures and potential failures – preferably before the impact of such failures has been felt by the customer – and putting them right by driving improvements to operational processes and making things better for the customer, the staff and the organisation (the triple bottom line).

The act of recovering from a failure should, of course, lead to satisfied, even delighted, customers. This, in turn, should lead to higher retention rates and therefore all the financial benefits this provides (long-term income streams and reduced costs, etc.) as well as positive word-of-mouth recommendations. The key purpose of service recovery is not solely to satisfy the customer *per se*, (i.e. recover the customer), although this can be important, but to use the information gleaned from the failure and its consequences to drive improvements through an organisation by focusing managerial attention on specific problem areas. If the focus of service recovery is solely to satisfy the complaining customer, then its potential to prevent the problem recurring – and thus prevent more dissatisfied and lost customers, and reduced financial

performance – is lost. Importantly, dealing with a problem and recovering from a failure should lead to operational improvements. This, in turn, leads to reduced costs, less waste and fewer problems in the future, which thus reduces the costs of dealing with problems. Dealing well with problems, satisfying customers and improving processes also makes life easier for staff. So, good service recovery should also lead to increased staff satisfaction, leading to higher levels of staff retention and therefore reduced costs.

The three operational results – customer recovery (dealing well with the complaining customer), process recovery (improving operational processes) and staff recovery (making things better for the staff) – are the main outcomes of service recovery. In turn, these should lead to improvements in the organisation's financial performance (see Figure 16.5). Interestingly, research has shown that the weakest driver of improved financial performance is customer recovery, and the strongest is process recovery.¹⁵ So, organisations that focus on recovering the customer and not recovering the processes are not only losing out on preventing problems reoccurring but also on improved financial performance. Despite this, many organisations do not obtain these benefits and continue to view service recovery simply as a means of trying to pacify a dissatisfied customer.

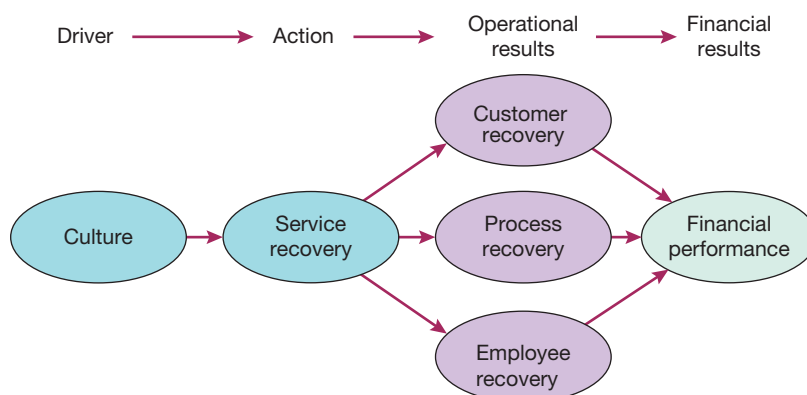
Creating the right culture

One critical condition of effective service recovery is having the right service culture. It is often typified by the words 'no blame'. This means that when a problem or a failure occurs, the member of staff is not blamed, but the focus of attention is on the problem itself and how it can be resolved for the future. However, should a member of staff make the same mistake twice – well that may be a different matter. This seemingly obvious approach is incredibly hard to achieve. It requires a highly supportive management style, one that stresses learning rather than blaming, where senior managers and indeed managers of all levels model the desired behaviours of support, encouragement and improvement. It also requires a good commitment to the support and training of staff to openly report problems, with good mechanisms to deal with the problems and improve processes.

Customer recovery

When things go wrong, organisations have a chance to demonstrate what they can do for their customers. Indeed, for some organisations, such as utilities, the occurrence of a failure or a problem is one of the few times that the organisation's staff may come into direct contact with customers. Employee unwillingness to recognise and deal with problems is known to be a key cause of customer dissatisfaction.¹⁶ Customer recovery involves dealing well with the complaining customer and also being proactive in seeking out feedback from customers about problems rather than waiting for the problems to occur.

Figure 16.5 The influence on service recovery and its consequences



Managing complaints well should lead to an increase in customer retention, but it may also lead to reciprocity. Because the organisation has been seen to go out of its way to sort out a difficult situation for a customer, customers may feel obliged to reciprocate by not only continuing to use its services but also by becoming a champion for the organisation and providing positive word-of-mouth recommendations.

Process recovery

Not all service organisations are good at taking information about service problems, learning from them and turning them into real improvements. Indeed, some organisations make it particularly difficult by setting up remote and disconnected customer service centres, whose role is to pacify customers while not disturbing the rest of the organisation and letting it get on with its 'real' task. Yet process recovery is an important activity.

Process recovery involves a number of steps. First, the problem needs to be investigated and data collected and analysed. Then, the root cause of the problem needs to be identified, options for improvement considered and costed. It may be that the cost or difficulty of overcoming a problem may be deemed to be greater than the cost and inconvenience caused. In such cases, a procedure needs to be put in place to ensure staff know how to deal with the situation should it occur again. On the assumption that changes are required, and deemed necessary and appropriate, whatever was the cause of the problem should be resolved and the problem eradicated. The process then needs to be checked to ensure that the solution has actually solved the problem. Then it may be appropriate to go back to the customer or member of staff who drew attention to the problem, to explain what has been done to fix the problem. This usually delights the customer/member of staff, validates their actions and encourages them to provide more feedback, in a positive way, to the organisation.

Information from customer complaints and from other failure or problem situations should provide organisations with the means (and motivation!) to improve what they do and make things better for the future – not only for their customers but also for their staff, who may experience on a regular basis what might seem one-off failures to customers.

Case example

The Slack recovery approach¹⁷

Slack is a workplace messaging platform or, as it describes itself, a collaboration hub where individuals and teams can work together to get things done. The name is an acronym for Searchable Log of All Conversation and Knowledge. It has many millions of active daily users collaborating in its workspaces (a workspace is a shared hub made up of 'channels', where team members can communicate and work together). Since its launch in 2013, Slack has helped streamline workplace communications and improve collaboration between employees. But like any platform-based operation, the greatest threat to its service is a system outage where users cannot access the platform. And it has happened. Yet, regrettable as such incidents are, how a service provider responds can make a big difference to customer reactions to the loss of service.

Slack has developed a reputation for responding relatively well to such incidents. First, it understands the importance of communications. Immediately there are any detected problems with the platform, the company keeps its users up to date with regular updates on Twitter, while the company's social media team work furiously to reply to people's, often angry, complaints and enquiries. Second, it apologises and reassures users that it is actively investigating the cause of the problem and will issue regular updates. Third, its communication is generally humorous, thoughtful and personalised. But, possibly most important, although the company puts considerable effort into maintaining a very high level of service provision, it is not taken by surprise when an outage does occur. It has a well-thought-through plan, agreed, resourced and organised in advance, for when such failures happen.

Employee recovery

Learning from problems, improving operational processes and satisfying customers should of course make things better for the staff. They will be faced with fewer complaining customers, and operational processes will be easier and better. However, problems will still occur and managers need to recognise that some front-line staff may feel a sense of frustration and irritation that a problem has occurred. They may also feel stress caused by having to deal with an unhappy customer, especially where managers are not listening or willing to make changes to deal with the cause of the complaints. This leads not only to dissatisfied and disillusioned customers but also to dissatisfied and disillusioned staff, who feel powerless to help or sort out the problems. This helpless feeling, known as learned helplessness,¹⁸ encourages, or rather induces, employees to display passive, maladaptive behaviours, such as being unhelpful, withdrawing or acting uncreatively. The employee alienation associated with this helplessness will be compounded if employees feel that management does not make efforts to recover them from this helpless state. So, just as with customers, employees may need to be ‘recovered’ by their supervisors or managers.

Employee recovery is done in the same way as recovering customers: acknowledgement, empathy, owning the problem, etc., and also investigating and fixing the problem, maybe by involving the member of staff in the process.

The acid tests of service recovery

In summary, we suggest that six acid tests can be applied to an organisation to assess its service recovery capability:

1. Is there a culture of learning from problems that drives improvement?
2. Does it lead to increased customer satisfaction (at least for those customers that the organisation wishes to retain)?
3. Does it improve customer retention rates?
4. Does it drive process improvements?
5. Does it lead to a better job for the staff?
6. And, as a result of the above, does it improve financial performance?

Counterpoint

How a business responds publicly to complaints or criticism can easily descend into cliché. Phrases such as, ‘Our customers’ feedback is very important to us and we are looking into this’, or ‘We value your feedback and we will be looking into our policy on this issue’, can be seen as largely meaningless at best and patronising at worst. Similarly, such comments as, ‘We appreciate your feedback [insert name here] and we’ll ensure this is fed back to the relevant team’, sound as if they have come from an algorithm-driven bot (even if they have not). Sometimes such comments from companies can even be seen as trying to cover up dubious practice. For example, when it became clear that a train operating company in the UK was keeping 10 per cent of any cash found in lost wallets and purses found on their trains, passengers were furious and made their outrage clear on

social media. The company did reverse the policy as a result of the uproar, but what annoyed some of its customers more was its statement to the press: ‘Our customers’ feedback is really important to us and following recent feedback on this issue we will now be changing our policy.’ Some commentators recommend more honesty and less cliché when companies reply to their customers. One story concerns a disabled user of Apple computers who wrote to the then boss of Apple, Steve Jobs, regarding a view he had expressed about traditional computers becoming obsolete.¹⁹ Because his disability made it difficult to use tablets, he asked Apple not to give up on its regular computers. Jobs did not reply saying, ‘Thanks for the feedback. I’ll feed it back to the feedback people.’ Instead he sent a one-liner, ‘We will keep making the best computers on the planet. We love it.’

On this last acid test, effective service recovery should lead directly to enhanced financial performance for the organisation. There should be increased revenues from higher levels of retention and from positive word of mouth from delighted customers. There should also be reduced costs from continuous operational improvements and lower costs (financial and emotional) in dealing with dissatisfied customers. Indeed, defined in this way, service recovery should be viewed as a profit centre. Sadly, in many organisations service recovery, or rather complaint management, is seen as a necessary evil and a sunk cost. To understand better these relationships between complaints/recovery and financial performance, organisations need to collect and analyse the data to help them exploit the value of service recovery for the organisation.

16.4 How can managers prevent problems occurring?

We defined service recovery as the action of seeking out and dealing with problems and failures in the provision of service in order to improve service, operational and organisational performance. One key part of this is seeking out problems and stopping them happening in the first place. In Chapter 15 we provided several tools to help organisations continuously improve what they do. Here are two additional tools that specifically help uncover and/or reduce problems: failsafing and service guarantees.

Failsafing

Failsafing is one means of trying to reduce the likelihood of failures in service processes.²⁰ This idea is called *poka yoke* in Japan (from the Japanese *yokeru*, meaning to prevent, and *poka*, inadvertent errors). *Poka yoke* are simple automatic failsafe devices that can be designed into a service to prevent many inevitable mistakes becoming failures. *Poka yoke* usually have the dual advantages of cheapness and simplicity, and are used to prevent both staff and customers doing the wrong thing. *Poka yoke* can be used to reduce customer failures by encouraging customers to do the right thing. Simple but effective examples include: airline lavatory doors that need to be locked to have the light come on; electronic tags on products in a store that ensure that they are not inadvertently or intentionally taken out of the store; and mobile phones that can be locked to prevent accidental calls being made in your pocket.

From an operation's perspective, *poka yoke* can be used to ensure that staff adhere to procedures in order to reduce or eliminate service failures. Some computerised procedures, for example, will not allow operators to move to the next screen until all the information has been provided on the previous screen. The 'dead-man's handle' on a train will automatically stop the train unless a driver is holding the handle down. Equipment failures can be prevented, or the consequences minimised, by making them literally failsafe: automatic doors that can only fail when open, traffic lights whose fail mode is amber in all directions. Using parallel wiring, or having back-up components or systems, can also dramatically reduce the likelihood of equipment failure.

There are four key steps in failsafing:

1. Identify the potential or actual weak points in a process. This can be done using some of the tools we introduced in Chapters 7 and 11 (such as process mapping, walk-through audits, emotion mapping or customer experience analysis), or from the analysis of complaints data.
2. Brainstorm various ways of reducing or preventing errors.
3. Select, design and implement the most appropriate *poka yoke*. If the failure is not preventable, ensure the staff know how to handle the situation when it arises.
4. Monitor and evaluate the effect of implementation and repeat the above steps if necessary.

Case example

Poka yoke in healthcare

It is one of the most fundamental principles of all medical education that students throughout the world are taught: *primum non nocere* – a Latin expression that means ‘first, do no harm’. In other words, when in doubt, it can be better to refrain from doing something, or even to do nothing, than to risk causing more harm than good. The reason is obviously the potential life-or-death consequences of treatment errors in healthcare operations. Which is why the idea of *poka yoke* to prevent life-threatening mistakes has been taken up with such enthusiasm by safety-conscious clinicians and managers in some progressive hospitals and clinics around the world. Here are just a few examples:

- Administering the wrong type of blood is potentially disastrous for a patient. Some hospitals use a plastic padlock that prevents medical staff having access to a unit of blood unless a three-letter code on the patient’s wristband is used. The code is set in the blood bank and is specific to a particular patient. So, whoever is administering the blood can access it only by obtaining the code from the patient’s wristband. This is the only place where the code is available. It is deliberately absent from the patient’s chart or other information systems.
- Wheelchairs are important in hospitals. Many patients with reduced mobility rely on them. However, people with reduced mobility can be vulnerable to accidents caused by the wheelchair rolling away as they sit down (potentially resulting in hip fractures for elderly patients). To prevent this, some wheelchairs have been fitted with automatic brakes that are designed to engage when the chair is unoccupied. Only when a person is seated or a hand lever is pulled will the wheels turn freely.
- With the increased use of medical gasses in routine procedures, most hospitals install gas delivery systems for clinicians to plug lines into. For example, one wall panel may have outlets for nitrous oxide, medical air, oxygen, etc. This is obviously convenient, but raises the possibility

of connecting lines to the wrong gas outlet. To prevent this, the lines can be designed so that a line cannot physically be connected to the wrong outlet. It may seem obvious, but it took several errors before the delivery systems were redesigned.

- Catheters are thin tubes produced using medical-grade materials that can be inserted in the body and serve a broad range of functions. They are usually employed to channel fluids either into or out of the body. A urinary catheter is used to empty the bladder and collect urine in a drainage bag. They are often inserted through the tube that carries urine out of the bladder, allowing urine to flow through it and into a drainage bag, for example before or after surgery. In such circumstances, one-way flow is essential, which is why modern catheters of this type have valves designed to allow fluids to flow only one way.
- Hospital operating suites can use many types of large, delicate and expensive equipment. During sometimes long and complex surgical procedures there is always the danger that items of equipment will collide with each other as they are being moved. Automated collision detection systems will warn and, in some cases, can lock if they sense an impending collision.

But *poka yoke* do not need to be expensive or sophisticated. In fact, many are simple, cheap and easy to implement. They may not all physically prevent errors occurring, yet they can reduce either the errors occurring or their impact on people or processes. Lines marked on the floors of hospitals are a good example. Many users of magnetic resonance imaging (MRI) machines advise marking the floor with lines to indicate where the magnet’s strength exceeds a recommended safe level. Other hospitals mark-off areas where nurses prepare or retrieve medications. When inside this area, colleagues are not allowed to interrupt them or engage in conversation, thus reducing the possibility of errors caused through distraction.

Service guarantees

A service guarantee is a built-in form of service recovery. It acknowledges that problems will occur and provides a system to encourage, and reward, customers to report problems so the organisation is made aware of them and can deal with them. A service guarantee is a promise to recompense a customer for service that fails to meet a defined level. A good guarantee explains what the promise is, what to do if it's not met and what the customer should expect to receive in compensation. For some organisations, service guarantees are a key part of a customer-focused strategy.

Guarantees require an organisation to formalise the service recovery process. A service guarantee includes the setting-up of a clear and inviting mechanism for customers to trigger the guarantee, as well as training and empowering employees to deal with guarantees when they are invoked. A service guarantee should also specify the compensation for any failure. The guarantee can also be used proactively: for example, a pizza restaurant developed explicit recovery procedures, which included front-line staff invoking the guarantee on behalf of the customer if the pizza was late by apologising and immediately presenting the guest with a voucher for a free pizza (as promised in the guarantee).

Case example

A service guarantee for aviophobes²¹

Flying is the safest way to travel. Unless you live in a particularly reckless country, your chance of dying when travelling by air is many times lower than it is travelling by car. Yet, fear of flying, or aviophobia, is a relatively common phobia. According to a YouGov survey, a third of people admitted to being slightly anxious about flying, and some 16 per cent confessed to being too afraid to fly.²² Several causes of aviophobia have been suggested, including the heavy media coverage of aeroplane accidents, an aversion to airport procedures such as security measures, long queues, body searches and X-ray scanners that can trigger feelings of anxiety in some people, and sometimes something as simple as a bad past experience such as a flight with severe air turbulence.

This is clearly an issue for airlines, who do not want a sixth of their potential market reluctant to use their services. Which is why the airline Virgin Atlantic made an offer to its customers that if they booked a flight on one particular day, they would be offered a free place on its 'Flying Without Fear' course. Better still, if they were not cured in time for



AndreyPopov/iStock/Getty Images Plus/Getty Images

their trip, the money they spent on their plane ticket would be returned. Virgin Atlantic wanted everyone to be able to say, 'let's do it', try something different and fly somewhere new. Hopefully, by guaranteeing to cure people of one of the main things holding them back, nothing could hold anyone back from flying. The Virgin Atlantic 'Flying Without Fear' programme has become, according to the airline, the leading course in the industry, having helped 2,000–3,000 people every year to overcome their

fear of flying. The airline says that it wants to reassure participants that they are not alone in their fear of flying, and that there are millions of people who suffer similar anxieties. The course has been designed to help people conquer their fears of flying, with the aim of enabling participants to be able to take a holiday or business trip and actually enjoy it. People from four years old up to the age of 87 (the oldest so far), with fears ranging from mild anxiety to complete terror, have all been helped by

the programme and are now flying. Virgin says that it has a 98 per cent success rate. The programme runs courses more than 20 times a year, and claims to help you to learn new ways to think about flying. And the guarantee? The airline says that if you can provide sufficient evidence that your fear of flying is not cured, they will provide a full refund for the flight purchased – this to be determined by the professionals who administer the ‘Flying Without Fear’ programme.

The six acid tests of service guarantees

The acid tests of service recovery, which we described previously, can also be applied to a service guarantee:

1. Is there a culture of learning from problems that drives improvement?
2. Does it lead to increased customer satisfaction (at least for those customers that the organisation wishes to retain)?
3. Does it improve customer retention rates?
4. Does it drive process improvements?
5. Does it lead to a better job for the staff?
6. And, as a result of the above, does it improve financial performance?

Learning culture

If there is no learning culture, guarantees will not do their job. Indeed, this is evident in some organisations where, as soon as somebody involves the guarantee – that is, tells the organisation something was wrong, they are immediately given the compensation (vouchers, cash back or whatever), but the problem is never recorded and nothing is ever done about it.

Customer satisfaction

A restaurant that promises to serve a lunch to customers within 10 minutes of their order not only focuses the organisation on delivering what is important to customers but also reduces customers’ perceived risk (if they need a quick lunch, for example). A service guarantee also reduces the likelihood of a dissatisfied customer walking out of the door without telling anyone what the problem was, thus giving staff a chance to recover the customer and indeed the process.

The key advantages to a customer include:

- *Focusing on satisfying the customer.* A guarantee helps to focus an organisation and its employees on satisfying the needs of a customer. It sharpens them and acts as a constant reminder of the need to satisfy customers.
- *Reducing perceived risk.* For the customer, a guarantee may reduce any risk in the purchase, which is important since many services cannot be assessed until experienced. A service guarantee can reduce risk by clarifying the standards of performance the customer can expect, promising high-quality performance in those service elements that are perceived as important by the consumer, and by the promise of a payout and/or rework should the service fail.
- *Creating a positive attitude.* According to the theory of reasoned action, an increased strength of the belief that buying the service will lead to a favourable outcome induces the customer to

form a more favourable attitude towards buying, which in turn leads to a stronger behavioural intention towards buying. This strengthening of behavioural intention has a positive impact on customer beliefs, attitudes, purchasing intentions and the number of customers actually buying.

- *Dealing with dissatisfaction.* A well-designed guarantee provides customers with clear standards against which to assess a service performance. The guarantee also promises the customer a meaningful compensation if guaranteed standards are not met. This therefore encourages complaining, or feedback, indicating that it is acceptable, indeed encouraged, and provides staff with mechanisms to deal with dissatisfaction. This, in turn, increases the chance of recovery and therefore customer satisfaction and organisational learning.

Customer retention

Customer retention is also increased by resolving complaints as a result of a service guarantee. By providing a guarantee, organisations may retain customers who might otherwise switch because of a perceived increased risk of purchasing elsewhere. Furthermore, well-designed service guarantees have a high communications quality in themselves and may induce customers to talk about them.

Process improvement

Service guarantees, just like service recovery, help identify fail-points in an organisation. Often, in the design stage of a guarantee, operations managers are forced to confront the weaknesses of their service processes and support systems to try to ensure that they will meet the required standards. When invoked, service guarantees provide data on poor performance, track errors and thereby help organisations identify and remove fail-points.

Staff performance

Guarantees can reduce the stress felt by staff in dealing with problems and complaints. By having a service guarantee with a clearly laid-out procedure for invoking the guarantee, the staff know exactly what to do and indeed their customers know exactly what to expect. Also, service guarantees, by their existence, reinforce the need for employees to provide error-free service by focusing on the things that (hopefully) are of importance to the customer.

Financial performance

Service guarantees, well designed and well applied, should therefore lead to customer satisfaction, which drives retention and long-term revenue streams. Reduced perceived risk in the purchase of the service not only helps satisfy existing customers but will help attract new customers to the organisation. Improved process performance should also help retain existing customers as well as attract new ones. Improved performance may also help reduce both the costs of the process and the costs of losing customers or of rework. Significant cost savings can emerge, even though they may not have been the initial motivation for the introduction of a guarantee. Guarantees may also reduce employee costs. After Hampton Inns introduced a service guarantee, employee surveys showed that the guarantee increased employee morale. This was also reflected in a drop in employee turnover from 117 per cent to 50 per cent within three years.²³

However, an additional cost is the cost of the compensation specified in the guarantee. This may not be insignificant if the guarantee is to have any meaning for customers, although at least this puts a clear internal cost on failure, which the organisation can seek to reduce. Furthermore, services are real-time performances and cannot be executed 100 per cent failure-free all of the time – occasional service failures are unavoidable. However, some customers so appreciate the existence of the guarantee and the chance to provide feedback easily that they decline the compensation when offered.

Downsides of guarantees

Service guarantees do, however, have their downsides. They imply that the service may well fail – thus the existence of a guarantee will sensitise customers to the performance of the service and maybe even make them look for poor service. Conversely, the standards set in the guarantee may be higher than customers need or even expect, thus unnecessarily increasing the cost of the service.

A frequently quoted concern is that customers may cheat. Believe it or not, it has been known for students to order a pizza with a guaranteed delivery time and then to barricade doors and corridors to ensure it is late and therefore free. Research found that despite the reluctance of many organisations to provide them, full money-back guarantees will be abused no more than for smaller payouts. It is also suggested that guarantees are best targeted at repeat customers because customers intending to use the service again tend not to cheat.²⁴

Designing a service guarantee

There are three key aspects to the design of a service guarantee: the design of the promise, the design of the procedure to invoke the guarantee and the design of the improvement system.

Design of the promise

There are five key elements in the design of the promise:

- *It should be meaningful.* The promise needs to be based on customers' expectations and to cover what they regard as being the critical determinants of success or failure. If an organisation guarantees something that is of little consequence, the guarantee will have little value. Before embarking on guarantees, organisations should conduct market research to understand customer needs.
- *It should be easy to understand.* A guarantee should be simple to understand and communicated in a clear way. Guarantees that involve pages of fine print will be regarded with scepticism. Indeed, guarantees that include constricting conditions, which are only revealed on close inspection, might be regarded as misleading and lead to dissatisfaction with the service in particular and the organisation in general.
- *It should be explicit.* The most powerful form of guarantee is one that is explicit – it is quite clear about what is being guaranteed and what the payout will be for failure. Federal Express was the first express company to offer a money-back guarantee – its guarantee states 'on-time delivery or your money back'.²⁵ Some organisations, particularly professional service organisations, may use implicit guarantees, where it is implied that any problems will be dealt with (in an unspecified way).
- *It should be unconditional.* The most powerful promise is one that guarantees satisfaction without conditions. Less powerful, though sometimes expedient, are guarantees that offer payouts with conditions attached. Airlines providing guarantees of punctuality may not cover instances when the delays are not their fault. The aircraft may be late due to typhoons or air traffic control problems.
- *It should pay out.* The service promise needs to have an appropriate level of payout. Too high a level – for example £1,000 for the late delivery of a pizza – may encourage cheating or may even put customers off claiming their rights. Inappropriately small payouts (£0.10 for a late pizza) may be deemed to be insulting and not worth informing the organisation of the problem (which was part of the intention in the first place).

Design of the procedure

The procedure to invoke or use a guarantee needs to be simple and easy. If the customer is expected to fill out a set of forms in triplicate and get signatures from all parties involved, as well as a written statement from a third party, the guarantee loses all its credibility and all its potential. The system should be easy, non-threatening, clear and known.

Design of the improvement system

A final and critical design aspect, sometimes lost in the marketing hype of service guarantees, is that one of their key purposes – and the most important – is to help the organisation learn from mistakes and then drive improvements through the organisation. If the guarantee simply proceduralises a system of payouts without providing information to the organisation about failures or encouraging improvement, we believe it is of little value.

16.5 Summary

Why do problems occur? – Problems occur because service operations are usually complex, human-based systems involving the provision of many services. When things do go wrong, customers are increasingly willing to complain, or to take other forms of action. A service process involves a wide range of inputs: staff, technology, facilities, with the additional variable, the customer, whose inputs are not always as predictable or consistent. There are several types of problems including service, equipment or customer failures, but dealing well with any type of problem should drive improvements in the operation.

How can complaining customers be dealt with? – Customers complain in order to have the problem sorted/corrected, prevent it happening to others, get an explanation, have someone disciplined, get financial compensation and to feel better. Good complaint handling consists of three activities: dealing with the customer, solving the problem for the customer and dealing with, and learning from, the problem within the organisation. Dealing with the customer involves five key activities: acknowledgement, empathy, apology, owning the problem and involving management. Solving the problem for the customer involves two key activities: fixing the problem for the customer and providing compensation. There is some support for what is called the ‘service recovery paradox’ (SRP). This is defined as when post-recovery customer satisfaction (or customer loyalty) is greater than it was prior to the service failure, when failure recovery is of a particularly high level. Generally, there are a variety of methods for encouraging feedback. These include comment cards, notices, websites and staff feedback.

How can managers use problems to drive improvement? – Service recovery is the action of seeking out and dealing with problems and failures in the provision of service, in order to improve the service and operational and organisational performance. Using problems to drive improvement requires the right culture, customer recovery, process recovery and staff recovery. Creating the right culture is important, and requires a highly supportive management style – managers who model the desired behaviours of support, encouragement and improvement, with a commitment to staff support and training. Recovery can be thought of as consisting of three elements. First, customer recovery involves dealing with the customer, solving the problem for the customer and dealing with, and learning from, the problem within the organisation. Second, process recovery involves investigation of the problem, data collection and analysis, root cause identification, consideration of alternatives and process change. Third, employee recovery requires supervisors or managers ‘recovering’ employees when they are faced with problem situations.

How can managers prevent problems occurring? – Failsafing, or using *poka yoke*, can reduce the likelihood of failures in service processes. *Poka yoke* are simple, failsafe, automatic devices that can be designed into a service to prevent many inevitable mistakes becoming failures. Service guarantees are a built-in form of service recovery. They acknowledge that problems will occur and provide a system to encourage, and reward, customers to report problems so that the organisation is made aware of them and can deal with them.

Discussion questions and exercises



1. Banking customers often suffer digital banking failures and shutdowns, either because of security alerts or because the bank's systems have failed. What is the damage to a bank's reputation when such problems occur and how can the bank both learn from them and minimise them?
2. Reread the Counterpoint box that claims that how a business responds publicly to complaints or criticisms can easily descend into cliché. How valid are such views, and what could companies do to prevent their replies becoming meaningless?
3. How might public service guarantees (service guarantees issued by public, rather than private, organisations) need to differ from normal commercial ones?
4. Viz2XHealth was a business-to-business healthcare IT company based in Dubai, serving major hospitals in the Gulf States. Its system allowed health staff to access and interrogate multiple systems from one, user-friendly interface. But it had a problem.

Everything we have ever done and worked for is about to go up in smoke,

explained the service manager.

If we are not able to quickly sort out the problems with the system at one of our main customer hospitals, we could lose a lot of future work.

The problem came to a head when it emerged that one patient, who had a serious but treatable heart condition that could have been cured with simple surgery, had died because of failures in the new system. It should have generated an admissions letter, but did not because the 'bed state' on the computer incorrectly showed no free beds. The patient died while waiting for admission. The hospital told Viz2XHealth that the system clearly did not work, had taken two years to implement instead of the promised six months and had cost significantly more than the original tender. It wanted it fixed, very quickly, at no additional cost, and would sue the company for the payout made to the family of the dead patient.

The Viz2XHealth service manager explained that they had followed all the usual protocols but had hit several problems. The steering group, which was there to oversee and specify the system, was a nightmare to run; people kept being

called away and meetings cancelled. Individual members just seemed interested in their own area and nothing else. User groups (whose role was to check the practicality of the proposal) also became resistant, making access to key people and processes difficult. Also, the hospital had requested a change of the system's specification a month before it went live. Moreover, the hospital's CEO changed half-way through the project, with the new one wanting to save money. A Viz2XHealth systems developer commented:

We spent time and effort mapping out all existing processes and identifying user needs. Then, when we checked back with the staff, they knew what they wanted but couldn't see the benefits of everything being joined up. Then, when they saw an early version of the system they started wanting lots of changes, not to the interface we were developing but to some of their existing systems. That significantly increased costs and extended the implementation.

He concluded,

Viz2XHealth has only been going for a few years. At the start it all seemed relatively straightforward. We would put in an interface system and people seemed to be grateful. Now we put in the system and they expect us to solve all their other problems for the same cost. We then get into a vicious spiral of increasing demands, greater complexity, escalating costs, more problems and more complaints.

- (a) How should Viz2XHealth respond to the problems with the hospital? (b) What should Viz2XHealth do to avoid this type of problem?
5. Froden is a leading international retailer selling clothing and accessories, with stores around the world. The countries from which it sources its products include Sri Lanka, Bangladesh, India and Vietnam. It was shocked when a British newspaper reported that an unauthorised subcontractor had used child workers to make some of its products at a factory in Delhi. In response, Froden immediately issued a statement:

Earlier this week, the company was informed about an allegation of child labour at a facility in India that was working on one product for Froden. An investigation was immediately launched. The company noted that a very small portion of a particular order

placed with one of its vendors was apparently subcontracted to an unauthorised subcontractor without the company's knowledge or approval. This is in direct violation of the company's agreement with the vendor under its Code of Vendor Conduct.

Froden's CEO said,

We strictly prohibit the use of child labour. This is a non-negotiable for us. Froden has a history of addressing challenges like this head-on. Froden ceased business with 20 factories due to code violations. We have 90 people located around the world whose job is to ensure compliance with our Code of Vendor Conduct. As soon as we were alerted, we stopped the work order and prevented the product

from being sold in stores. While such violations are extremely rare, we have called an urgent meeting with our suppliers to reinforce our policies. Froden has one of the industry's most comprehensive programmes in place to fight for workers' rights. We will continue to work with stakeholder organisations in an effort to end the use of child labour.

(a) 'Being an ethical company isn't enough any more. These days, leading brands are judged by the company they keep.' What does this mean for Froden? (b) When Froden found itself with this problem, was its recovery appropriate?

6. What would be the impact of offering a guarantee on the service that *you personally* provide?

Case exercise

'One-Stop' Protection Service

Executive Bank plc is a bank that attracts premium customers, usually international travellers. As part of its exclusive, and expensive, gold charge card service, Executive Bank offers its customers the opportunity to join, for a small additional annual fee, its rescue and protection scheme: the 'One-Stop' Protection Service (OPS). Executive Bank founded OPS in 1982, and at the time the service existed primarily to protect customers who had lost credit cards, cash and paper identification documents. In the late 1990s, Executive Bank and OPS began to sell 'white-labelled' versions of its service to other financial service providers and also enhanced the service to cover flight rescue and emergency accommodation. In the late 2010s, Executive Bank sold the OPS Brand to Omnium Security, a company specialising in cybersecurity and cyber insurance. Over some three months the two companies transferred all operations to the Omnium operations support centre in Leeds, UK. The transfer was assisted by the fact that most of the original OPS executive moved to new posts in Omnium. Few operations staff made the transition, however, as the original OPS support was provided from Executive Bank's operations in Chichester and not many people were willing to make the move to Leeds.

Executive Bank customers were informed of the transfer of ownership and operations, but were reassured that the high standards of support would

continue in the hands of Omnium, and would moreover be enhanced with Omnium's cyber and identity security offerings. On a quiet Monday in January, Omnium operations went live to provide support to many thousands of Executive Bank customers, as well as customers from other retail banks and credit card companies.

The OPS offering now included:

- a 24-hour worldwide freephone number;
- cancellation of all cards via a single freephone call, text message or email, as well as the immediate ordering of replacement cards;
- £10,000 insurance against misuse prior to notification;
- unlimited cover after notification;
- £5,000 interest-free emergency cash if the customer is stranded abroad;
- emergency identity theft support, which included 24-hour access to a specialist IT forensic support team who could investigate what data has been compromised;
- a lost key and luggage retrieval service, which makes use of 'smart' key trackers;
- a smartphone like-for-like immediate replacement service;
- help in the emergency replacement of driving licence and passport;
- payment of emergency hotel bills up to £5,000;

- emergency airline or ferry tickets up to £7,000, as well as, for 'stranded' customers, prepaid access to airport lounges (where available), restaurants and premium hotels;
- emergency car hire assistance.

The OPS service brochure claims that it provides a 'friendly, efficient and thorough service to all its customers' and that it will 'answer calls, texts or mail triggers within an average of ten seconds, generate loss reports to the card issuers within 20 seconds after the initial trigger and always send prompt confirmation of action taken with an email and text message to the customer'.

The following is a letter sent by a customer after having experienced the service.

6 February

Mr Daniel Payne
Customer Services Manager
Gold Card Customer Services
Executive Bank plc

Dear Mr Payne

I am writing to express my profound dissatisfaction with the service provided by your organisation.

At 9.30 a.m. on 17th January I was robbed while entering a bus near Warsaw railway station on the way to Warsaw airport. My wallet, containing all my credit and charge cards, and a number of personal items, was stolen. I reported this loss to your Card Protection Service at 11.00 a.m. on my arrival at Warsaw airport. I greatly appreciated the opportunity to make a freephone call.

I was told that all my cards would be stopped immediately and replacements requested. The operator asked if there was any cash in the wallet. I told her that there was about £40 in the wallet. She asked me if I had cash with me and I confirmed that I had. The operator asked for my mobile phone number, and when I could be contacted that evening. This was provided.

I was impressed by the arrival of my replacement Executive Gold Card on 19th January.

By Wednesday 24th January all the replacement cards had arrived with the exception of

my Executive Bank Cashline card. This was an important card as it was my main means of obtaining cash. Having been without the card for a week this was becoming a problem!

On returning home from work at 8.00 p.m. on 25th January I found that the card had still not arrived. I rang the Executive Bank's telephone banking service to ask when I should expect to receive my card. I was told that the card had been stopped but no replacement ordered. I was told they would notify my branch but I should ring the branch the following day. I then rang your organisation to try to discover why the replacement card had not been ordered. I spoke to James Creek who informed me that the Executive Bank did not accept orders for replacement cards from anyone but the customer and that I should contact my bank directly. I complained that I had not been told this, indeed one week had gone by, during which I had assumed it was on its way. James apologised and said the operator should have told me. I then asked James if the small amount of cash that I had in my wallet was also covered. James told me it was and he offered to send me a claim form. I asked why the operator had not checked this with me at the time. James said she should have done so and again apologised and promised to send me a claim form immediately. I felt very dissatisfied with your service at this point. One of my card issuers had sent me, with their replacement card, information about their card protection scheme, which I noticed provided free cover for family members. I pointed this out to James and asked him to send me information about your card protection scheme so I could make a comparison. He agreed to do this and also offered me free cover for my spouse for one year to make up for the inconvenience I had suffered. James told me that he would contact my bank to try to sort out the replacement. He sincerely apologised for all the errors.

On 26th January, I rang my bank to check that a card had been ordered. My branch confirmed that a replacement had been ordered by your organisation and it should arrive on the 30th (nearly two weeks after it had been stolen). I complained that it was my main means of getting cash. I was told there was nothing that could be done, though I could call into the bank and they would provide me with some cash from my

account. I suggested that might be difficult as I had a full-time job.

On 30th January, my Cashline card arrived, with a letter telling me I would have to wait for a new PIN number to arrive before I could use it. Further, there was no material from your organisation. I then rang and spoke to you and you apologised for the incidents. You agreed that the material should have arrived by now as stationery orders are processed overnight. I agreed to wait a few more days.

Today is 6th February. I have just received the PIN number for my Cashline card and have managed to activate it and use it – nearly three weeks after the robbery. I am still without the promised material from your organisation.

I would be grateful if you could answer the following questions:

1. Why did the operator not tell me that my Cashline card would not be replaced unless I contacted my bank?
2. Why did the operator not tell me that the cash in my wallet was also covered by your scheme and volunteer to send me a claim form?
3. Why did the operator not ring/email/text me in the evening to tell me about the problem with the Cashline card or to confirm that all the instructions had been carried out? I would have very much appreciated this reassurance.
4. Why could James order a replacement on the 25th but the initial operator could not do so on the 17th? Did I need to contact the bank or not?
5. Why did James not ring me a few days later, on the 27th for example, to check that I had received the material he promised and that everything was now all right?
6. Why did I not receive the material?
7. Why do you wait till the customer is so fed up and has to ask you to sort something out? I have now made five telephone calls and written this one letter. I have not yet received any call or correspondence from your organisation. I can only conclude that you just don't care.
8. Why do you only do what appears to be the minimum possible to deal with an aggrieved customer?

Please would you tell me why I should continue to pay the large annual fee for the Executive Gold Card and the additional cost for the Card Protection Service for this appalling lack of service?

Yours sincerely

David Smith
David Smith

Question

1. How would you respond to this letter?

Further reading



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Chapter 17

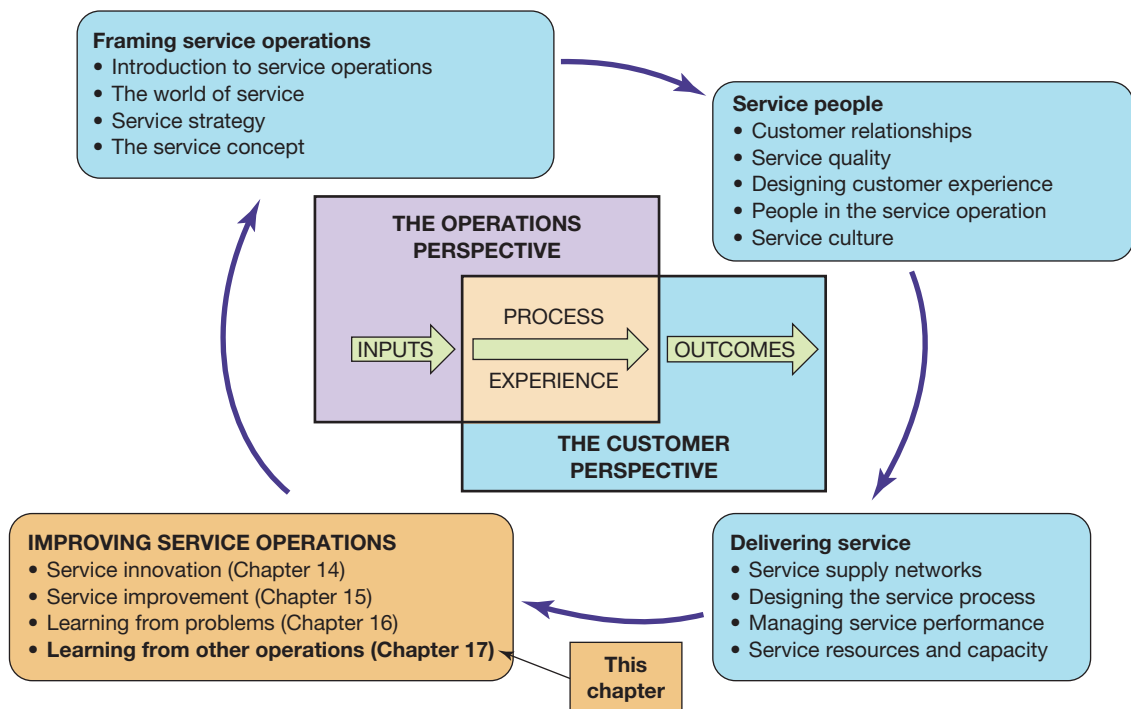
Learning from other operations



This chapter is about how service operations can learn from other operations to improve performance. We will start by defining benchmarking, explain why it is important and identify the various types of benchmarking that can be undertaken. We will then focus on the important part – how to do benchmarking. We will also spend a little time explaining the useful role of quality awards in benchmarking. Figure 17.1 shows where this topic fits in our model of service operations management.

Learning objectives

- To be able to explain what is benchmarking
- To be able to identify some ways in which benchmarking can help organisations improve their performance
- To be able to list the different types of benchmarking
- To be able to identify the key steps organisations can take to implement benchmarking
- To be able to discuss how quality awards and academic studies help with benchmarking

Figure 17.1 This chapter looks at learning from other operations

Introduction

We all often believe that the situations we face are unique. Managers of service operations are no different. But there are usually many other managers who have faced the same, or at least similar, situations and challenges. In fact, there are always opportunities to observe and learn from others so that mistakes are not repeated and good ideas can be shared and adapted. There are many ways in which service organisations can learn from what other organisations and their operations are doing. Management magazines, financial newspapers and many academic journals will report on stories of successful (and unsuccessful) changes and interventions in the hope that others can learn from these. Similarly, management texts, such as this one, will share stories that can be analysed in order to extract their essential learning points. Another way for managers to learn is to talk with other managers, seeing what they do and finding out what works, what doesn't and why. Practising managers are surprisingly open with their ideas. Clearly, some approaches will be proprietary and there may be a reluctance to share successful approaches with competitors. However, confident managers tend to want to talk, and will usually do so if approached sensitively on a one-to-one basis – for example, using mentoring schemes.

Stories of both success and failure can be instructive but, arguably, stories of failure can be the most useful to managers who are trying to broaden their understanding. These learning approaches are usually referred to as 'benchmarking'. By benchmarking with other organisations, operations managers can see how well they are doing, and more importantly obtain some ideas that they can adapt to their own situations to improve their own performance.

17.1 What is benchmarking?

Views differ on the origin of the term ‘benchmarking’. Some authors refer to the benchmark used by cobblers (shoe repairers). Customers would place their bare foot or shoe on a bench and the cobbler would make a mark at each end as a basis for constructing the shoe. A more common view is of the benchmark as a reference point; originally a surveying term for a mark cut in a building used as a base point for measuring altitude. Whichever is true, a benchmark serves as a reference point that informs activity. In the context of managing service operations, *benchmarks* are measures or targets against which performance can be compared. *Benchmarking* is the activity whereby a measure or target of a process or some other aspect of an organisation or operation is compared with a similar aspect of another organisation in order to learn and to improve performance.

The measure or target could be internal, such as is used by another operation inside the organisation (internal benchmarking), or could be an external measure or target in another organisation (external benchmarking). In everyday business usage, the term benchmarking is often taken to mean external, ‘best-in-field’ benchmarking. Thus, benchmarking implies a process of searching for the best practice that will encourage improvements and result in superior performance for the benchmarking organisation. The search for best practice is not necessarily limited to the industry of the benchmarking organisation. Competitive sensitivities might impose significant barriers to learning among industry competitors, so the search is without constraint. It aims for best practice, wherever that may be. For an example of how benchmarking can benefit service operations, see the worked example ‘Macy–Helston Foot Care’.

The advantage that benchmarking provides over several other methods of learning is that by benchmarking *practices* against other organisations, managers can gain insight into *how* the desired level of performance was achieved, thus suggesting how it can be achieved in their own organisation. Even if the process is invisible, e.g. in the back office, or the situation is different, the very existence of a better process, or better business results, can stimulate learning and improvement. An important aspect of the art and science of benchmarking is the ability to reduce practice to fundamental principles, as doing so enables the practice/principle to be more easily applied in different contexts.

Worked example

Macy–Helston Foot Care

The Macy–Helston Foot Care clinic specialised in foot health support for professional and amateur athletes in the Midlands (UK). The company, run by Dr Sheila Macy and Dr David Helston, provided services ranging from orthotic design and design of foot exercise regimes all the way to minor surgery to repair injuries and uncomfortable bone growth. The company’s two biggest client groups were professional footballers in teams from the top national leagues in the region, and members of the public with ski-related issues. The two client groups were different in terms of the type of work and the frequency and timing of demand. Most football injuries occurred early on in the playing season, but the demand for ski services

was more predictable, typically peaking around December. Professional footballers would encounter in-game injuries, such as ankle sprains, ankle and metatarsal fractures, contusions and bone bruises, as well as the consequences of overuse and excessive training. Skiers suffered mainly from plantar fasciitis but often sought the clinic’s expertise in designing orthotic support to make ski boots more comfortable.

Professional footballers were extremely valuable to their teams, and in terms of revenue to the clinic. Accordingly, they received preferential treatment, with the clinic making treatment slots available. In the daily training regime within the clubs, footballers’ every minute was planned out. However, when

it came to appointments with external bodies they were generally left to their own devices. Sheila and David were constantly frustrated by their late arrival and 'did not attends' (DNAs). The clinic lost money when their facilities were idle but, because there was competition in the sports foot-care business, they were reluctant to complain to team managers. Yet, if a player didn't turn up it potentially meant the loss of a very significant worth of work per hour. The skiing clients did not present the same problem. Most of the clinic's work for skiers was preparing them for an upcoming trip. As such, there was a personal incentive for the skier to attend on time. Additionally, the clinic could easily impose no-show penalties on the skiing clients.

What the clinic did

Sheila and David started by looking at other health-care clinics, who emailed and text messaged their clients a few days prior to the appointment. For repeat offenders, clinics would try to call and talk with the client before the appointment. However, these methods had been tried and did not work with the lucrative footballer client group. Worse still, if there were problems and delays in treatment, the coach and teams generally blamed the clinic. Sheila and David decided to look more broadly to see whether there was anything they could learn from other industries. Talking with team managers, who were successful in getting even the most wayward of players to make appointments, David learned that,

although most players did not use a diary and would not use the calendar apps on their mobile phones, they would respond to Google calendar notifications. So the managers made it a requirement that the Google calendar application was installed on players' phones, and notifications switched on. Similarly, WhatsApp was used to remind players of important events.

Talking with her MBA alumni group, Sheila learned that many courier companies had found it easier to collect packages from customers rather than rely on customers to pack items properly, print labels and deliver packages to collection points. Often, customers could not get organised enough to drop-off packages, print-out labels, etc, and the returns were never sent. Increasingly, courier companies were providing label printers and returns boxes. The group thought that this principle could be applied with Sheila's footballers. After all, Sheila figured, the cost of collecting players using a taxi service that she would provide free of charge was tiny in comparison to the loss of revenue for a no-show. So, after discussion, David and Sheila decided to run a trial using a local taxi service. They also set up access to both the club calendars and the WhatsApp groups to manage the players' attention prior to their clinic session. They ensured that the clubs' physiotherapists were also aware of the taxi pick-up schedule. The trial was a great success – so much so that the clinic invested in the conversion of two small microvans, which could be used as ambulances/shuttles and also as general runabouts for the clinic.

How can benchmarking improve performance?

Benchmarking can assist organisations in five areas of performance improvement. It can help to:

1. assess how well the benchmarking organisation is performing compared to a benchmark organisation;
2. set realistic performance targets;
3. search out new ideas and practices;
4. stimulate creativity and performance innovation; and
5. drive improvement through an organisation.

The essential purpose – driving improvement – can easily be overlooked in an organisation's desire to undertake benchmarking. Often, the benefits realised from benchmarking are limited to point 1 and sometimes 2. Some managers skip these important stages and focus their efforts on point 3. While the search for potentially useful practice can be the fun and certainly interesting part of benchmarking, without following through to points 4 and 5 the activity becomes little more than what has been called 'industrial tourism'.

17.2 What are the different types of benchmarking?

‘Benchmarking’ is not all the same. There are different types of benchmarking, and often the same types of benchmarking can be called different names. It can all get confusing. Nevertheless, it is worth remembering that all types of benchmarking essentially have the same purpose – to provide information and inspiration for improvement.

However, it is useful to think about benchmarking in terms of three key questions. When comparing oneself through benchmarking:

- What does one use as a comparison? Performance metrics or practice methods?
- Against what does one compare? Internal activities, external competitors or external non-competitors?
- At what level should the comparison be made? The level of individual processes, or at the level of the whole organisation?

The answer to each of these questions defines the type of benchmarking that is being undertaken. This is illustrated in Figure 17.2. The remainder of this section describes each of these benchmarking types.

What does one use as a benchmark comparison?

The first task in any benchmarking exercise is to decide whether one wants to know if one’s own organisation or process is better than others, and if so, by how much, or in what way it does things differently to other operations or processes. The first issue is addressed by performance metric benchmarking, the second by practice methods benchmarking.

Performance metric benchmarking

Performance metric benchmarking (sometimes simply called ‘performance benchmarking’ or ‘metric benchmarking’) is the process of collecting measures and targets used by one or more other operations (usually called the benchmark target) and using these performance measures and targets to evaluate the performance of the ‘home’ operation. If a benchmarking target uses measures that are important to one’s customers then it might be worth considering benchmarking against one

Figure 17.2 Types of benchmarking

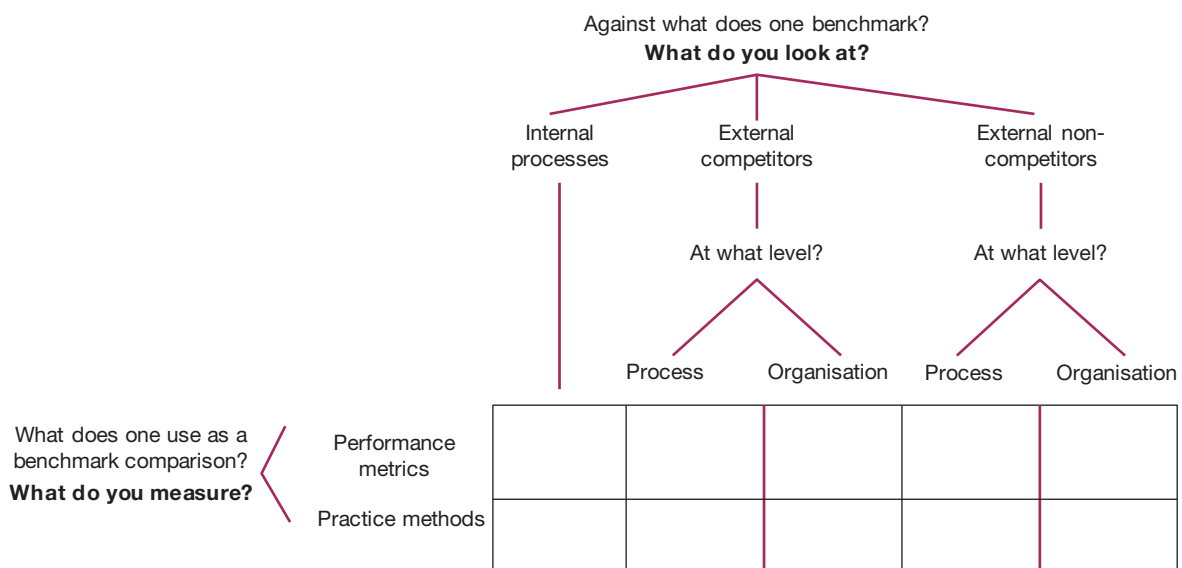
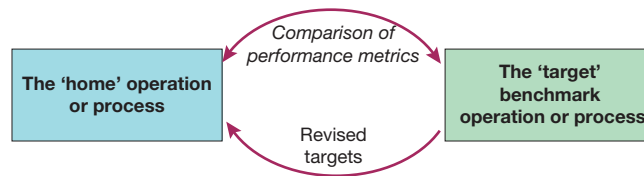


Figure 17.3 Performance metric benchmarking

or more of those measures. If the benchmark measure is an internal measure, such as the cost of a particular process element, then it might be unwise to use this benchmark to encourage internal process improvement in the home operation without incorporating, or understanding, the many contextual factors that impact upon it, such as numbers of staff, technology used, equipment and other resources available, etc. In other words, if a performance measure is invisible to customers (an internal measure), then using it to drive performance improvement effectively means that one is importing elements of the other organisation's strategy with its allocated set of resources. These reservations aside, metric benchmarking obviously has its uses. Its primary purpose is to stimulate the question '*why* is performance different?'. In turn, this question should stimulate learning.

The underlying idea behind performance metric benchmarking is shown in Figure 17.3.

Practice methods benchmarking

While metric benchmarking is essential for establishing whether the performance of a particular process is relatively better or worse, practice methods benchmarking is important in understanding *how* the process can be improved. Practice methods benchmarking (also called simply 'practice benchmarking' or 'methods benchmarking') is the process of comparing how the target operation or process performs a particular task, compared with how the home operation or process does it. So, practice methods benchmarking gets into the details of how things are done. It can take many forms. At its most simple, it involves visits to other organisations providing opportunities to observe practice that might be useful in the home context. Such visits are often mediated via clubs and benchmarking organisations. In some ways, the quality award schemes operate as benchmarking clubs (see case example later in the chapter).

Counterpoint

One reason for performance metric benchmarking falling short of its potential is that it can become over-concerned with, and then held back by, confusion over the details of the metrics used. It is not uncommon for organisations to become embroiled with the establishment of good comparators of performance between operational processes, so that they can assess how well a process is performing. However, using these as a means of comparison can be misleading because organisations measure things in different ways and use different methods to collect data. Therefore, a great deal of time and effort can be spent on trying to establish a base by which performance can be compared. Also, performance metric benchmarking can result in damaging

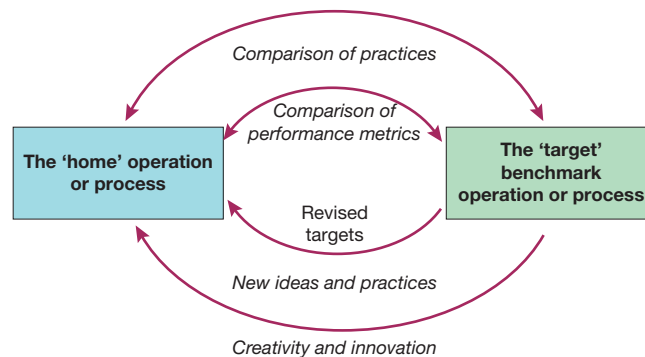
behaviours if used naïvely. Another operation's benchmark, measure or target will be derived from the strategy of the parent organisation, and in turn will be informed by a unique set of contextual and environmental factors. Competing organisations often work within similar sets of constraints and environmental conditions, so it might be reasonable to assume that, for example, the market leader – the benchmarking target – in your industry has a suite of measures and targets that will be useful to your – the home – organisation. However, this consistency with respect to context is not always the case, and so a benchmark, measure or target that is useful and relevant in one context, might result in damaging, unintended behaviours in another.

The idea is that by identifying how others perform the same task or objective, the ‘home’ operation or process can gain insight and ideas they may not otherwise conceive. However, there are also dangers with this approach. Practice methods benchmarking can easily fall into the trap of ‘industrial tourism’. This is when managers enjoy the activity of finding, going to and looking at other processes and operations but those experiences do not lead to improvements. The simple test of the value of benchmarking is whether it leads to improvement. One of the ways in which organisations can avoid the pitfalls associated with both metric and practice benchmarking is in adopting the correct sequencing of the two activities. It can be beneficial for organisations to first undertake practice methods benchmarking to obtain an understanding of other processes and to benefit from quick gains, and then follow this with performance metric benchmarking once a relationship and mutual benefits have been obtained.

Metric versus practice benchmarking

While performance metric benchmarking fulfils the desire to know whether performance is relatively good or bad, it does not necessarily help managers understand how they might go about improving their own processes. In contrast, practice methods benchmarking (which can actually be carried out without knowing how good or bad the respective processes are) is an attempt to search out new ideas and practices and stimulate creativity and performance innovation (points 3 and 4 earlier) in order to learn and improve performance (point 5). This involves seeking out ideas and practices that might be adapted for the benefit of the organisation (see Figure 17.4). It is important to recognise that practice benchmarking is further removed from the historical definition of benchmarks (creating a reference point) and far more concerned with the purpose of benchmarking: the quest for superior performance.

Figure 17.4 Performance metric and practice methods benchmarking



Case example

Acuity and HouseMark¹

Social housing gives people on low incomes a home to rent that is generally less expensive than privately rented accommodation. Tenancy agreements are also typically much longer term than in the general rental market. The social housing sector also provides

renters with opportunities to establish roots in communities. Social housing landlords tend to be either local authorities (councils) or housing associations. Housing associations are independent from local authorities. Profits, or ‘surpluses’ in the vernacular,

are used mainly for new home building. The industry is regulated by the UK Regulator of Social Housing.

Acuity and HouseMark are consulting and benchmarking organisations for the sector. Though there are clearly differences from region to region, in general social landlords can benefit from using the same suite of benchmarking measures. Both Acuity and HouseMark provide access to UK benchmarking data for members on performance trends of interest to them. This data includes, for example, cost performance, tenant satisfaction, development and new-build statistics, achievement of social outcomes, asset performance and operating efficiencies. HouseMark provides an extensive knowledge base of housing-related content. The knowledge base includes best-practice case studies and analysis of future trends. Acuity also provides support for 10 benchmarking clubs across the regions of the UK, and also supports special interest groups. The benchmarking clubs typically meet quarterly and membership includes landlords and other professionals in the sector. Acuity also organises conferences on social housing.

Acuity members use the Smaller Providers Benchmarking (SPBM) website/database to record details of their own performance and produce comparative reports. The website has a library of performance indicators, standards and definitions. Members also have access to the HouseMark good practice website and forums, as well as practice benchmarking access to practitioners from over 900 social housing providers.



VictorHuang/iStock/Getty Images Plus/Getty Images

Both organisations are engaged in continual development of benchmarking methodologies. For example, there are currently moves afoot to develop their existing customer satisfaction assessment instrument to include measurement of the customer experience. In so doing, both HouseMark and Acuity are keen that a common methodology is adopted so that benchmark data is comparable across the UK. Newer measures being incorporated into the benchmarking questions include issues such as the degree of trust that tenants have in their landlord, how easy it is to access services, the degree of uncertainty in relation to the tenancy agreement and so on. The aim of the development programme is to arrive at a contemporary yet consistent framework for measuring customer satisfaction that allows cross-UK comparisons and also allows landlords to make effective use of data to drive improvement.

Against what does one benchmark?

The next decision is what to choose as the ‘target’ against which one will be compared in the benchmarking activity. Here there are three broad choices:

- Be compared against other internal processes within the same organisation (known as internal benchmarking).
- Be compared against competitors – external organisations in the same or similar markets, or providing similar services (known as competitor benchmarking).
- Be compared against non-competitors – external organisations that don’t compete in the same market, but have some kind of commonality, so that the comparison reveals something (known as non-competitor benchmarking).

Internal benchmarking

In larger organisations there may be many opportunities for learning from comparing internal operations or processes. (The terminology assumes that if the comparison is internal, it will be processes rather than whole operations that are being compared.) These can be perfect opportunities to share best practice. Some organisations actually formalise the process whereby high-performance units become exemplars – practice leaders for given areas of activity. Yet this approach can also have its disadvantages. For example, in the UK National Health Service, using practice exemplars has become problematic in some cases. When a department or process becomes a ‘star performer’ it can generate a considerable administrative burden associated with visits from other parts of the service who want to learn. The additional scrutiny can also be distracting, and even stressful, for service staff. However, sharing of practice at the level of informal visits and ‘practice development clubs’ or similar has several advantages. It is certainly cost efficient and relatively easy when compared to other types of benchmarking. It is fast and provides good practice in the process of benchmarking. It also provides a common language in an organisation and it is relatively easy to transfer lessons learned.

Competitor benchmarking

Benchmarking can be carried out with or without the participation of the benchmark organisation. Competitor benchmarking is a direct competitor-to-competitor comparison of service performance, process or method. Information about the benchmark organisation can be gathered from public domain sources, academic sources, purchased market research reports, etc. Some organisations

Case example

John Lewis deprives retailing of an industry benchmark²

All retail services like to know how well they are doing, both in absolute terms and compared with other similar retailers. In the UK retailing sector, the Office for National Statistics and the British Retail Consortium both publish monthly figures. Kantar and Nielsen, in the research and consultancy business, also distribute monthly sales data and relative market shares. But within the industry, a key benchmark has been the John Lewis Partnership, the UK’s largest employee-owned business and parent company of two retail brands – John Lewis & Partners, which runs 50 department stores, and Waitrose & Partners, which runs over 300 shops in its supermarket chain. It came as a shock to other retailers when John Lewis announced that it was to stop publishing its weekly sales figures, removing a widely used benchmark in the retail sector. The group had published its figures externally for more than a decade, and had been regarded as particularly useful. No other retailer in the UK had released its sales



Jason Alden/Bloomberg/Getty Images

trends so frequently, and the numbers had become a valued benchmark indicator for other stores, investors, analysts and economists. The employee-owned group said its new strategy meant that it was moving to a new financial reporting structure, and sales or operating profit would no longer be split between its two brands.

engage the services of specialist investigators to gather benchmarking information. There is always the danger of providing too much of an advantage to a competitor, of course, but very often leading players in an industry are actually quite willing to allow competitors access to their processes. Maybe this confidence comes from their (sometimes well-founded) belief that ‘it is easier to see an innovation, than it is to make it work in practice’. For example, one of the organisations discussed elsewhere in this text is Singapore Airlines. Singapore Airlines famously exposes a great deal of what would be considered proprietary in some other organisations. It knows that by the time other organisations benchmark, and improve to reach its level of performance, it will already have moved on.

A subsidiary question is which competitors to choose for benchmarking. Often, organisations choose the one that seems to be performing best. The question of who this is can come from customer surveys, information derived from customer advocacy group reports and so on. What is often more interesting in the context of benchmarking is the criteria used to assess such ‘top-performing’ organisations. These criteria might provide a ready-made suite of outcome benchmarks. However, it may be misleading to assume that consumer associations and consumer advocacy groups have designed their assessment criteria after talking to consumers. It might be more useful for the benchmarking organisation to make an independent assessment of what consumers actually value.

Many of the benefits of competitor benchmarking are connected to the obvious advantages of knowing more about one’s competitors. It is useful in devising one’s own strategy, it gives an idea of how much ahead (or behind) a competitor is, it may even lead to future partnerships with current competitors. However, there are also disadvantages. Currently attractive benchmarking targets may not be the main competitors in the future. If the target organisation’s performance is close to one’s own, the potential for improvement may be limited, and competitors may go to some lengths to prevent useful information becoming available.

Case example

The benchmark that nobody wanted³

Consumer groups can help benchmarking organisations identify the best services. However, the downside (or upside, depending on your perspective) is that they can also identify the worst. The consumer affairs website ‘The Consumerist’ was a non-profit consumer affairs website owned by Consumer Media LLC, a subsidiary of Consumer Reports – an independent organisation that works with consumers for truth, transparency and fairness in the marketplace. For several years The Consumerist ran an annual award for the worst-performing services in the USA: the ‘Worst Company in America Award’. Winners of the award were given its ‘Golden Poo’ trophy. The Consumerist was happy to admit that its ‘benchmarking’ methodology was not totally rigorous.

In effect, it was a contest to see who a series of reader polls, the internet and social media ‘chatter’ thought had done the worst job servicing its customers, and was most deserving of a plastic poop-shaped trophy.



3djewelry/Shutterstock

In 2017, Consumer Reports shut down The Consumerist, a move that some regretted, partly because it often provided for each nomination citation a list of ‘what to repair’. This could be considered as providing free consultancy to the ‘winning’ organisation.

Non-competitor benchmarking

Many organisations in widely differing industries can share identical, or very similar, functions. Almost all organisations have similar HR, invoicing, IT helpdesk and many other functions. Therefore, there are many opportunities for learning that can be found in organisations that may not be competitors or even provide similar services, but which employ similar functions. Of course, it may be that the industrial context of some non-competitors means that their circumstances make them an unsuitable comparator. Even so, breaking out of an industry to look at different ways of using and running commonplace shared services can stimulate creativity and suggest alternative and improved practices. For example, in recent times many services, especially those with extensive back-office operations, have discovered that they have a great deal to learn from some manufacturing organisations. If the service organisation can identify processes that have a structural similarity to a process in a manufacturing organisation, then there is no reason why benchmarking and learning cannot take place. Additionally, a service organisation is unlikely to be competing directly with a manufacturing benchmark organisation, so collaborative benchmarking and sharing holds fewer conflicts of interest.

The case example on the National Basketball Association (NBA) illustrates examples of different types of benchmarking.

Case example

Benchmarking the NBA – bouncing accepted wisdom⁴

Professor of Accounting, Mahmoud M. Nourayi, carried out a benchmarking study of National Basketball Association (NBA) games over three basketball seasons. The study looked at both output metrics (progression to the playoffs) and practice (player and team behaviour on the field) in teams that reached the NBA playoffs and those that did not. The NBA playoffs are an annual 'best-of-seven' elimination tournament held after the NBA's main season to determine the league's champion. A key finding of the study was that the top-performing teams were effective not just because they played better overall, but because at team and individual level they engaged in different practices from teams that performed less well. The utility of the study was that teams wishing to improve could address specific behaviours on the field, and also 'import' appropriate behaviours via different recruiting practices.

Accuracy and precision

The top-performing teams in the study had a significantly larger number of field goals made (FGM), in spite of the fact that they took fewer field goal attempts (FGA). This ratio suggested greater efficiency in the use of FGAs, mainly by better shot selection. Top-performing teams also took advantage of extra free throws awarded to them and made (successfully scored points from) a significantly larger number of free throws than their

opponents. However, the free-throw percentage (FT per cent) did not appear to be significantly different. (Conventional wisdom in basketball is that the more a team attacks the basket, the larger the number of free-throw attempts (FTAs).) Furthermore, top-performing teams took advantage of their FGAs by attempting and making a larger number of three-point field goals. (A three-point field goal is a field goal made from beyond the three-point line – a designated arc radiating from the basket.)

Opportunism

A rebound is the act of successfully gaining possession of the basketball after a missed field goal or free throw. Rebounds in basketball are routine, as possession changes after a shot is successfully made. There are two categories of rebound: 'offensive rebounds', in which the ball is recovered by the offensive side and does not change possession; and 'defensive rebounds', in which the defending team gains possession. One might reasonably expect the team with more *missed* shots to get more opportunities to grab offensive rebounds. Therefore, a larger number of offensive rebounds is not necessarily associated with wins. However, top-performing teams had a definite advantage on *defensive* boards (a turnover that does not result in a dead ball) in that they had a significantly larger number of defensive rebounds.

Cooperation

Shot selection is usually influenced by the team's point guard(s), who may be credited with 'assists' for the field goals made. (An assist is when player A passes the ball to player B and player B makes the shot in a short time, resulting in player A getting an assist.) The study showed that the top-performing teams had a larger number of assists. A team's point guard is generally the person on the court who moves the ball. Therefore, his ability to maintain possession of the ball and his ball-handling skills seem critical for success of the team. This study demonstrated that the number of assists and turnover (lost possession) are critical variables. Top-performing teams have a larger assist-to-turnover ratio.

Defence

Top-performing teams were better in defence, too. In addition to the superior defensive rebounding, top-performing teams had a better shot-blocking skill and a larger number of 'steals.' (A steal happens when a defensive player legally causes a turnover.) Winning teams had fewer offensive rebounds. Offensive rebounding did not appear as important for teams that played efficiently and made good shot-selection decisions. The results highlighted the value of a good defensive posture – particularly

defensive rebounding, which reduces the second shot opportunity (an additional chance after missing the first shot) for the opponent.

Discipline

The fact that a team has more free-throw opportunities is reflective of the number of personal fouls committed by the players of the other team. It is conventional wisdom that players who are in foul trouble (in danger of fouling out of a game) tend to become more hesitant in defence because they fear reduced playing time. This condition provides the opposing team with a higher percentage of shots, hence better field goal percentage (FG per cent).

Summary

This study was interesting in that it made use of public domain data on basketball. The study was detailed, but its logic was not particularly complex. In general, the results suggested that, among other things, 'calmness', accuracy and precision are critical team characteristics. More to the point, the levers of control that could modify these characteristics were available to teams regardless of their relative wealth. Better performance was not just down to money! Thus is demonstrated the considerable power of a relatively simple tool.

At what level to benchmark?

The next decision regarding the structure of a benchmarking exercise is to decide on which organisational level to focus. One could decide that benchmarking should be done at the level of the whole organisation, or some specific part of the organisation such as a particular department or function. One could even choose to focus on an individual process. Here, we shall illustrate some of the issues involved by looking at benchmarking at the level of the whole organisation and at the level of the individual process.

Benchmarking at the level of the whole organisation

At the level of the whole organisation, one organisation could compare broad and aggregated measures (for example its sales figures or its return on equity) with another. It would give a certain amount of comparative information. And, where there are (reasonably) common standards of how such measures are derived, such as corporate accounts, comparisons can be useful. For example, market analysts spend all their time comparing the financial statements of publicly quoted companies. But look at the footnotes on any set of public accounts and one can see that the data is subject to many conditions and caveats. And that is the main problem with benchmarking at the level of the whole organisation. The differences in circumstances can make it difficult to draw any meaningful comparative information on which improvement could be based. At this level, there are so many factors influencing the figures that, at best, the only information to be certain of is that one is better or worse than the benchmark organisation.

Benchmarking at the level of individual processes

From the perspective of operations improvement, benchmarking at a lower level such as a specific function or, better still, an individual process, usually enables more learning to take place. One function might compare its absentee statistics with another and ask the question, why is one better? What can be learned? At a process level you might compare your speed of service or customer satisfaction with others and then visit and test those processes to try to understand why they perform better and what you might need to do to improve yours.

The benchmarking target process does not need to be exactly the same as the home process that an organisation is seeking to improve. Provided benchmarking activities are carried out with due regard to contextual factors, then it is possible to make meaningful comparisons and to learn. For the most part, process benchmarking concerns looking at the process in the target, walking through those processes, seeking out differences and then making a judgement upon whether those differences, if applied in the home process, would improve performance. Usually, such process comparison takes place in broadly similar operations, in similar or the same industries, delivering similar service outcomes. However, there are benefits to be derived from the comparison of processes that attempt to achieve the same result in terms of generic partial measures of process performance, but which are in extremely different contexts.

In what has become a classic example, Southwest Airlines, a low-cost airline in the USA, wanted to improve its turnaround times at the airport (its speed performance), to help keep costs low. Instead of comparing itself against other airlines (it believed that it was already one of the fastest), it compared turnaround practices with Formula 1 pit stops. By developing ideas found in Formula 1, the airline was able to make significant time savings.

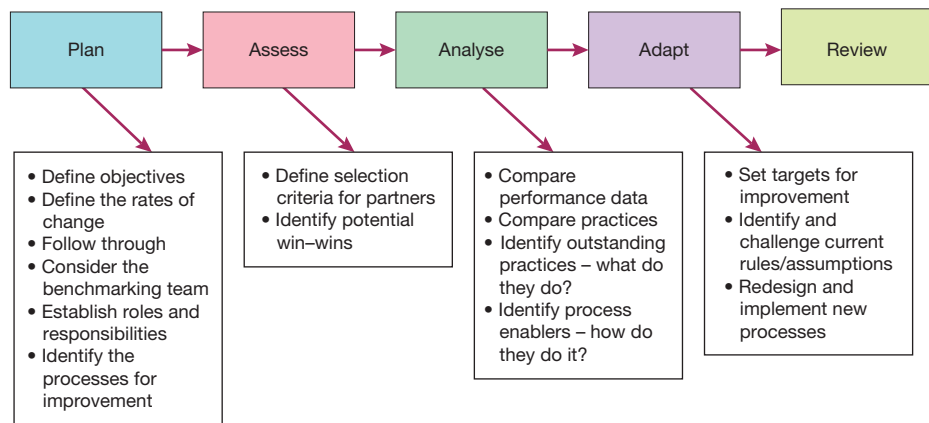
Another point to consider when process benchmarking in services is that, unlike in a manufacturing context, competitor services of front-office processes are relatively accessible. For example, if an airline is seeking to improve check-in and on-boarding processes, it needs only to buy tickets from competitors' airlines. Investing a relatively small amount of time and effort (with a notepad and possibly a mobile phone camera) could result in extremely valuable benchmarking information.

Even more creatively, Singapore Airlines famously encourages its staff, when submitting expense claims, to make some sort of observation on the service received. The idea is that most cabin staff and aircrew, when off-site, are buying services that have similarities with the services offered by the airline. The presumption, therefore, is that subcontractor services provide more than simple support for off-site staff – they also provide learning opportunities.

A slightly more 'double-edged' opportunity for learning comes from the potential provided by social media. In most B2C markets there are many social media influencers and reviewers who test out service, and publish their perspectives online. Remaining in the world of passenger air travel, hardly a week goes by without an aviation blogger or Instagrammer reviewing a flight, or a particular cabin in an airline. Such material, if analysed properly, can be valuable in process benchmarking. Nevertheless, there are clear problems with using such data. Social media commentators rarely use rigorous methods of comparison, so one does not have control over how 'data' was gathered. Also, social media is far from being an unbiased arena.

17.3 How do organisations go about benchmarking?

A great deal of the practitioner and academic benchmarking literature focuses on the benchmarking process. The benchmarking models proposed, which try to capture how organisations go about benchmarking, vary in complexity. They may involve many stages, from eight upwards – and there is one that incorporates 33 stages.⁵ Even a cursory look at these models reveals a great deal of commonality, so here we have distilled them into a simple, five-step model, as shown in Figure 17.5.

Figure 17.5 Key steps in the benchmarking process

Step 1: Plan

Benchmarking needs to be part of a plan – not just a plan for benchmarking, but a broader plan for improvement. Even before the benchmarking activity begins, it is wise to at least sketch out the improvement activity that will result. The alternative is ad hoc and undirected improvement activity.

Define objectives

It is essential to undertake benchmarking with clear objectives. It should be a ‘given’ that we carry out benchmarking in order to improve particular processes or aspects of the service provided. If benchmarking is to encourage change, then we need to understand the nature of the change.

The nature of required change is, in part, determined by the organisation’s strategy. However, strategy is usually articulated in very ‘high-level’ or overarching terms. Benchmarking is a specific and detailed improvement instrument, so there needs to be some translation from strategy to short- and medium-term operational priorities. Strategy is about where we are going long term and, in broad terms, how. Benchmarking requires that we spell out something of what we are trying to do to meet this long-term objective. So, we need to articulate specific short- to medium-term outcomes, and also process objectives that will result in these outcomes. Articulating strategy in this way is not easy, and can take some time. (The material in Chapter 3, and to some extent the strategy articulation approaches related to the balanced scorecard from Chapter 12, may be useful here.) Does the organisation wish to pursue a strategy of lowest price, or highest quality, or speediest delivery, or most able to customise? While all of these might be desirable at once, there is a need to concentrate on specific performance criteria to be improved. This focus provides clear objectives for the benchmarking activity and also limits the types of organisations that might be chosen as benchmarking targets.

Rates of change

Given that the organisation needs to change, service managers should think about the rate of change required. It is useful to think about threshold levels of change; closing some performance gaps might be essential in order to make the service organisation a ‘player’. For example, it could be that a new process or modification of an offering by a competitor raises the lower threshold of performance for a particular aspect of service. Overnight, there may be a requirement for all competitors to raise their game to similar levels. Other changes can take place over longer timescales. Remember that the improvement activity may require considerable resources. Ploughing finite resources into rapid change on a particular objective may actually damage or limit performance on

Case example

A 15-day turnaround time

Adopting the results from performance metric benchmarking without consideration of practice methods can lead to problems. For example, in UK higher education, for years the typical turnaround target for grading student assessments was a working month, or 20 working days. Then, it was discovered that a leading UK university had decided to promise a 15-working-day turnaround for marking of assessed work. On discovering this, naturally enough, other universities followed suit. University heads readily promised a 15-working-day turnaround or better. However, at some institutions the promise was made in advance of any consideration of the processes required to provide decent feedback and consistent marking. The assumption made by university heads was that departments were resourced on the basis of student numbers, with associated assessment requirements and staffing budgets. Over the academic year this assumption was correct: capacity and demand were fairly well matched. However, the reduction in the turnaround time for marking resulted in extreme time compression. The overall or annual reconciliation of capacity and demand was not the problem. The problem was that all the demand for marking services came in a very short space of time. Moreover,

the increased variability of demand in the summer exam-marking period applied to all eligible teaching staff. This meant that departments were not able to spread the load by having marking shared beyond the tutors on a particular course. The outcome was that some departments used inexperienced staff to assist in grading papers, resulting in less-accurate and usually less-consistent marking. The quality and volume of feedback to students were also reduced.

Even experienced staff found themselves pressurised to the extent where they limited the volume of feedback to students. Yet some institutions had indeed spent time refining their processes. Typically, these changes involved systematisation of the marking process using, for example, rubrics and 'automated' feedback systems. But the development of such systems cannot be done overnight. Unfortunately, the rate of change required by the institutions that had simply copied the 15-day target was to take out 25 per cent of marking time overnight, resulting in compromised marking and a reduction in quality overall. These institutions had no time to look in detail at the new methods of providing feedback, or figure out what new processes would be needed and how to implement them.

other, equally important, performance objectives. The rate of change required might also determine the type of benchmarking activity. The desire for continuous and incremental improvements might only require internal benchmarking. For radical step-changes in performance, one might expect to use external benchmarks.

Follow through

As is the case with most business research activity, the value of the data derived from benchmarking diminishes over time. This happens for two reasons. First, we have change: the organisation changes, as does its environment and its competition. Second, service managers and staff can actually get fired up by the benchmarking activity; they can become excited about very good performance, and also can become determined to close the gaps. If this enthusiasm is not exploited quickly by allocation of improvement resources, then managers and staff will see the benchmarking activity as a waste of their time. This aspect of benchmarking is no different from other improvement activity. The maintenance of momentum is critical.

The benchmarking team

Much of the data of benchmarking is technical, especially numbers – numbers in spreadsheets, in surveys, customer reports and so on. However, benchmarking is carried out, analysed and acted upon by human beings. The benchmarking team therefore needs to be familiar with

spreadsheets at the very least. A basic knowledge of statistics is also very useful. If the whole team does not have such expertise, then it will need someone who can both understand and interpret data and provide descriptive statistics, but also who can relate this material to their colleagues on the team. The benchmarking team would ideally consist of experienced managers who can observe without being confused by the complexity and chaos of real-life operational environments. This requirement has a follow-on requirement, which is that benchmarking requires protected time. Experienced managers are what the team needs for interpreting complex environments, but they are also the people who are most in demand. Ideally, experienced managers will be seconded to a benchmarking team and their day job carried out by their deputy or similar.

Depending on the nature of the benchmarking organisation, the team will either need to be such that it has specific expertise about the target, or perhaps more general capabilities. The benchmarking objective defines the team and its structure. Another important aspect of the benchmarking team is continuity. Ultimately, the benchmarking team will be creating a set of stretch targets and process interventions. If these are handed to a completely different set of people to implement, then the lack of ownership of both targets and interventions will be a problem. This factor suggests that the benchmarking team should constitute – at least in part – the group of managers who will implement any process improvements.

Establish roles and responsibilities

Because of the wide variety of processes that could be benchmarked, it is impossible to cover every role and responsibility within a benchmarking team. However, it is worth drawing attention to one key position. Benchmarking is a project and therefore needs a project manager. The project manager need not be the benchmarking team leader: because of the need for inter- and intra-organisational connection, it is probably best to draw the project manager from the senior levels of the organisation. The benchmarking project manager needs to act as a point of contact for all parties involved in benchmarking, including the benchmark organisations, and this role implies a high level of interpersonal skills. The project manager needs to manage diaries, schedule the project itself, facilitate meetings, visits and so on. Such work requires a considerable amount of managerial time. This time can be resourced internally, but it is also worth considering using an external consultant. The consultant could be expert in the fundamentals of benchmarking but would need to work with local managers for specific context knowledge.

Identify the processes/services for improvement

While benchmarking can take place at an organisational level (a comparison of key performance measures such as profit, share price and turnover), benchmarking is usually, and most profitably, applied at a process level. Benchmarking at an organisational level has a meaning for external agencies such as investors, groups that might assess the service organisation and possibly customers. Certainly, customers would like to know who's the best in the field at the performance objectives of interest to them. The problem is that customers rarely trust benchmarking carried out by the leading players in an industry. So, organisational benchmarking is best carried out by independent parties such as consumer quality/advocacy groups. While not completely independent, these groups will more likely be trusted by customers.

In benchmarking *processes*, the process chosen should be one that will have an impact on the desired objectives. Key activities at this stage include:

- selecting an appropriate process;
- defining the process and its objectives;
- mapping the process;
- assessing the process;
- identifying and defining all the measures and targets used;
- assessing the measures and targets;
- determining current performance and practices;
- involving the people who are involved in the process.

The definition of the process for the purposes of benchmarking can sometimes be difficult. For example, consider the case of a forensics laboratory. Clearly, the laboratory will provide professional services to the police, the coroner's office and possibly other parties too. However, within this professional service environment there exists a 'factory' process in which a tangible product, the sample, is converted to information.

In this competitive environment of forensic services, it is the benchmark measures associated with service effectiveness (the outcomes) that are of primary interest to the investors in, and purchasers of, the laboratory service. However, the managers of the forensics laboratory will have little scope for intervention and improvement at the level of these outcomes. Most meaningful intervention will take place at the level of the back-office process. So, in this context it would be useful to deconstruct the service and redefine it. For example, if we look at the flows through the forensic service we can identify an 'information product' as the standard unit of 'production' flowing through the service. We can then define performance objectives, measures and benchmarking targets with respect to this process.

Step 2: Assess

There are several ways of going about benchmarking. Benchmarking may involve a one-to-one relationship between two organisations or possibly two particular departments. Alternatively, benchmarking data and 'round-table' discussions may be facilitated by a third party, such as a benchmarking group. Around the world, various industry bodies have set up a range of service benchmarking surveys, groups and clubs. Benchmarking could be carried out under the umbrella of a large-scale assessment activity using, for example, one of the many nationally based schemes for improving quality, service or customer satisfaction (please see the later section on awards schemes). Participation in such schemes enables the benchmarking organisation's performance to be compared with many other organisations. Ideally, the comparison stimulates questions that will lead to changes in practice.

Define selection criteria for partners

The types of organisations selected for benchmarking will in part be determined by the level of benchmarking selected and the performance objectives for that particular process. For best-in-field benchmarking it is important to think creatively and to move away from traditional sources of comparison to seek out truly different and challenging good performance.

Identify potential win-wins

Benchmarking is not a one-way activity and all partners can and should gain a great deal from the practice. Indeed, it is through benefits going both ways that a benchmarking activity will stay alive and purposeful. Some points for dealing with benchmark partners are the following:

- *Look for mutually beneficial outcomes.* Try to identify common aspects of performance for a common process that, if improved, would help both parties.
- *Start with practice benchmarking.* Practice benchmarking will allow both parties to learn about each other's processes, and more generally about each other's organisations. The benchmarking team is likely to consist of service operations managers and staff, so it is as well to begin benchmarking with the sorts of processes with which they are familiar.
- *Discuss objectives above with partners to ensure there is comparability, or at least no conflict.* Context is critical. It may be that objectives and constraints in the partner organisations differ sufficiently so as to make a difference.
- *Set up regular meetings to discuss practice and methods of improvement.* It never ceases to surprise us how challenging it can be to insert benchmarking, and for that matter general improvement meetings, into the business calendar. Ideally, set up the benchmarking year with a series of pre-set meetings. They can always be cancelled if they're not needed. Matching-up diaries is a long-term process.

- *Evaluate relative performance through joint definition and agreement of measures and performance levels.* This is not to say that performance measures and levels need to be exactly the same. However, it is useful if benchmarking partners build a kind of ‘Rosetta Stone’ or glossary so that there is relatively easy translation from one context to the other.
- *Focus on improvement.* Finally, in front and centre we have the purpose of benchmarking. Benchmarking is not industrial tourism; its purpose is to make things better.

Step 3: Analyse

Compare performance data

The first step within the analysis phase of benchmarking will be that of making comparisons and assessing differences. ‘Assessing differences’ refers to the need to move from the passive to the active in benchmarking. If there are differences in the level of outcomes, are these explained at the level of process, or perhaps by external factors? Collecting data is just a first step. Analysis is required to make sense of the data and establish ideas about causal connections between practice and performance. In other words, use the benchmarking data to ask *why?*.

Compare practices

Does the answer to the question about different levels of performance lie in the processes of the benchmark organisation? If so, is there something that the benchmarking organisation could do differently, at the level of process, that would close performance gaps? Process comparisons usually require a high degree of technical familiarity, which is one of the reasons why benchmarking generally cannot be carried out by consultants alone.

Identify outstanding practices – what do they do?

Like any business activity, benchmarking is time constrained. Some practices in the benchmark organisation will stand out above others. In prioritising the interventions that should result from benchmarking, and to an extent the data capture and analysis of benchmarking itself, organisations should pay attention to those practices that seem particularly effective in realising exceptional business results. The fact that a practice is ‘outstanding’ does not mean that it will be transferable, but with experienced managers in the benchmarking team it should be easy to spot quick-win opportunities.

Identify process enablers – how do they do it?

Underlying outstanding practice is a plethora of enablers at the level of process, staffing, management, culture and so on. Some of these enablers may be transferable, some may not. An important aspect of the analysis task is identifying which of the process enablers has to be transferred along with the practice. In a way, the work of the benchmarking team is much like that of chemists who try to extract the suite of active components from complex, naturally occurring sources such as plants and animals. Sometimes it is difficult to isolate a single active chemical. The same is true of organisations. This issue of ‘the whole being greater than some of the parts’ is something that comes up in our frequent discussion of Singapore Airlines. To use a cliché, Singapore Airlines ‘punches above its weight’, and many pundits argue that this is because of its unique culture that works as a performance booster for all the attention the airline puts into process management. However, another answer is that in complex service organisations, process enablers work in concert and are rarely effective in isolation.

Step 4: Adapt

‘Adapt not adopt’ – the phrase is as much a warning as it is an activity. As the Singapore Airlines discussion suggests, specific solutions utilised by the benchmark target cannot be naïvely adopted by the benchmarking organisation. Solutions are the product of a multiplicity of factors in the benchmark organisation.

‘Copy-pasting’ a specific solution from one organisation into another is a recipe for disaster. Instead, organisations need to think intelligently about what ideas and innovations to bring from one organisation to another. This is actually quite a tricky thing to do. It usually involves some abstraction from the observation of the specific solution to a set of general principles and then the application of said principles in the benchmarking organisation. In our experience, naïve application of solutions as opposed to principles is one of the most common reasons for benchmarking failure.

Set targets for improvement

The existence of a ‘gap’ between the benchmarking measure or target within the benchmarking organisation and the benchmark organisation does not by itself define a stretch target. Stretch targets have to be actively developed by the benchmarking organisation. The stretch target will be informed by the benchmarking data, but also by other factors such as capability, available resources, time pressures, decisions about focus and strategy, and so on.

Identify and challenge current rules/assumptions

While it is sensible to warn potential benchmarking organisations about transferability, it is also worth highlighting the problem of ‘not invented here’. This is the resistance to practice that is not rational, but derives from prejudice about the origin of the new practice, process, etc. Such resistance is subtle and can be quite pervasive. Careful selection of the benchmarking team is obviously one counter to the problem. Probably more useful is to ensure that the managers who will drive interventions in response to benchmarking are fully engaged with, and ideally involved in, the benchmarking process itself.

Redesign and implement new processes

The information on processes and process enablers within the benchmark organisation is just a starting point. The information does not, by itself, spell out a blueprint for a new process. The information has to be adapted into a new process within the benchmarking organisation. This means that a core element of ‘adapting’ is process design, or redesign. Redesign implies a need to respect and accommodate existing routines and processes.

Step 5: Review

Finally, we come to the ‘meta-benchmarking’ activity. Benchmarking is not a one-off; if it is delivering improvement results for the benchmarking organisation, there is an argument to ‘do more of it’ and possibly do it a little better. If the results did not achieve the benchmarking objectives then we need to know why and do things differently next time.

The tasks described earlier are often intricate and challenging. It is therefore easy to see how the overall objective of improvement might be missed; so much time and effort is involved in the actual process of benchmarking. This fifth stage of benchmarking is therefore critical: benchmarking of benchmarking! We need to have performance measures in place to assess the benchmarking activity itself, and these measures should clearly track improvement.

In undertaking benchmarking, success is not guaranteed. Indeed, benchmarking can be a very slow and costly activity. It requires a culture that supports learning and improvement, together with the necessary investment and allocation of staff to undertake the work.

Many benchmarks are public, and review takes place whether the benchmarking organisation wants the review or not. The UK school performance or ‘league’ tables described in the case example are very public and have been subject to a great deal of scrutiny and discussion. Successive review of the league tables by parents, regulators, journalists, educators and government ministers highlights some of the problems associated with providing comparative performance data and, to some extent, questions the benefits of the activity. The example also illustrates the trade-off between the cost of developing an ever-more complex measurement regime and the need to create measures that give a ‘good enough’ indication of school performance. The league tables are used by a number of different stakeholders with different requirements, and this increases the complexity of the instrument.

Case example

School performance tables⁶

Since the mid-1990s, the UK Government's Department for Education has published performance tables for schools. The tables for UK secondary schools present statistics on such things as examination performance and the extent of unauthorised absence. The tables have, to varying degrees, been useful for parents wishing to find out which school to send their child to, rather than having to rely on a school's reputation in their area or trying to make a judgement based solely on meeting a head teacher.

One of the prime measures for a school teaching 16-year-olds (the minimum school-leaving age in the UK) is the percentage of students achieving good grades in a nationally recognised qualification, the General Certificate of Secondary Education (GCSE). Performance statistics are produced for each school, showing the trend in its achievement for recent years, its position against other schools in the same local education authority and comparison with national statistics.

The statistics have great appeal for government ministers, not least because the tables at national level usually show a continuing rise in the percentage of students achieving good GCSE grades. Perhaps inevitably however, not everyone is happy with the tables and their measures. In many individual schools there are not enough children to make the figures statistically significant, although clearly the national statistics are not a problem. Another challenge is that schools in prosperous catchment areas perform relatively consistently, but those in poorer areas seem to oscillate, having alternate good and bad years. This 'yo-yo' effect can be demoralising to staff, who feel that they are judged on statistics that, to some extent, are outside their control.

Some teachers feel that the statistics can be misused, with damaging results. This concern may be in part due to the reluctance of professionals to be measured by an external agency, but teachers are also concerned that reducing the performance of a school to a limited set of statistics may mislead parents. An early criticism of the league tables was that the statistics did not demonstrate how well a given



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school had developed gifted students – the students who would perform well in almost any circumstance. The league tables were also criticised for failing to indicate whether genuine learning had taken place as opposed to good preparation for examinations.

There was also concern that potentially flawed statistics might be used to remove underperforming teachers. This perceived threat incentivised some teachers to spend a great deal of time ensuring that their figures were presented in the best possible light. The inevitable imperfections in the early measurement instrument led to frustration that so much emphasis was placed upon the tables. The general argument was that the tables did not appear to present a fair and rounded picture of individual schools.

Because of the importance placed by successive UK governments on demonstrating increasing levels of student achievement, the early and problematic school league tables were not abandoned, but the criteria for assessment were gradually reviewed and refined in an attempt to provide a fairer measure of success. A 'value-added' measure was introduced in the early 2000s, comparing the success of 16-year-olds with a peer group of those who had similar performance standards at age 11 years.

In 2007, a further refinement was introduced: contextual value added (CVA). This measure incorporated nine coefficients intended to adjust performance based on the circumstances of schools. These contextual factors included gender balance, ethnicity

and a range of social factors relating to the degree of deprivation of the school's location. The score was based on prior attainment, adjusted by background. The CVA score is the difference between predicted score and actual performance. But critics of the CVA argued that it gave rise to a temptation for schools to put pressure on individual students. Others argued that CVA was so complicated that parents and other interested parties would not understand what the measure meant. CVA was dropped in 2011, but many educationalists argued that the measure should be reintroduced in some form.

In 2016, the UK Government introduced its Progress 8 measure as the main indicator of school performance. This was intended to capture the progress that pupils in a school made from the end of primary school to the end of Key Stage 4 – the five years of

school education that incorporate GCSEs and other examinations. Progress 8 is also a value-added measure, in that that pupils' results are compared to the progress of other pupils nationally with similar prior attainment. Every increase in every grade that a pupil achieves attracts additional credit in the performance tables. However, it has been argued that the new measure penalises schools with large numbers of disadvantaged students, that the new measure neglects certain pupil characteristics, such as disadvantage, which may be 'unfair to some schools'.

School performance benchmarking is possibly going to be a story of never-ending review. Societal change, changes to curricula and economic growth, as well as the fact of individual and school 'measure gaming', mean that there will always be work for those who need to benchmark school performance.

17.4 How can quality awards and general benchmarking studies help?

Many organisations have been inspired to improve their performance through the use of quality awards. There are awards for quality in many countries, supported by local quality foundations or governments that recognise outstanding organisations – for example, the European Quality Award and the Malcolm Baldrige Award (in the USA). The European Foundation for Quality Management (EFQM) was founded in 1988 by the presidents of 14 major European companies, with the endorsement of the European Commission. The European Quality Awards are presented to organisations that demonstrate excellence in the management of quality as their fundamental process for continuous improvement.

The quality awards are usually based on generic cause–effect models, showing some of the key linkages between operations decisions and their business performance (see Chapters 3 and 12). Most schemes require that the participating organisations provide evidence of a structured and sustainable approach to improvement, covering aspects such as leadership, vision and values, customer understanding, people management, systems, practices, procedures and results.

The schemes entail several stages, such as the completion of a self-assessment tool, the comparison of performance against other organisations in the award database and then some form of independent assessment and feedback. Many organisations use the self-assessment tools to help drive improvement, with no intention of competing for the award. It is the 'comparison' aspect of the award schemes that makes them in some ways 'ready-made' benchmarking instruments. However, service organisations need to take great care in using generic prescription to inform improvement activity.

In the opening sections of this chapter we discussed the dangers of metric benchmarking. In some respects, this danger surfaces again when organisations participate in the various quality awards schemes. The generic strategies and the specific advice on process improvements, interventions and so on are derived from large-scale statistical research. This research looks at associations between aspects of practice and high levels of performance. In most of the popular awards models, the specific practice–performance associations are aggregated into generic relationships. The relationships do not describe causal connections, but they are often interpreted as such. The 'philosophical' basis of the quality award schemes is that if generic practice recommendations can

imported into the benchmarking organisation, it will similarly result in high levels of performance. The reality is that the copying of a particular aspect of practice will result, across a sample of organisations, in quite a large distribution of performance. The reason for this difference is context. Context is everything, and the importance of context is reflected in our exhortation to ‘adapt not adopt’.

In some ways, taking the generic advice of a quality award scheme is less damaging than metric benchmarking. This is because of the smoothing effect of statistical aggregation at the level of practice. The benchmarking organisation is less likely to be seduced into adopting extremes of practice.

These considerations beg the question, ‘which service organisations should engage with quality award schemes?’. If levels of performance are exceptionally low, then the service organisation has little to lose and needs all the help it can get! Generic advice and generic benchmarks are probably appropriate for organisations in this domain. However, where performance is already good, organisations can make informed judgements about both what they are trying to do and the benchmark targets they should use as aspirations.

General benchmarking studies

Large-scale studies (for example UKCSI business benchmarking,⁷ and ‘Service Competitiveness’⁸) can provide a useful source of benchmarking information. Such studies are not useful for direct benchmarking, as organisations are required to engage with the study from its outset. However, the comparison criteria in the studies are a good source of ideas for benchmarking measures. In terms of dynamic benchmarking, large-scale studies can also be a good source of trends – for example, a source of the performance criteria that are becoming important to consumers.

Many industry studies that could usefully inform the contextual basis of a benchmarking study appear in the academic journals relating to service management. Typically, there are about three such studies over an average year in the life of the journals. For example, a 2020 paper about customer service well-being⁹ contained a wealth of information about which service elements can be used in measuring well-being, and provided a ready-made metric for organisations wishing to measure this potentially important aspect of satisfaction. Another paper¹⁰ looked at benchmarking data that could be obtained from social media interactions between the service organisation and customers. The content analysis carried out gives a clear steer to useful benchmarking measures of customer communication.

Both studies derived measures that could have been derived by benchmarking teams. However, what the studies do provide is a feel for the relative importance of benchmarking measures, and they obviously provide a short cut.

Counterpoint

Although benchmarking is commonly regarded as popular and well established, and beneficial to organisations, it is certainly not without its critics. Of the criticisms, some are definitional and focus on the lack of consensus about its classifications and some of the models used in deploying benchmarking.¹¹ Others have criticised the frequent lack of involvement of staff in the benchmarking process. Some criticism is directed at benchmarking against competitors rather than focusing on customers. In effect, it claims, one’s customers really don’t care

how well you do against your competitors. Instead, they care how well you do for them.¹² They might prefer a competitor, but this may be because your service was not good enough in the first place. So rather than obsessing about competitors, focus on finding out from one’s customers what can be done better. This way you’ll know what to do to make your customers happier and come back to you.

Some would also question whether benchmarking is always worth doing. Certainly, you will want to know how your performance and methods compare

with competitors, or even other parts of your business. There can be improvements in both the culture and working practices of any operation that takes such comparisons seriously. But does that really mean that you want to make a huge fuss out of the benchmarking process? Looking at some of the advice from benchmarking specialists, one would think that a business's whole strategy-making process should be based on benchmarking. It shouldn't. There is a real danger that benchmarking becomes an end in itself: an internal industry with its own super-complex procedures and specialist staff. Taking it that far is rarely worth it. Rather, think about

benchmarking as a state of mind. It is an endorsement of the idea that operations managers should always be looking, outside and inside, both for ideas and for performance comparisons.

Arguably, the most profound criticism is that benchmarking is essentially conservative in that it focuses on copying from others rather than promoting true innovation. Why, the argument goes, settle merely for what others have achieved? Why not be more ambitious and aim for real innovative breakthroughs? If one is limited to what other organisations have done, one is always playing catch-up rather than being able to adopt a truly leading role.

17.5 Summary

What is benchmarking? – There are always opportunities to observe and learn from others, so that mistakes are not repeated and good ideas can be shared and adapted. Benchmarking is the activity whereby a measure or target of a process or some other aspect of an organisation or operation is compared with a similar aspect of another organisation in order to learn and improve performance. Benchmarking can help managers assess how well the benchmarking organisation is performing compared to a benchmark organisation. The process of benchmarking also helps managers to set realistic performance targets. Perhaps the most exciting and beneficial aspect of benchmarking is that it is a source of new ideas and practices. The flow of ideas from the benchmark organisation can stimulate creativity and performance innovation in the benchmarking organisation and, in turn, provide a further stimulus to drive improvement through the organisation.

What are the different types of benchmarking? – There are different types of benchmarking, and often the same types of benchmarking can be called different names. It is useful to think about benchmarking in terms of three key questions. First, what does one use as a comparison? Performance metrics or practice methods? Second, against what does one compare? Internal activities, external competitors or external non-competitors? Third, at what level should the comparison be made? The level of individual processes or at the level of the whole organisation? Different combinations of answers to these questions result in different types of benchmarking. For example, performance metric benchmarking is the process of evaluating relative performance by collecting measures and targets used by other operations, the 'benchmark(s)', and then applying these measures and targets in the home or benchmarking operation; while practice methods benchmarking is an attempt to search out new ideas and practices, and stimulate creativity and performance innovation in order to learn and improve performance. In other words, 'what ideas can we borrow from other service operations?'. Internal benchmarking takes place among – usually – similar processes within the same organisation. Competitor or peer benchmarking is carried out among organisations in – broadly – the same or similar markets, or among organisations providing similar services. Non-competitor benchmarking is carried out among organisations that do not compete in the same markets, or provide similar services. Here the comparison might be, for example, among structurally similar processes that are used for different purposes, or when two different organisations have to respond to market pressure to perform on a performance objective common to both. All types of benchmarking can take place at different levels of analysis, from the whole organisation through to individual processes.

How do organisations go about benchmarking? – The steps in the benchmarking process include:

- *Plan* – this involves definition of objectives for the benchmarking project, which will also cover desired ‘rates of change’ required in particular measures. The planning stage needs also to consider follow-up into process improvement activity and the benchmarking team.
- *Assess* – after the initial planning phase, there comes a need to assess potential ways of going about the benchmarking process, such as using a one-to-one relationship with a partner, or perhaps joining a benchmarking group or one of the larger award schemes.
- *Analyse* – the analysis step is in some ways the ‘meat’ of the benchmarking process and it involves comparison of performance data at the level of outcomes and practice. It can be useful to draw attention to outstanding practice, as this can be exciting and motivating for both benchmarking teams and the broader organisation.
- *Adapt* – this step is concerned with adapting practices and thinking about how they might work in the benchmarking organisation. Almost always, ideas taken from a benchmark subject have to be modified to reflect contextual differences.
- *Review* – benchmarking is sometimes a one-off project but is best when part of an ongoing recursive process. Inevitably, therefore, there is a need for a formal review of both the benchmarking and the way in which learnings are incorporated in the ongoing management and improvement of the benchmarking organisation.

How can quality awards and general benchmarking studies help? – Quality awards are usually based on generic cause–effect models and usually require the participating organisations to provide evidence of a structured and sustainable approach to improvement, covering aspects such as leadership, vision and values, customer understanding, people management, systems, practices, procedures and results. Large-scale industrial and academic studies can provide a useful source of benchmarking information and industry trends.

Discussion questions and exercises



1. Select a process you are involved in, such as ‘being taught’, ‘cooking a meal’, ‘cleaning’, etc. What might be the benefits of benchmarking this process and with whom could you compare your performance? How would this lead to the benefits identified?
2. Haven is a charity providing refuge and safe houses for parents and children who have been subject to domestic abuse. The charity is based in the south-west of England. Most of the revenue funding for the charity comes from Haven’s 14 charity shops. One of the problems encountered in the shops is that charitable gifts end up clogging the precious floor space. Donations can be dropped at the shops at any time. Typically, a donator will pull up their car outside the shop and bring in several bags of clothing, bric-a-brac, books, digital media, etc. Haven’s shops do not process the donations directly. Rather, they are consolidated at Haven’s central warehouse just outside Bristol, and then redistributed to Haven’s shops according to intelligence on where best to sell certain items. For example, if a shop is adjacent to a bus stop, then it can easily sell small and lightweight paperback books. Accordingly, the warehouse would put extra books in deliveries to that particular shop. Even though there is some thought going into the stock that gets distributed to the shops, the individual shops rarely have any say in what arrives on their doorstep. As result there is considerable clutter. The clutter is problematic because purchasers cannot see all the goods and the shop environment becomes unattractive and unfriendly. Where could Haven look to get ideas on how to organise both the consolidation and distribution process, and also the organisation of stock within its shops?
3. Viola Media, run by Violet Lesseps, had developed a specialisation in videography for festivals, arts and outdoor events when it won a contract to provide videography support for the production of online Masters degrees at a UK university. Violet knew that the work would be interesting but potentially challenging. The university had already subcontracted project management of the online programmes to a large US-based publishing

house, which had experience in short commercial video production. One surprise was the high degree of hand-holding and support required by professional lecturers. Violet had assumed that lecturers who could talk for several hours in traditional face-to-face lecturing would easily warm to the video medium. This was not the case. Delivering short introductory videos for an online course was not the same as delivering a full-blown two-hour lecture to a class of students. To shoot the videos, the production crew would generally come to the lecturer's institution for a day, with possibly one additional day for location shoots. This time had to be exploited fully. Pre-production was extensive. Nearly a year into the five-year project, Violet's processes were extremely efficient and Viola Media succeeded in winning more work from other publishers and universities directly, and the US publisher decided to bring Viola in-house. The problem arose when the US publisher decided to conduct an internal benchmarking study. It found that Viola's costs were far higher than its other divisions. The adherence to time budgets for videography and editing were broadly comparable with the teams in the USA, but Viola Media generally spent far more money and time on pre-production. Moreover, the US parent was frustrated because a good deal of the pre-production time was unquantified. How should the publisher respond to these findings?

4. Re-read the 'Acuity and HouseMark' case example earlier in the chapter. The example refers to 'benchmarking clubs'. The benefits of these clubs are mostly obvious, but what might be the 'dis-benefits'? How would you counter these dis-benefits?
5. A problem in large service organisations is that knowledge is often 'siloed' in regions, or functional departments. Internal practice benchmarking can be difficult because experience is inaccessible to many employees. This situation can be a real headache for managers who need to 'onboard' new employees. New employees who want to meet people and acquire information may not know where to go. A company that runs facilities management services has been offered an artificial-intelligence-driven 'Cognitive Assistant' app that its developers claim can be used to bridge the gap among pools of knowledge and experience. It is claimed that it would provide readily accessible advice on who to approach in a variety of scenarios, such as onboarding new hires and for supporting outsourced employees. The app would provide employees with a 'one-stop shop' knowledge base for assignment support, process guidelines, HR policy advice, etc. The app would also allow new employees to readily identify recent assignments similar to their own, and therefore provide an opportunity to tap valuable practice experience. (a) How is this app related to the practice of 'benchmarking'? (b) How could it aid improvement in the company?

Case exercise

Mumbai Private Bank

We are doing well but we cannot afford to be complacent,

said Arnab Mondal, the Chief Operating Officer with Mumbai Private Bank (MPB) in India.

To keep us on our toes and help us keep improving what we do, I think we need to benchmark ourselves against other organisations, though the problems are which measures do we use, and which organisations should we benchmark ourselves against?

With a head office in Mumbai and 98 branches in most of the larger cities across India, MPB has assets in excess of 1.4 trillion rupees (£15 billion) and

employs around 3,000 staff. The bank specialises in providing a top-quality service to higher-income earners with a range of savings, investments and loan products. MPB offers its customers ease of access and convenience, and provides specialist sales and service teams who ensure that the highest levels of customer service are provided by telephone, post, internet (both website and smartphone app) and in person.

Arnab explained how the bank has been trying to develop its performance measurement systems:

We are currently using the balanced scorecard to help us develop our measures and improvement activities. We have found, perhaps not surprisingly,

that we have quite a lot of financial and market measures – the results, if you will. What we are less good at measuring are the enablers. There are many operational and development aspects of the bank's work that we need to track. For example, we have a project running at the moment to improve our mobile application. The project involves integration of several existing services. We are working with a partner, and as COO I need better visibility of this project. And it is not just the projects that I need to track. We do measure customer satisfaction and employee satisfaction, but maybe not in a particularly sophisticated way, though we are working on this at the moment. I am convinced that we could do better in terms of metrics for customer satisfaction and the customer relationship issues related to satisfaction. A good deal of our 'wealth management' activity is critically dependent on relationships with our high-value customers. There are many ways to measure the health of a relationship, but honestly, I have not been impressed with any of them.

We obviously have a lot of information in terms of volumes about all of our products; mortgages, savings and investments, and details of all money flows on a daily basis. I think we have all the day-to-day measures needed for running such a business pretty much covered. We use these

performance measures to compare the activities of our various branches. We also have several measures of 'competitiveness'. We send monthly returns to the Indian Banks' Association and they provide some broad statistics comparing us to other banks.

We want to do some benchmarking to see how we can improve what we are doing and also to try to ensure that what we do is adding value for our customers and other stakeholders. Should we look, for example, at some of the co-operative banks, such as Bombay Mercantile Co-operative Bank, which are often local banks focused on personal service, or the State Bank of India, the largest and oldest bank in India, or Coutts bank in the UK (which also focuses on high earners), or international banks such as HSBC ... or Oberoi Hotels, or Singapore Airlines? I don't want us to waste our time creating measures for the sake of measuring things. I want us to choose measures that will help us improve and know how far in front or behind we are.

Questions

1. What is the purpose of benchmarking?
2. What advice would you give to Arnab Mondal?

Further reading



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Notes



- 1 The information on which this example is based is taken from: <https://www.arap.co.uk/> [accessed 20 April 2020]; and <https://www.housemark.co.uk/about-us> [accessed 20 April 2020]
- 2 The information on which this example is based is taken from Eley, J. (2020) 'John Lewis to stop reporting weekly sales figures', *Financial Times*, 28 January
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- 6 This illustration was compiled from information taken from: the UK Government website, <https://www.gov.uk/government/collections/statistics-performance-tables> [accessed 29 April 2020]; and from interviews with teachers.
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Index



- absenteeism 453
- absolute targets 402, 403, 412
- accessibility 186
- acknowledgement of problems 550
- Acuity (case example) 578–9
- acute patient's journey (case example) 208–9
- ad hoc innovation 471
- adaptability 275
- adaptive approach to discretion 252, 254
- adhocracy 284, 285, 286, 291, 292
- aesthetics 186
- agricultural sector 47, 48
- airlines 26–7, 46, 175, 192–3, 396, 436
 - Balanced Scorecard approach (case example) 414–18
 - chase capacity approach 436
 - level capacity approach 432
 - passenger area configuration (case example) 503–4
 - service strategy (case example) 76–7
 - services guarantees 561–2
 - see also names of individual airlines*
- algorithmic decision-making 365, 409, 468, 489, 514
- alignment, organisational 109, 114
- Allen Curve 360–1
- Allen, Thomas J. 360
- Allies 140, 141
- Amazon 282, 310, 349
- American Customer Satisfaction Index 231
- Amfring Transport (worked example) 87–8
- 'Anarchists' 140, 141
- annualised hours 434
- apology 550
- Apple (case examples) 49–50, 52–3, 105, 558
- approach behaviour 205, 207
- apps 210–11
- architectural knowledge 467, 493
- artificial intelligence (AI) 51, 365, 409, 468
- Astell Mortgage Society (worked example) 244–5
- attention, management of 241
- attentiveness/helpfulness 186
- audits, walk-through 216
- augmented reality technologies 366
- automated guided vehicles (AGVs) 366
- automated services 210, 211, 221–2
- automation 50, 51, 514
- availability 186
- average service position 79
- avoidance behaviour 205, 207
- B&Q 104
- back-office processes 18, 20, 199, 207, 211
 - and front-office processes interface problems 214–15
 - move to front-office 212
- Balanced Scorecard 378, 392–6, 404, 412, 414–18
- banking 187, 188, 189, 190, 473, 596–7
- behaviour
 - approach 205, 207
 - avoidance 205, 207
 - see also customer behaviour*
- behavioural segmentation 131
- beliefs 174
- benchmarking 402, 403, 412, 572–98
 - adapt phase 589–90, 595
 - analysis phase 589, 595
 - assessment phase 588–9, 595
 - competitor 580–1
 - criticisms of 593–4
 - definition 574, 594
 - follow through 586
 - internal 580
 - levels 583–4
 - non-competitor 582
 - objectives 585
 - and performance improvement 575
 - performance metric 576–7, 578
 - planning phase 585–8, 595
 - practice methods 577–8
 - process 584–90, 595
 - processes/services level 587–8
 - rates of change 585–6
 - review phase 590, 595
 - roles and responsibilities 587
 - studies 593, 595
 - team 586–7
 - types of 576–84, 594
- 'beneficiary' customers 134
- benefits provided 14–15, 78, 103, 104
- Le Berceau des Sens (case example) 171–3
- Bessant, J. 529–30
- Bezos, Jeff 282
- bi-directional supply relationships 306–7
- big data 365, 368
- blockchain technology 366
- booking systems 433, 442
- bottlenecks 358–9, 425, 440–1, 454
- 'bottom-up' view of strategy 66
- 'bow-tie' relationships 154, 155
- brand 106, 274
- Branson, Richard 282
- breakthrough innovation projects 474, 475
- bricoleurs/bricolage 483
- British Airways (BA) 504, 552
- broken processes 339
- bullwhip effect 322–4, 328
- burnout 243
- business ecosystem 303–4
- business model 105
- business objectives 72–3
- business process outsourcing (BPO) 310
- business process re-engineering (BPR) 519, 534
- business proposition 105
- business relationships 150–6, 157
 - forms of 151–2
 - key account management (KAM) 154–6, 157
 - measurement of 153–4
 - personal relationship-building 156, 157
 - strategic-type 152, 154
 - transactional-type 152, 153
- business-to-business (B2B) services 39, 106, 134, 143
 - and customer experience 218
 - experience economy for 53–4
 - relationship development 150–6
- business-to-consumer (B2C) services 39–40
 - customer relationships 138–50, 151, 157
- business-to-government (B2G) services 39, 40
- Buxtain Security Services (worked example) 67–8, 74, 75
- Caffyn, S. 529–30
- call centres 310–11, 363, 451–2
- Cameron, K.S. 291
- Campwagon Conversions (case example) 188–9
- capability–commodity profile 345–6
- capability mapping 113
- capability processes 342, 343–4, 345, 346, 363, 369, 370
- capable processes 409–11, 413
- capacity *see* resource and capacity management; service capacity
- Capes & Latimer (C&L) (case exercise) 116–20, 474
- care 186
- Carlzon, Jan 239, 396
- Caterof and Hotspice (worked example) 321–2
- Cathay Pacific Airways 26–7
- cause–effect relationships in strategy 404–5, 412–13

- celebration of success 253, 282
- Center Parcs 261
- 'Champions' 141
- charities 43–4, 47
- chase capacity approach 431, 433–4, 436, 454
- Chase, R.B. 80–2
- chatbots 221–2
- Chilli Airways (case exercise) 414–18
- clan (collaborate) culture 284, 285, 291, 292
- Clark, K.B. *see* Henderson–Clark model
- Clark sector model 47–8, 50
- cleanliness/tidiness 186
- cloud computing 366
- clues 204–5
- co-consumption 17
- comfort 186
- commitment 186
- commodity processes 342, 344–5, 346, 361–2, 369, 370
- communication 143, 144, 174, 186, 187, 366
 - between staff 360–1
 - and performance management 381
 - with staff 251, 253
- compensation 551
- compete (market) culture 287, 291, 292
- competence 186, 187
 - customer 234–5, 261
- Competing Values Framework 276, 284–7, 291–2, 293
- competitive advantage 78–82, 90
- complaint/compliment analysis 191
- complaints, customer 548–55, 565
 - customers who don't complain 552–5
 - dealing with 550–2
 - online/computerised systems 554–5
 - reasons for 549
 - word of mouth and word of mouse 549
- complexity, costs of 453
- compliant approach to discretion 252, 253–4
- condition sensor technologies 366
- confidence, customer 173–4
- consumer-to-business (C2B) services 39, 41
- consumer-to-consumer (C2C) services 39, 42
- consumer-to-government (C2G) services 39, 41
- The Consumerist website 581
- content overload 222
- continuous improvement (CI) 507
 - see also* kaizen
- contracting 318, 320, 328
- contracts 151
 - short-term 319–20
 - see also* service-level agreements
- control, and performance management 405–11, 413
- control (hierarchy) culture 285, 286, 291, 292
- control mechanisms 281
- Co-op (case example) 235
- coping zone, management of 446–50, 454
- co-production and co-creation 16–18, 134, 232, 244, 259, 271, 306, 471
- core competences 76
- cost of a service 104
- cost-based value 504–5
- County Workhouse (case exercise) 495–7
- courtesy 186
- create (adhocracy) culture 284, 285, 286, 291, 292
- creative discretion 251
- creativity 465, 477
- critical factors 187, 188, 189
- critical incident technique (CIT) 191
- cross-channel networks 317
- crowd behaviour 218–19
 - case example 220
- crowd management 351–4
 - flow prediction stage 352
 - performance analysis stage 352
 - planning stage 352
 - real-time management stage 353
- crowd/event marshals 353
- cruise industry 79–80
- cultural web 276, 278–84, 293
 - control mechanisms 281
 - financial services (worked example) 283–4
 - organisational structures 279–80
 - organisational values and culture 279
 - power structures 280
 - rituals and routines 282
 - stories and myths 281
 - symbols and role models 281–2
- culture 108
 - change 276, 289–92, 293, 294–6
 - management 289–92, 293
 - national 287–9, 293
 - see also* organisational culture; service culture
- customer advisory panels 191
- customer behaviour
 - in queues 205, 445
 - servicescapes' influence on 205–7
 - technology and understanding of 222
- customer confidence 173–4
- customer contact 348
 - high, and service improvement implementation 511
- customer dissatisfaction 181, 182–3, 184, 187, 190, 548–9
 - see also* complaints
- customer expectations 164, 165, 166, 168
 - continuum 176
 - fuzzy 177–8
 - influences on 178–9, 193
 - management of 179–80, 193
 - methods to capture 190–1, 193
 - perceptions–expectations gap 169–71
- pressures resulting from 234
- technology and 221
 - zone of tolerance 177, 180–4
- customer experience 14–16, 22, 78–9, 102–3, 198–229
- customer journey 207–14, 224
 - design 215–18
 - Elena (case exercise) 226–7
 - and emotions 202–4, 216, 217, 224
 - experience statement 201–2, 224
 - management of total chain of processes 214–20, 224
 - and risk 213–14
 - servicescapes' effect on 204–7, 224
 - technology and shaping of 221–3, 224–5
- customer experience analysis (CEA) 217–18
- customer failures 547–8
- customer groups 27
- customer involvement
 - benefits of 259
 - degree of, in service processes 348–51, 369
 - see also* co-production and co-creation
- customer journey 207–14, 224
 - back-office processes 211, 212–13
 - front-office processes 210–11, 212–13
 - mapping 215
- customer lifetime value (CLV) 136–8, 156
- customer loyalty 129, 136, 138
- customer motivation 262
- customer perceptions 168
 - influences on 175–6, 193
 - management of *see* customer perceptions management
 - perceptions–expectations gap 169–71
- customer perceptions management 179, 180–5, 193
 - by making the intangible tangible 184–5
 - peak, beginning and end experiences 180–2
- customer performance measures 393
- customer perspective 14–16, 97
 - and operations perspective, balancing of 24–5
 - and operations perspective, meeting of 16–18
 - performance measurement 396–400
 - service process design *see* customer experience
 - supply networks 307–8
- customer recovery 556–7, 565
- customer relationship management (CRM) 145–8, 157
- customer relationships 138–50, 151, 157, 236
 - and customers' perceived risk 144–5
 - improving 141
 - personal relationships 143–4
 - portfolio relationships 142–3

- progression model of 139
- relationship marketing 138–9
- temporary relationships 144
- types of 140–1
- customer removal 149–50, 262
- customer retention 135–8, 139, 156, 257, 563
- customer roles 259, 263
- customer satisfaction 164, 166–75, 193, 257, 562–3
 - continuum 168
 - measurement of 396–400
 - and staff satisfaction, link between 231, 256
 - see also* customer expectations; customer perceptions
- customer selection 261
- customer service 200
- customer–supplier duality 320
- customer training 148–9, 261, 262
- customers 46, 126–35
 - categorisation of 128–35
 - based on characteristics of customer groups 131–2
 - based on nature of purchasing behaviour 128–30
 - based on position in supply network 132–4
 - co-production and co-creation 16–18, 134, 232, 244, 259, 271, 306, 471
 - competence of 234–5, 261
 - ‘management’ of 259–62, 263
 - presence 9
 - and service innovation 471, 482, 490–3
 - as service people 232, 259–62, 263, 434
- cybersecurity 222
- dabbawala service (case example) 308–9
- dark kitchens delivery service (case example) 314–15
- data mining 365
- Deal, T.E. 276, 277–8, 293
- delight 181, 183–4, 187, 190
- delivery flexibility 451
- demand
 - break point 446, 454
 - forecasting 428
- demand management approach 431, 435–6, 454
- demand-side factors 429, 430
- demographic segmentation 131
- derivative innovation projects 474
- design *see* service design
- destination statement 394–5
- deviant discretion 252
- Dexan Consulting (case exercise) 294–6
- DHL innovation workshops (case example) 492
- ‘diamond’ relationships 154, 155
- discretion *see* employee discretion
- disintermediation 313–15, 328
- Disney 166–8, 170
- dissatisfaction *see* customer dissatisfaction
- DMAIC approach 519
- do-it-yourself service 349
- double-loop learning 407
- DPD group (case example) 381–2
- Ducasse, Alain 245–6
- e-commerce 221, 222
- e-procurement 327
- easyJet 26
- economic change, and innovation 472
- economic importance of services 47, 48, 49, 57
- eight Ps of service marketing 105
- emotion mapping 216
- emotions 15, 78, 103, 104–5, 114
 - and customer experience 202–4, 217, 224
- empathy 550
- employee discretion 251–8, 262–3
 - adaptive approach to 252, 254
 - compliant approach to 252, 253–4
 - empowerment and control, balancing of 256
 - and organisational style 252
 - perceived individual 252
 - transitions management 254–6
 - adaptive to compliant 255–6
 - compliant to adaptive 254–6
- employees
 - involvement in target setting 403
 - recovery after service problems 558
 - see also* employee discretion; staff
- employment 47–8, 50
- end users or consumers 133
- English National Opera (case example) 20–1
- enhancing factors 181, 183, 187, 188
- environment, impact on 23, 368, 472
- Ess Pannanservice (worked example) 399
- Europa Conference Centres (worked example) 165
- European Airlines Group (case exercise) 32–4
- European Foundation for Quality Management (EFQM) 592
- evaluation of ideas 17
- Executive Bank (case exercise) 567–9
- expectations *see* customer expectations
- experience
 - previous 179
 - see also* customer experience
- experience economy 51–4, 57
- expert control 408, 409
- expertise 316
- external customers 133
- external supply network 305, 306
- external targets 402, 403, 412
- face recognition technology 222, 366, 468
- face-to-face contact 210
- facilities management organisations (FMO) 313
- fads 531
- failing service 79, 453
- failsafing 559–60, 565
- failures
 - customer 547–8
 - service 547, 548
- faith organisations 43, 47
- familiarity 174
- features-based value 504–5
- Federal Express 281, 564
- feedback control 406–9
- feedback, customer 552–4, 556, 557
- Feigenbaum, Arnold 515
- Fermat Numérique (case exercise) 535–42
- financial incentives 316
- financial measures 392–3
- financial performance 563
- financial risk 213
- first in, first out (FIFO) 438, 439
- flexibility 186, 428, 451–2
- flexible employment contracts 434, 452
- flexible staffing levels 434
- flow, work/customers 523
- focus groups 191
- focusing operations 429, 454
- forecasting demand 428
- four Ps of service marketing 105
- Four Seasons Hotels (case example) 282, 289, 505–6
- fraud 222
- friendliness 186
- front-line staff roles 246–7
- front-office processes 18, 20, 199, 207, 208, 210–11
 - and back-office processes interface problems 214–15
 - move to back-office 212
- functionality 186
- GDP Central Estimation Service (case exercise) 372–5
- GE (General Electric) 516
- geographic segmentation 131
- gig economy (case example) 435
- Gilmore, James 51
- Glassdoor 231
- Google 360
- government-to-business (G2B) services 39
- government-to-consumer (G2C) services 39, 41
- government-to-government (G2G) services 39, 40
- gross domestic product (GDP), services contribution to 47, 48, 49, 57
- guestology 166–8
- hairdressing concept design, Japan (case example) 109, 110
- halo effect 183
- HappyOrNot (case example) 390–1

- Harley Owners Group (case example) 142–3
 Hayes, R.H. 80–2
 helpfulness 186
 Henderson–Clark model of innovation 467–8
 Heskett, J.L. 256
 heterogeneity of services 4, 5–6, 10, 11, 31, 339, 387, 392, 408, 510, 533
 Heywood Hill bookshop (case example) 491
 hierarchy (control) culture 285, 286, 291, 292
 hierarchy of needs hypothesis 50
 high-value customers 130
 Hofstede, G. 287–8, 293
 Holmart and Wersa – food waste partnership (case exercise) 330–3
 Hostages 140, 141
 HouseMark (case example) 578–9
 Hoxby Collective (case example) 326
 hygiene factors 182, 183, 187, 188, 189

 iceberg metaphor 272–3
 Icehotel (case example) 4756
 idea/ideation 16–17, 106, 479
 IDEO (case example) 466–7
 IHIP characteristics 4–7, 10, 11, 31, 338–9, 386–7, 391–2, 408
 and service improvement 509–10, 533
 see also heterogeneity; inseparability; intangibility; perishability
 IKEA (case examples) 17, 69–70, 97, 98, 148–9
 imitability of service innovation 472
 importance–performance matrix 84–8, 89
 improvement *see* service improvement
 in-house supply 309–10, 328
 Incompetents 141
 individualism–collectivism 287
 indulgence–restraint 288
 information and communication technology (ICT) 7, 48, 366
 innovation
 definition 464–5, 471–2, 493
 see also service innovation
 innovation-based improvement 507
 input–transformation–output model 7–8, 9
 inseparability 4, 6, 7, 10, 11, 31, 339, 386, 391, 392, 408, 510, 533
 ‘inside-out’ view of strategy 66
 Institute for Global Economic Development (IGED) 106, 108
 intangibility 4, 5, 7, 10, 11, 31, 339, 387, 391, 392, 408, 425, 509, 510, 533
 intangible supply 304, 305–6, 327
 integration
 and service innovation 488
 vertical 310, 318
 integrity 186
 intellectual property 472
 intentions 15, 78, 103

 intermediaries 133, 315–17, 328
 internal customers 133
 internal process measures 393
 internal process network 305, 337
 internal services 44–6
 internal supply network 305, 306
 internal targets 402–3, 412
 internet 468, 472
 internet of things (IoT) 367
 intimacy 14, 143, 144
 ‘Intolerants’ 141
 intuitive control 408, 409
 involvement
 staff 251, 253
 see also customer involvement

 Japan, hairdressing concept design (case example) 109, 110
 John Lewis (case example) 580
 Johnson, Gerry 278
 joint ventures (JVs) 152
 ‘journeyman’ service operations 81
 judgements 15, 78, 103

 Kaiten-zushi restaurants (case example) 523–4
kaizen 253, 403, 507
 Kamrad, Ingvar 97
 Kaplan, Robert 392, 404, 412
 Karolinska Hospital (case example) 439
 Kelleher, Herb 281, 282
 Kennedy, A.A. 276, 277–8, 293
 key account management (KAM) 154–6, 157
 key decision area matrix (KDAM) 348–9, 369
 key performance indicators (KPIs) 389
 knowledge
 architectural 467, 493
 component 467
 leakage 488
 knowledge economy 48
 knowledge workers 286

 Lapworth Museum of Geology, Birmingham, UK (case example) 111–13
 last in, last out (LIFO) 438
 leadership 238–41
 transactional 239, 241
 transformational 239–40, 241
 lean Six Sigma 528
 lean thinking 519–28, 534
 five principles of 522–3
 value stream mapping 524–8
 learned helplessness 237, 558
 learning
 culture 562
 organisational 275
 single- and double-loop 407
 learning and growth measures 393
 level capacity approach 431–3, 436, 454
 loading 438

 location 429–30
 impact of 425
 London Underground (case example) 422–4
 Long Ridge Gliding Club (worked example) 28–9
 long-term orientation 288
 lost luggage (case example) 551–2
 low-value customers 130
 loyalty, customer 129, 136, 138
 lunch delivery service in Mumbai (case example) 308–9

 Macy-Helston Foot Care (worked example) 574–5
 manufacturing sector 47, 48, 50, 54
 market (compete) culture 287, 291, 292
 market environment 73–4
 market segmentation 66, 74, 131–2
 marketing 66, 105, 178, 179
 markets 66
 masculinity–femininity 287–9
 mass customisation 347, 363
 McDonald’s (case examples) 286, 316
 McDonald’s Innovation Centre (case example) 481–2
 meaning, management of 241
 Médecins sans Frontières 43
 media coverage 174
 memory organisation packets (MOPs) 249
 Michelin (case example) 55
 Microsoft 39
 mindset, and customer experience 214
 mission statements 105–6, 383–4, 412
 mobile devices 221
 mobile phone apps 210–11
 modification, product/process 469
 Monzo Bank Ltd (case example) 473
 mood 234
 and customer expectations 179
 and customer experience 214
 motivation
 customer 262
 staff 236
 Motorola 516, 517
muda (waste) 522
 multi-channel networks 317
 Mumbai Private Bank (case exercise) 596–7
 Mumbai Tiffin Box Suppliers Association (MTBSA) 308, 309
 mystery shoppers 397
 myths and stories 281

 National Basketball Association (NBA) (case example) 582–3
 national culture 287–9, 293
 National Health Service (NHS)
 Innovation Challenge Prize (case example) 490
 Nationwide Building Society 310–11
 Natural Environment Research Council (NERC) 48

- negotiated control 408, 409
- Net Promoter Score (NPS) 397–8
- Netflix 310, 489
- networks 152
 - internal process 305, 337
 - service innovation 487–8
 - see also* supply networks
- neutral factors 187, 188, 189
- new service flexibility 451
- new/lost customer surveys 191
- non-governmental organisations (NGOs) 43
- non-profit services 42–4, 47, 84
 - strategy 70–1
- North Healey Building Society (worked example) 201–2
- Northern Breast Screening Unit (case exercise) 194–6
- Norton, David 392, 404, 412

- Ocado (case example) 71–2
- off-peak demand, promotion of 432
- offshoring 310–11
- Ohno 522
- omni-channel networks 317
- open innovation 489
- operations focus 429, 454
- operations perspective 10–12, 97
 - and customer perspective, balancing of 24–5
 - and customer perspective, meeting of 16–18
- operations segmentation 132
- Optiker Söderberg (case example) 166–8
- order winners 84–5
- organisational alignment 109, 114
- organisational benefits 23
- organisational climate 271–2
- organisational culture 271–2, 292–3
 - change 276, 289–92, 293, 294–6
 - Competing Values Framework 276, 284–7, 291–2, 293
 - Deal and Kennedy model 276, 277–8, 293
 - iceberg metaphor 272–3
 - and resource management 453
 - servicescapes and 360
 - see also* cultural web
- organisational culture assessment instrument (OCAI) 291–2
- organisational learning 275
- organisational outcomes 15–16
- organisational pressures 232, 233–4, 236–7
- organisational structures 279–80
- organisational values 279
- organising idea 100, 101, 107, 114
- ‘outside-in’ view of strategy 66
- outsourcing 50, 303, 309–11, 328, 452
 - innovation 487–8
- overtime 434, 452
- Oxfam International (case example) 43–4

- P-Mecxx Cyber Services (case exercise) 158–60
- partnering 152
- partnerships 152
 - service 350
 - supply relationships 318–19, 320, 328, 330–3
- passport control (case example) 442–3
- patents 472
- ‘Patients’ 140
- ‘paying’ customers 134
- peak-end rule 180
- perceived user value (PUVs) 75, 82–4
- performance
 - benchmarking and improvement in 575
 - financial 563
 - idea of in service operations 385–8, 412
 - importance–performance matrix 84–8, 89
- performance appraisals 379
- performance indicators 379, 389
- performance management 377–419
 - achieving consistency in 404–5, 412–13
 - and communication 381
 - and control 405–11, 413
 - cost of 382–3
 - definition 379, 411–12
 - importance of 380–1
 - as motivator of appropriate behaviour 381
 - and operations improvement 381
 - scope of 379–80
 - and strategic decision-making 380
 - strategic objectives in 384–5
- performance measurement 388–400, 412
 - Balanced Scorecard approach 378, 392–6, 404, 412, 414–18
 - from customers’ perspective 396–400
 - in service operations 391–2
- performance measures 389–90
 - systematic development of 389–90
 - ten tests of 389
- performance metric benchmarking 576–7, 578
- performance objectives 75–6
- performance reporting 400–2, 412
- performance targets 233, 379, 381, 402–4, 412, 575
 - employee involvement in setting 403
 - linking rewards to 404, 412
- perishability 4, 6, 7, 10, 11, 31, 339, 386, 391, 392, 408, 510, 533
- personal relationships 143–4
 - in business 156, 157
- personality clashes 214
- PESTEL factors 73
- Peters, T.J. 274
- physical risk 213
- Pine, Joseph 51
- pioneer product/process change 469
- Pixar 284, 521

- platform innovation projects 474, 475
- platform–train interface (case example) 353–4
- Plaza Athénée (case example) 245–6
- poka yoke* 559, 560, 565
- PoPaws (case example) 525–8
- PortAventura 101, 102, 103, 430–1, 439, 442
- portfolio relationships 142–3
- post-industrial society 48
- power distance 287
- power structures 280
- practice methods benchmarking 577–8
- pressures 232–7, 262
 - customer 232, 234–5, 236–7
 - organisational 232, 233–4, 236–7
- price 104, 178, 312, 313
- prison service (case examples) 135, 173–4, 206–7
- problems *see* service problems
- process capability 409–11, 413
- process characteristics change 468, 469–70
- process control charts 410–11
- process mapping 354–7, 370
- process recovery 557, 565
- processes 66–7, 76, 187, 336, 338, 532
 - broken 339
 - design *see* service process design
 - and resources, mutual dependency 8, 337–8
 - service innovation 477–84
- procurement or purchasing function 326–7
- product innovation 469, 470
- products 14, 78–9, 103
- professional services 432
 - case example 364–5
- profiling processes 345–6
- profit, service–profit chain 256–8
- psychographic segmentation 131
- psychological risk 213
- public sector services 378–9, 554–5
- pull systems 523
- punishments 316
- purchasing or procurement function 326–7

- qualifiers 84, 85, 86
- qualitative versus quantitative customer satisfaction measures 400
- quality *see* service quality
- quality awards 592–3, 595
- quaternary sector 48, 51
- Queen Mother Hospital for Animals (case example) 362
- questionnaires 190, 191, 396, 397
- queues
 - and customer behaviour 205, 445
 - management of 432–6, 441–6, 454
 - pooling 444–5
 - theory and simulation 443–4
- Quinn, R.E. 284, 291

- radio frequency identification (RFID) 222, 366, 367
- Ramblers Walking Holidays (case example) 98, 99
- Red Crescent 43
- 'regulatory' customers (or stakeholders) 134
- relationship marketing 138–9
- reliability 186
- 'repeaters' 341, 342, 348, 349, 350
- research and advanced development 474, 475
- resilience 428
- resource and capacity management 420–60
 - bottlenecks 425, 440–1, 454
 - building flexibility 451–2
 - capacity utilisation, improvement of 450–3, 454–5
 - chase capacity approach 431, 433–4, 436, 454
 - coping zone 446–50, 454
 - definition 422, 454
 - demand management approach 431, 435–6, 454
 - hierarchical planning and control approaches 42
 - level capacity approach 431–3, 436, 454
 - loading 438
 - long-term 426, 427–31, 454
 - medium-term 426, 431–6, 454
 - and organisational culture 453
 - queues 441–6, 454
 - scheduling 437–8
 - sequencing 438–9
 - and service concept 447, 453
 - and service innovation 487
 - short-term 426, 437–9, 454
 - yield management 450–1
- resource constraints 425
- resources 66–7, 76, 337–8, 532
 - and processes, mutual dependency 8, 337–8
 - transforming 7–8
- responsiveness 186, 187
- retention, customer 135–8, 139, 156, 257, 563
- rewards, linking targets to 404, 412
- RFM (recency, frequency, monetary value) technique 129
- risk 237
 - and customer experience 213–14
 - innovation 474
 - and relationships 144–5
- rituals and routines 282
- robots 366, 368–9
- Rohrbaugh, J. 284
- role models 282
- role(s)
 - ambiguity 247
 - clarification of 246–7
 - clarity and fit 236
 - conflict 247
 - customer 259, 263
- Rolls Royce 54
- routine control 408–9
- routine discretion 251
- routines and rituals 282
- RSPCA 47
- rules 143, 144
- 'runners' 341, 342, 343, 344, 348, 349, 361, 452
- St Göran's Hospital (case example) 520
- SAP 39
- SAS airline 239, 396
- satisfaction *see* customer satisfaction
- scale/scalability 481
- Scarlets Rugby Club (case examples) 12–14, 242–3
- scheduling 437–8
- scheduling losses 453
- Schein, Edgar 272–3, 291, 293
- school performance tables (case example) 591–2
- Scouting Association 43
- scripts 249–50
- sectors, differences between service operations within 46
- security 186, 222
- Seddon, John 402
- segmentation-targeting-positioning (STP) 131
- self, management of 241
- self-service 307
 - technologies 222
- sequencing 438–9
- sequential incident analysis 191
- service capacity, defining and measuring 424–5
- service characteristics innovation 468, 469–70
- service climate 271
- service concept 18, 74, 75, 89, 95–121, 192, 447
 - as bridging mechanism 97–8, 114
 - and capability processes 343
 - and commodity processes 344
 - defining what it is not 105–6, 114
 - emotional dimension of 104–5, 114
 - managers use of 106–14
 - to assess the implications of design changes 110–14
 - to create organisational alignment 109, 114
 - to define and communicate the nature of the business 108, 114
 - to stimulate innovation 114
 - and resource and capacity management 447, 453
 - and service innovation process 483–4
 - and service processes 343, 344, 347–8
 - structure of 114
 - organisation responsible for service 100, 114
 - organising idea 100, 101, 107, 114
 - service provided 100, 102, 107, 114
 - service received 100, 102–5, 107, 114
 - summary of service concept 100, 101, 114
- service culture 108, 273–6
 - change 276, 289–92, 293, 294–6
 - definition of 293
 - importance of 274–5, 293
 - and service recovery 556
 - see also* organisational culture
- service design 17, 109–10, 465, 480–1
 - changes 110–14
 - customer experience 215–18
 - see also* service process design
- service-dominant logic 56–7, 306, 482
- service factory 349
- service guarantees 561–5
 - designing 564–5
 - downsides of 564
 - six acid tests of 562–3
- service improvement 500–44, 565
 - approaches to 514, 515–28, 533–4
 - closed versus exposed operations 529–30
 - continuous 507, 508–9, 529
 - elements 514, 515
 - exploiting and coping with labour-intensive processes 513
 - high customer contact impact on 511
 - IHIP characteristics implications for 509–10, 533
 - incremental versus radical 505–9, 533
 - and relationship between resources and processes 532
 - and stability 531
 - sustainability 529–32, 534
 - techniques 514, 515
 - to be better versus to be different 505–9, 533
 - trade-offs, management of 511–13
 - using problems to drive 555–9, 565
 - value as a driver for 502–5, 533
 - variability as characteristic of 513–14
- service innovation 114, 463–99
 - capacity 487
 - copying/protection issues 471–2
 - customers' involvement in 471, 482, 490–3
 - difference from innovation in other sectors 470–6, 494
 - Henderson–Clark model of 467–8
 - importance of 471–2
 - incremental 471, 482, 493
 - interactive nature of 471, 482
 - networks 487–8
 - open innovation 489
 - organisation of 488–9
 - portfolio of projects 474–5
 - process characteristics 468, 469–70
 - radical 493
 - resources necessary for 487–93, 494
 - risk 474

- service characteristics 468, 469–70
 - and supply networks 472–3
 - testing 471
- service innovation process 477–84, 494
 - evaluation stage 479–80
 - execution stage 480–1
 - ideation stage 479
 - progressively reducing options 483
 - recycling and interaction between stages 482
 - and service concept 483–4
 - vision stage 479
- service-level agreements (SLAs) 153, 154, 324–5, 328
 - advantages and disadvantages 325
 - developmental relationship 325
 - routinised relationship 324
 - service specification 324
- service mix 425
 - flexibility 451
- service operations management
 - challenges for 24–6, 31
 - distinguished from general operations management 9
 - importance of 22–3, 31
 - principles of 7–18, 31
- service operations managers,
 - responsibilities of 18–21, 31
- service outcomes 14–16, 103, 502
- service partnerships 349, 350
- service performance network *see*
 - service–profit chain
- service positioning 74
- service problems 545–71
 - complaint handling *see* complaints
 - prevention of 559–65, 565
 - reasons for 546–7, 565
 - types of 547–8
 - using problems to drive improvement 555–9, 565
- service process design 335–76
 - customer experience perspective *see*
 - customer experience
 - definition 337, 369
 - and IHIP characteristics 338–9
 - importance of 339
 - process demand and operating characteristics 357–8
 - process mapping and 354–7, 370
 - servicescapes as part of 359–61
 - technology in 364–9, 370
- service process repositioning
 - moving from capability towards commodity 361–2, 370
 - moving from commodity towards capability 363, 370
- service processes
 - bottlenecks 358–9
 - capability processes 342, 343–4, 345, 346, 363, 369, 370
 - commodity processes 342, 344–5, 346, 361–2, 369, 370
 - complexity processes 343, 347–8
 - degree of customer involvement 348–51, 369
 - do-it-yourself service 349
 - off-diagonal processes 347–8
 - output interval or cycle time 357, 358, 370
 - profiling 345–6
 - service factory 349
 - service partnerships 349, 350
 - service projects 349, 350
 - service variety 340, 341–5, 347–8, 369
 - service volume 340–1, 342–5, 347–8, 369
 - simplicity processes 343, 348
- service projects 349, 350
- service promise 105
- service quality 163–97
 - customer-perceived 164, 165
 - factors 185–8
 - failures 453
 - operationalisation of 185–90, 193
 - operations 164, 165
 - see also* customer expectations; customer perceptions; customer satisfaction
- service recovery 555–9, 565
- service recovery paradox (SRP) 550–1, 565
- service science 57
- service specification 165, 192–3
- service strategy 63–94, 530–1
 - and competitive advantage 78–82, 90
 - defining 68
 - formulation process 72–7, 90
 - four perspectives on 65–8
 - importance of 68–72, 90
 - and importance–performance matrix 84–8, 89
 - as iterative and continuous process 76
 - and market environment 73–4
 - and overall business objectives 72–3
 - and perceived user value (PUVs) 75, 82–4
 - and performance objectives 75–6
 - and service concept 74, 75, 89
 - and service positioning 74
 - and service resources and processes 76
 - sustainable 88–9, 90
- service transaction analysis *see* customer experience analysis (CEA)
- service trauma 237
- service value 14, 15, 22, 103–4
- service–profit chain 256–8
- service(s)
 - customer perspective 14–16, 16–18, 24–5
 - definition of 4–7, 31
 - economic importance of 47, 48, 49, 57
 - employment in 47, 48, 50
 - growth in 50
 - IHIP characteristics *see* IHIP characteristics
 - operations perspective 10–12
 - types of 38, 39–46
 - merging of distinction between 46–7
 - ubiquity of 37–8, 57
 - visibility of 9, 174
- servicescapes 204–7, 224
 - and customer behaviour 205–7
 - and organisational culture 360
 - and process design 359–61
 - and staff behaviour 207, 359–61
- servitisation 54–6, 57, 58–61
- SERVQUAL 397
- SHAPE International 154
- shared services 45–6
- Sharp, Isadore 282
- Shouldice Hospital (case example) 346–7
- Singapore Airlines (case example) 76–7, 270, 589
- Singapore Zoo (case example) 484, 485–6
- single-channel networks 317
- single-loop learning 407
- Site Steward Archaeological Tours (worked example) 146, 147–8
- sites
 - activities allocated to 429
 - location of 429–30
 - number and size of 428–9
- Six Sigma 253, 516–19, 533
 - lean 528
- skills flexibility 434
- Slack recovery approach (case example) 557
- social change, as motive for innovation 472
- social housing (case example) 578–9
- society, impact on 23
- Southwest Airlines 281, 282
- specialisation 488
- specification, service 165, 192–3
- stability, organisational 531
- staff 231–2
 - absenteeism 453
 - annualised hours 434
 - flexible employment contracts 434, 452
 - and good service operations management 22
 - motivation 236
 - overtime 434, 452
 - pressures on 232–7
 - satisfaction, link with customer satisfaction 231, 256
 - service culture influence on 275
 - servicescape influence on 207, 359–61
 - temporary 434
 - underperformance 453
 - see also* employee discretion; staff management
- staff management 237–51, 262
 - communication and involvement 251
 - leadership 238–41
 - role clarification 246–7
 - teams and teamwork 243–6
 - using scripts 249–50

- stage model for changing culture 290–2
- standard operating procedures (SOPs) 109, 528
- standardisation of services 5, 452, 514
- Starbucks 310
- statistical process control (SPC)
 - approach 409–11
- status symbols 281
- Sterksteen (case exercise) 58–61
- stored services 6
- stories and myths 281
- ‘strangers’ 342, 343, 348, 350, 361
- strategic alliances 152
- strategic decision-making 380
- strategic linkage model 385, 395–6
- strategic management 29–30
- strategic objectives 384–5, 412
- strategic relationships 152, 154
- strategy *see* service strategy
- strategy mapping 404–5
- stress 233–4, 236, 237, 262, 558
- stretch targets 403
- subcontractors 434
- supermarkets 264–6, 368
- ‘supplier’ customers 134
- suppliers
 - choice of 312–13
 - one-stop shops 313
 - selection criteria 312–13
 - single- or multi-sourcing decision 313
- supply chain management (SCM) 300, 301
- supply chains 300, 301, 305, 327
 - bullwhip effect 322–4, 328
- supply networks 299–334
 - and business ecosystem 303–4
 - complexity 317
 - configuration of 309–17, 328
 - customers’ perspective 307–8
 - customers’ position in 132–4
 - disintermediation 313–15, 328
 - dyadic relationships 301–3
 - intermediaries 133, 315–17, 328
 - internal and external supply 305, 306
 - ongoing management of 317–27, 328
 - purchasing or procurement function in 326–7
 - and service innovation 472–3
 - service supply and product supply distinguished 306–7
 - tangible and intangible supply 304, 327
 - triadic relationships 301–3, 306, 312, 327, 328
- supply relationships 318–22
 - contracting 318, 320, 328
 - partnerships 318–19, 320, 328, 330–3
 - and product supply relationships, differences between 319–20
 - supply-side factors 429
 - surveys 190, 191, 396
 - sustainability change 472
 - switching services 171, 221
 - symbols 281–2
- tactical management 29–30
- tangible supply 304, 305–6, 327
- targets *see* performance targets
- task allocation 350–1
- team leaders 245
- teams and teamwork 243–6, 253, 452
- technical support 316
- technology 7, 51, 464, 468
 - case examples 223, 364–5, 368–9
 - and customer experience 221–3, 224–5
 - innovation and changes in 472
 - potential benefits of 366–8
 - in service process design 364–9, 370
 - see also* information and communication technology (ICT)
- TECLAN Translation Agency (worked example) 113–14
- telephone contact 210, 211, 222
- temporary customer relationships 144
- temporary staff 434
- Terrorists 141
- Tolerants 140
- ‘top-down’ view of strategy 65
- total quality management (TQM) 243, 258, 515–16, 517, 533
- tour guide/leader roles (case example) 247–8
- Toyota 522
- training 316
 - customer 148–9, 261, 262
- transactional leadership 239, 241
- transactional relationships 152, 153
- transference (psychological concept) 214
- transformational leadership 239–40, 241
- transforming resources 7–8
- transportation technologies 366
- trauma, service 237
- Treegrove Holiday Village (case exercise) 456–9
- trial-and-error control 408, 409
- trust 143, 144, 241, 319
- Uber (case example) 150
- unbalanced service position 79
- uncertainty avoidance 288
- underperformance 453
- ‘user’ customers 134
- user toolkits 492
- uSwitch (case example) 171
- Väänänen, Heikki 390–1
- value 522
 - cost-based 54–5
 - customer 130
 - customer lifetime value (CLV) 136–8, 156
 - as a driver for improvement 502–5, 533
 - features-based 504–5
 - service *see* service value
- value stream 522
- value stream mapping (VSM) 524–8
- valued customers 130
- values, organisational 279
- variability, service 513–14
- variety of services 340, 341–5, 347–8, 369
- vertical integration 310, 318
- ‘Victims’ 141
- Virgin Atlantic 561–2
- Virgin Group 282
- virtual reality technologies 366
- visibility 9, 174
 - process 210, 356–7
- vision 105, 479
- vision statements 383, 412
- visionary leadership 89
- Vodafone (case example) 311
- volume flexibility 451
- volume of services 340–1, 342–5, 347–8, 369
- volume–variety matrix 342, 343
- waiting 441–2
- walk-through audits 216
- Waterman, R.H., Jr. 274
- Weber, Max 286
- website contact 210
- Welch, Jack 516
- Wellcoults Meedon Business Solutions 106, 107
- Weta Workshops’ clan culture (case example) 285
- Wipro (case example) 518
- word of mouse complaints 549
- word of mouth 23, 174, 178
- word of mouth complaints 549
- work-flow thinking 523
- world-class service 79, 80–2
- Yahoo (case example) 275–6
- yield management 450–1
- Zara 310, 506, 507
- zone of tolerance 177, 180–4
- ZPZ Systems (worked example) 53–4

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About the authors

The late **Robert Johnston** was Professor of Operations Management at Warwick Business School. He had a management degree from the University of Aston and a Ph.D. from the University of Warwick.

Michael Shulver is a Senior Lecturer in the Information, Decision and Operations Division at Bath School of Management, where he is the Director of Online Teaching.

Nigel Slack is Emeritus Professor of Operations Management and Strategy at Warwick Business School, an Honorary Professor at Bath University and Honorary Fellow of the European Operations Management Association.

Graham Clark is a Visiting Fellow at Cranfield School of Management, having been a member of the Operations Management Faculty for nearly 30 years.

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