

TAWFIK JELASSI
ALBRECHT ENDERS
FRANCISCO J. MARTÍNEZ-LÓPEZ

Third Edition

STRATEGIES FOR E-BUSINESS

Creating value through electronic and
mobile commerce

CONCEPTS AND CASES



Strategies for e-Business

PEARSON

At Pearson, we have a simple mission: to help people make more of their lives through learning.

We combine innovative learning technology with trusted content and educational expertise to provide engaging and effective learning experiences that serve people wherever and whenever they are learning.

From classroom to boardroom, our curriculum materials, digital learning tools and testing programmes help to educate millions of people worldwide – more than any other private enterprise.

Every day our work helps learning flourish, and wherever learning flourishes, so do people.

To learn more, please visit us at www.pearson.com/uk

Third Edition

Strategies for e-Business

Creating value through electronic
and mobile commerce

CONCEPTS AND CASES

Tawfik Jelassi

Albrecht Enders

Francisco J. Martínez-López

PEARSON

Harlow, England • London • New York • Boston • San Francisco • Toronto • Sydney
Auckland • Singapore • Hong Kong • Tokyo • Seoul • Taipei • New Delhi
Cape Town • São Paulo • Mexico City • Madrid • Amsterdam • Munich • Paris • Milan

Pearson Education Limited
Edinburgh Gate
Harlow CM20 2JE
United Kingdom
Tel: +44 (0)1279 623623
Web: www.pearson.com/uk

First published 2005 (print)
Second edition published 2008 (print)
Third edition 2014 (print)
© Pearson Education Limited 2014 (print)

The rights of Tawfik Jelassi, Albrecht Enders and Francisco J. Martínez-López to be identified as authors of this work have been asserted by them in accordance with the Copyright, Designs and Patents Act 1988.

The print publication is protected by copyright. Prior to any prohibited reproduction, storage in a retrieval system, distribution or transmission in any form or by any means, electronic, mechanical, recording or otherwise, permission should be obtained from the publisher or, where applicable, a licence permitting restricted copying in the United Kingdom should be obtained from the Copyright Licensing Agency Ltd, Saffron House, 6–10 Kirby Street, London EC1N 8TS.

All trademarks used herein are the property of their respective owners. The use of any trademark in this text does not vest in the author or publisher any trademark ownership rights in such trademarks, nor does the use of such trademarks imply any affiliation with or endorsement of this book by such owners.

Contains public sector information licensed under the Open Government Licence (OGL) v1.0. www.nationalarchives.gov.uk/doc/open-government-licence.

The screenshots in this book are reprinted by permission of Microsoft Corporation. Pearson Education is not responsible for the content of third-party internet sites.

The Financial Times. With a worldwide network of highly respected journalists, *The Financial Times* provides global business news, insightful opinion and expert analysis of business, finance and politics. With over 500 journalists reporting from 50 countries worldwide, our in-depth coverage of international news is objectively reported and analysed from an independent, global perspective. To find out more, visit www.ft.com/pearsonoffer.

ISBN: 978-0-273-75787-0 (print)

ISBN: 978-1-292-08239-4 (pdf)

British Library Cataloguing-in-Publication Data

A catalogue record for the print edition is available from the British Library

Library of Congress Cataloguing-in-Publication Data

A catalogue record for the print edition is available from the Library of Congress

10 9 8 7 6 5 4 3 2 1

16 15 14 13 12

Print edition typeset in 9.5/12.5 Charter ITC Std by 73

Printed in Great Britain by Henry Ling Ltd, at the Dorset Press, Dorchester, Dorset

Brief contents

List of exhibits	xx
Foreword	xxiii
Preface	xxvii
Authors' acknowledgements	xxxiii
The authors	xxxv
Publisher's acknowledgements	xxxvii
Part 1	
Introduction	1
1 Key terminology and evolution of e-business	3
Part 2	
The e-business strategy framework	31
2 Overview of the e-business strategy framework	33
3 External analysis: the impact of the Internet on the macro-environment and on the industry structure of e-business companies	40
4 Internal analysis: e-business competencies as sources of strengths and weaknesses	79
5 Strategy options in e-business markets	104
6 Sustaining a competitive advantage over time	127
7 Exploiting opportunities of new market spaces in e-business	152
8 Creating and capturing value through e-business strategies: the value-process framework	174
9 Choosing the appropriate strategy for the internal organisation of e-business activities	195
10 Choosing the appropriate strategy for interaction with suppliers	218
11 Choosing the appropriate e-business strategy for interacting with users	232
12 Moving from wired e-commerce to mobile e-commerce and u-commerce	265
Part 3	
A roadmap for e-business strategy implementation	297
13 A roadmap for e-business strategy implementation	299

Part 4	
Case studies	315
14 Building e-business competence through concepts and cases	317
A guide to the main focus of the case studies	337
Synopsis of case studies	338
Case studies	357
Index	717

Contents

List of exhibits	xx
Foreword	xxiii
Preface	xxvii
Authors' acknowledgements	xxxiii
The authors	xxxv
Publisher's acknowledgements	xxxvii

Part 1 Introduction

Chapter 1 Key terminology and evolution of e-business	3
Chapter at a glance	3
Learning outcomes	3
Introduction	4
1.1 Key terminology	4
1.1.1 e-Business	4
1.1.2 Electronic commerce	4
1.1.3 Mobile e-commerce	4
FT article It's too early for e-business to drop its 'e'	5
1.1.4 The concept of strategy	6
1.1.5 The concept of value creation and capturing	9
1.2 The evolution of e-business	9
1.2.1 The grassroots of e-business	14
FT article EDI update	14
1.2.2 The rise of the Internet	16
FT article Boo.com founder fears net bubble	17
1.2.3 The crash	18
FT article Webvan's billion-dollar mistake	21
1.2.4 The synergy phase	22
FT article From Netscape to the Next Big Thing: how a dotcom decade changed our lives	22
Blog box Google acquires Internet (May 2017)	27

Contents

Summary	28
Review questions	28
Discussion questions	28
Recommended key reading	29
Useful third-party weblinks	29
Notes and references	30

Part 2 The e-business strategy framework

Chapter 2 Overview of the e-business strategy framework	33
Chapter at a glance	33
Learning outcomes	33
Introduction	33
2.1 Key challenges in e-business strategy formulation	34
2.2 A systematic approach to e-business strategy formulation	35
Summary	38
Review questions	38
Recommended key reading	39
Note and reference	39
Chapter 3 External analysis: the impact of the Internet on the macro-environment and on the industry structure of e-business companies	40
Chapter at a glance	40
Related case studies	41
Learning outcomes	41
Introduction	41
3.1 Examining trends in the macro-environment	42
3.1.1 The political and legal environment	42
FT article Online gambling: the sector has been able to cash in on a regulatory regime set up in Alderney	43
FT article Publishers sued over e-book price 'collusion'	45
3.1.2 The economic environment	46
3.1.3 The social environment	46
FT article UK online economy valued at £82bn	47
3.1.4 The natural environment	47
FT article A social network links our personal and office lives	48
Blog box How Facebook got its green back	49
3.1.5 The technological environment	50

FT article Trying on the future	51
3.2 Examining industry structure with the five forces framework	51
FT article Michael Porter, management thinker – academic who shares his values	53
3.2.1 Industry rivalry	54
3.2.2 Barriers to entry	55
FT article Cloud computing cuts start-up costs	57
3.2.3 Substitute products	59
3.2.4 Bargaining powers of buyers and suppliers	59
FT article Facebook shows it gets the message with Instagram deal	60
FT article Google buys UK price comparison website for £37.7m	61
3.3 Complementing the five forces framework with the co-opetition framework	62
FT article Nokia and Microsoft talk up benefits of co-dependence	64
Critical perspective 3.1 Benefits and drawbacks of industry analysis tools	66
3.4 Defining industries, segmenting markets and targeting markets in e-business	67
3.4.1 Defining an industry	67
3.4.2 Segmenting markets in an industry	67
e-business Concept 3.1 The e-business market segmentation matrix	68
FT article: Vodafone and Facebook team up on smartphone	72
3.4.3 Targeting specific markets in an industry	73
FT article Google searches to become personalised	75
Summary	76
Review questions	76
Discussion questions	76
Recommended key reading	76
Useful third-party weblinks	77
Notes and references	77
Chapter 4 Internal analysis: e-business competencies as sources of strengths and weaknesses	79
Chapter at a glance	79
Related case studies	79
Learning outcomes	80
Introduction	80
4.1 Understanding core competencies in e-business	80
4.1.1 Competencies and core competencies: a brief overview	80
4.1.2 Sources of value and core competencies in e-business	82

FT article IT linked to financial performance	84
4.2 Analysing the Internet-impacted value chain	86
4.3 Leveraging the virtual value chain	89
Critical perspective 4.1 Compatibility between the resource-based view and the market-based view of strategy	91
4.4 Selecting activities for online interaction with customers – the ICDT framework	92
4.4.1 Information activities	92
FT article Advertisers rush to master fresh set of skills	93
4.4.2 Communication activities	95
Blog box Moving back to personalised interaction – e-Diets.com	95
4.4.3 Transaction activities	96
4.4.4 Distribution activities	96
4.5 Moving beyond the value chain to value networks	96
FT article Outsourcing supply chain operations	97
Summary	100
Review questions	100
Discussion questions	101
Recommended key reading	101
Useful third-party weblinks	102
Notes and references	102
Chapter 5 Strategy options in e-business markets	104
Chapter at a glance	104
Related case studies	104
Learning outcomes	105
Introduction	105
5.1 Understanding the fundamentals of competitive advantage in e-business	105
5.2 Examining the landscape of strategy options for e-business	107
5.2.1 Cost leadership strategies	108
5.2.2 Differentiation strategies	111
5.2.3 Outpacing strategies (and the risk of getting 'stuck in the middle')	113
5.3 Developing strategy alternatives	115
5.3.1 The strategic gameboard framework	115
5.3.2 e-Business models: a brief overview	117
Blog box Facebook made \$9.51 in ad revenue per user last year in the US and Canada	119
5.4 Creating a fit between the chosen strategy and the value chain	120
5.4.1 Consistency between activities	120

Blog box easyJet – setting up an organisation for a low-cost strategy	121
FT article Airlines ditch simple model for complexity	122
5.4.2 Reinforcement of activities	123
5.4.3 Optimisation of efforts	123
Summary	124
Review questions	125
Discussion questions	125
Recommended key reading	125
Useful third-party weblinks	125
Notes and references	126
Chapter 6 Sustaining a competitive advantage over time	127
Chapter at a glance	127
Related case studies	127
Learning outcomes	128
Introduction	128
6.1 Building up barriers to imitation	128
6.2 Dealing with the threats of disruptive innovations in e-business	130
6.2.1 Understanding the fundamental process of disruptive innovations	130
Blog box Strategy for startups: the innovator's dilemma	132
6.2.2 Discovering the underlying reasons for incumbents' failure	135
FT article Why disruption can be good for business	136
6.2.3 Raising the right questions to recognise the threats of disruptive innovations	138
6.2.4 Finding ways to deal with disruptive innovations	139
FT article Light reading	140
6.2.5 Selecting the appropriate mental frame for efficient reactions	143
FT article Snapshot of a humbled giant	144
Summary	149
Review questions	149
Discussion questions	149
Recommended key reading	150
Useful third-party weblinks	150
Notes and references	150
Chapter 7 Exploiting opportunities of new market spaces in e-business	152
Chapter at a glance	152
Related case studies	152
Learning outcomes	153
Introduction	153

Contents

7.1	Gaining insights into new market spaces through the value curve	153
7.2	Looking outside one's own box	154
FT article	The way we shop now	156
7.3	Pinpointing possibilities for new value creation	158
7.4	Finding the right time to enter a market	159
7.4.1	Early-mover advantages	160
FT article	The first-mover advantage myth	161
Blog box	Google just got a whole lot smarter, launches its knowledge graph	163
FT article	Inside Match.com	165
7.4.2	Early-mover disadvantages	170
	Summary	171
	Review questions	171
	Discussion questions	171
	Recommended key reading	172
	Useful third-party weblinks	172
	Notes and references	172

Chapter 8 Creating and capturing value through e-business strategies: the value-process framework

		174
	Chapter at a glance	174
	Related case studies	174
	Learning outcomes	175
	Introduction	175
8.1	The value-process framework for e-business strategies	175
8.1.1	Creating value	176
8.1.2	Capturing value	177
8.2	Integrating strategic management analyses through the VPF	181
8.2.1	The value chain analysis and the VPF	181
8.2.2	The five forces analysis and the VPF	182
8.3	Sony BMG (Germany): an actual application of the VPF	183
8.3.1	The business context	184
8.3.2	Value creation	184
8.3.3	Value capturing	188
8.3.4	Findings	190
	Summary	192
	Review questions	192
	Discussion questions	192
	Recommended key reading	193
	Notes and references	193

Chapter 9	Choosing the appropriate strategy for the internal organisation of e-business activities	195
	Chapter at a glance	195
	Related case studies	195
	Learning outcomes	196
	Introduction	196
	9.1 Reasons determining 'make-or-buy' decisions in e-business	196
	9.1.1 Reasons favouring 'make' decisions	198
	FT article Everyone's a critic now – or are they?	201
	9.1.2 Reasons favouring 'buy' decisions	201
	9.2 Choosing the organisational structure for e-business activities	202
	9.2.1 Separate e-business organisation	203
	9.2.2 Integrated e-business organisation	204
	FT article Last bookstores standing may turn digital page	205
	9.3 Value chain deconstruction over the Internet	206
	Critical perspective 9.1 The limitations of deconstruction and unbundling	207
	9.4 Unbundling the corporation over the Internet	208
	FT article Model that works even in turbulent times	208
	9.5 Managing conflicts between online and offline distribution channels	211
	9.5.1 Understanding conflicts in distribution channels	212
	9.5.2 The channel conflict matrix	213
	FT article Expedia stops American Airlines ticket sales	214
	Summary	215
	Review questions	216
	Discussion questions	216
	Recommended key reading	216
	Notes and references	217
Chapter 10	Choosing the appropriate strategy for interaction with suppliers	218
	Chapter at a glance	218
	Related case studies	218
	Learning outcomes	218
	Introduction	219
	10.1 Advantages and drawbacks of online purchasing	219
	FT article Supply chain leaders identified	221
	10.2 Classification of B2B e-marketplaces based on the purchasing process and the purchased products	222
	FT article Amazon noses into industrial supply chain	224

10.3 Classification of B2B e-marketplaces based on their degree of openness	225
10.4 Integrating e-procurement systems	226
FT article Supply chain is a strategic discipline	228
Summary	229
Review questions	230
Discussion questions	230
Recommended key reading	230
Useful third-party weblinks	231
Notes and references	231

Chapter 11 Choosing the appropriate e-business strategy for interacting with users	232
Chapter at a glance	232
Related case studies	232
Learning outcomes	233
Introduction	233
11.1 The Internet and social commerce	233
11.1.1 The advent of Web 2.0	233
11.1.2 Implications of Web 2.0 for Internet business models	235
11.1.3 Understanding user behaviour on the social web	240
FT article Facebook shows off new marketing tools	241
11.2 The trade-off between richness and reach	243
Critical perspective 11.1 The limitations to blowing up the trade-off between richness and reach	245
11.3 Increasing the richness of interactions with customers	245
11.3.1 Customer relationship management (CRM) in a digital context	246
FT article Social CRM mirrors rise in customer power	249
11.3.2 The concept of mass-customisation	251
11.4 Increasing the reach of interactions with customers	252
FT article Lights, camera, blender! How to create a hit	253
11.4.1 Viral growth	254
11.4.2 The 'tipping point' concept	255
11.4.3 The 'long tail' of Internet-based social networks	256
FT article Lulu aims to wag the Internet 'long tail'	259
Critical perspective 11.2 Is there unlimited choice and does it create unlimited demand?	261
Summary	261
Review questions	262

Discussion questions	262
Recommended key reading	262
Useful third-party weblinks	263
Notes and references	263

Chapter 12 Moving from wired e-commerce to mobile e-commerce and u-commerce	265
Chapter at a glance	265
Related case studies	265
Learning outcomes	266
Introduction	266
12.1 Mobility and unwired e-commerce	266
12.1.1 Understanding the value network of mobile e-commerce	267
12.1.2 Segmenting mobile e-commerce consumers and business services	270
FT article The retailers' increasing use of smartphones to reach consumers – codes open new front in retail wars	273
12.1.3 Comparison of mobile e-commerce with wired e-commerce	274
12.2 Strategy and mobility	277
12.2.1 Leveraging wireless technologies to create a competitive advantage	277
12.2.2 Impact of wireless technologies on a company's value chain	278
FT article Mobile: Nirvana is tantalisingly close	280
12.2.3 Influence of wireless technologies on the industry's five forces	281
12.2.4 Main challenges for mobile e-commerce companies	283
FT article The online challenges facing retailers – stores tap into shoppers as mobiles ring the changes	285
12.3 Ubiquity and u-commerce: strategy for the ultimate evolution of commerce	286
12.3.1 What is u-commerce?	287
12.3.2 Main features of u-commerce	287
12.3.3 From wired e-commerce to u-commerce: the definite evolution	288
12.3.4 Types of u-commerce and new forms of marketing	289
FT article Welcome to a new reality	291
Summary	293
Review questions	293
Discussion questions	293
Recommended key reading	294
Useful third-party weblinks	294
Notes and references	294

Part 3 A roadmap for e-business strategy implementation

Chapter 13 A roadmap for e-business strategy implementation	299
Chapter at a glance	299
Related case studies	299
Learning outcomes	300
Introduction	300
13.1 What is the mission of our company?	300
13.2 What are the objectives for our e-business strategy?	303
13.3 What value do we want to offer through our e-business strategy?	303
13.3.1 What type of competitive advantage do we aim for?	303
13.3.2 How much breadth do we want to have in our product and service offerings?	304
13.4 What are the customer segments to target and what is our value proposition for each segment?	305
13.5 What kind of ethical issues, privacy concerns and security risks do we need to consider?	305
13.5.1 Dealing with ethical issues and privacy concerns	305
13.5.2 Addressing security risks	306
FT article LinkedIn vows to tighten security after password breach	307
13.6 Should we implement our e-business strategy alone or with external partners?	309
13.7 What organisational structure should our e-business activities have?	309
13.8 What is our cost and revenue model?	309
13.8.1 What is the cost structure of our e-business activities?	310
13.8.2 What is the revenue structure of our e-business activities?	310
13.9 How should we align our physical-world strategy with our e-strategy?	311
Summary	312
Review questions	313
Discussion questions	313
Recommended key reading	313
Notes and references	314

Part 4 Case studies

Chapter 14 Building e-business competence through concepts and cases	317
Chapter at a glance	317
Learning outcomes	317
Introduction	318
14.1 Defining creativity and analytical ability	318
4.1.1 Creativity	318

FT article Breaking the barriers to creativity	320
14.1.2 Analytical ability	322
14.2 Becoming a 'catalyst for change'	322
14.3 Learning about e-business through case studies	324
14.3.1 Case studies as a context for the analysis of e-business issues	324
14.3.2 Case studies as a context for the application of e-business concepts	324
14.3.3 Case studies as a stimulus for creative e-business strategies	325
14.4 Learning about e-business through concepts and frameworks	326
Strategy in action 14.1 Business thinking: on finding the right balance between analysis and intuition	327
14.4.1 Extending the breadth of the analysis	330
14.4.2 Extending the depth of the analysis	331
Strategy in action 14.2 'Why?' – the importance of questions in strategy formulation	332
Summary	334
Review questions	334
Discussion questions	335
Recommended key reading	335
Useful third-party weblinks	335
Notes and references	336
A guide to the main focus of the case studies	337
Synopses of case studies	338
B2C e-commerce	338
1 From A(pples) to Z(oom lenses): extending the boundaries of multichannel retailing at Tesco.com	338
2 From e-banking to e-business at Nordea (Scandinavia): the world's biggest clicks-and-mortar bank	339
3 Ducati (Italy) vs. Harley-Davidson (USA): innovating business processes and managing value networks	340
4 American Well: the doctor will e-see you now	340
B2B e-commerce	341
5 IBX (Northern Europe): expanding B2B e-purchasing from indirect to direct goods and services	341
6 Satec (Spain): business transformation through IT value reinvention and organisational redesign	342
7 Otis Elevator: accelerating business transformation with IT	343
8 TopCoder (A): developing software through crowdsourcing	344
9 Appirio: new venture on a cloud	344
10 ITC e-Choupal: corporate social responsibility in rural India	345
G2B2C e-government	346
11 e-Government in Estonia: establishing the world's leading information society	346
12 ICT in Tunisia: a strategic lever for building a knowledge-based economy	347
13 Fostering innovation in the public sector: VivekKundra@USgovernment	348

B2E e-communities	348
14 Knowledge management at Booz & Company: towards a culture of knowledge sharing and collaboration	348
C2C e-communities	349
15 Spreadshirt: mass-customization on the Internet	349
16 When digital David meets physical Goliath: the case of Brockhaus vs. Wikipedia	350
17 Nettwerk: digital marketing in the music industry	351
18 Licia Chery and MyMajorCompany: crowd funding to stardom	352
Mobile commerce	353
19 SMS for Life (A): a public-private collaboration to prevent stock-outs of life-saving malaria drugs in Africa	353
20 NTT DoCoMo (Japan): moving from a mobile phone operator to a lifestyle service provider	353
21 M-PESA (Kenya): mobile financial services for the financially excluded in society	354
22 Tunisiana: leading a mobile telecom operator in post-Arab Spring Tunisia	355
23 12snap: reinventing mobile marketing	356
Case studies	
1 From A(pples) to Z(oom lenses): extending the boundaries of multichannel retailing at Tesco.com	357
2 From e-banking to e-business at Nordea (Scandinavia): the world's biggest clicks-and-mortar bank	373
3 Ducati (Italy) vs. Harley-Davidson (USA): innovating business processes and managing value networks	389
4 American Well – the doctor will e-see you now	403
5 IBX (Northern Europe): expanding B2B e-purchasing from indirect to direct goods and services	424
6 Satec (Spain): business transformation through IT value reinvention and organisational redesign	441
7 Otis Elevator: accelerating business transformation with IT	454
8 TopCoder (A): developing software through crowdsourcing	469
9 Appirio: new venture on a cloud	486
10 ITC e-Choupal: corporate social responsibility in rural India	495
11 e-Government in Estonia: establishing the world's leading information society	513
12 ICT in Tunisia: a strategic lever for building a knowledge-based economy	530
13 Fostering innovation in the public sector: VivekKundra@USgovernment	543
14 Knowledge management at Booz & Company: towards a culture of knowledge sharing and collaboration	561
15 Spreadshirt: mass-customization on the Internet	577
16 When digital David meets physical Goliath: the case of Brockhaus vs. Wikipedia	597
17 Nettwerk: digital marketing in the music industry	608
18 Licia Chery and MyMajorCompany: crowd funding to stardom	621
19 Novartis SMS for Life (A): a public-private collaboration to prevent stock-outs of life-saving malaria drugs in Africa	639

20 NTT DoCoMo (Japan): moving from a mobile phone operator to a lifestyle service provider	653
21 M-PESA (Kenya): mobile financial services for the financially excluded in society	670
22 Tunisiana: a leading mobile telecom operator in post-Arab Spring Tunisia	690
23 12snap: reinventing mobile marketing	706
Index	717

Exhibits

P.1	The cases cover several industries and focus on different themes	xxxi
1.1	Electronic business includes electronic commerce and mobile electronic commerce	5
1.2	The focus of the cases is on corporate-level and business unit strategy	8
1.3	Technological revolutions move through different stages as their diffusion increases	10
1.4	Major technological revolutions during the past two centuries show similar patterns of evolution	12
1.5	Since the mid-1990s, e-business companies have passed through four distinct periods, as is reflected in the evolution of the NASDAQ	13
2.1	The goal of e-business strategy is to achieve (long-term) success by building up one or more sources of competitive advantage	35
2.2	The e-business strategy framework consists of three main steps	36
2.3	e-Business strategy formulation entails an internal and an external analysis to identify strengths, weaknesses, opportunities and threats	37
3.1	e-Business companies are impacted by their industry and macro-environment	43
3.2	Five forces influence the attractiveness of an industry	52
3.3	The Internet has a profound impact on the five forces that influence industry attractiveness	63
3.4	The value network outlines the main players in the co-opetition framework	63
3.5	The e-business market segmentation matrix classifies different types of interaction between consumers, businesses and governmental agencies	69
3.6	Segmentation variables are the basis for strategic customer analysis	71
3.7	Target-market selection depends on the number of markets served and the number of different products and services offered	74
4.1	Distinctive e-business competencies result from the combination of unique resources and capabilities	81
4.2	The core competence approach cuts across different functional areas within a firm	82
4.3	Sources of value creation in e-business	83
4.4	An extensive e-business capability model	85
4.5	A company's value chain consists of distinct value-adding activities	87
4.6	The Internet impacts on all activities in the value chain	89
4.7	The virtual value chain illustrates how information captured in the physical value chain can be used to develop new markets	90
4.8	The ICDT model describes the four main usage dimensions of the Internet in the virtual market space	92
4.9	The value network includes numerous partners with differing functions	98
5.1	The strategic triangle addresses the main drivers of competitive advantage	106
5.2	Impact of threshold features and critical success factors on consumer benefit	107
5.3	There are two generic approaches to achieve a competitive advantage	108
5.4	Economies of scale lead to a decrease in per-unit costs as output increases, whereas dis-economies of scale lead to an increase in per-unit costs	109
5.5	Tangible and intangible sources of differentiation	112
5.6	Perceived performance and relative price position determine a firm's strategy	114

5.7	The strategic gameboard helps to formulate consistent business strategies	116
5.8	Components of an e-business model	117
6.1	A company can build up numerous barriers against imitation	129
6.2	S-curves of e-commerce innovation: from i- to u-commerce	132
6.3	Disruptive innovations enter the market from below and improve over time until they meet the demands of mainstream customers	134
6.4	To overcome organisational rigidities, incumbents who are faced with disruptive innovations need to adopt two contradicting cognitive frames	148
7.1	The value curve provides insights into new market spaces	154
7.2	The six paths framework suggests different starting points for creating value innovations in e-business	155
8.1	Value is created if the perceived use value exceeds costs	176
8.2	The price indicates how the value created is distributed between the producer and the consumer	177
8.3	Producers completely capture the value created in a (quasi-)monopolistic environment	178
8.4	The competitive discount is equal to the consumer surplus provided by the strongest competitor	179
8.5	The VPF – to achieve profitability, companies must be able to create and capture value	180
8.6	The VPF integrates different strategy analyses	181
8.7	Value is created by the individual business activities of the value chain	182
8.8	Porter's five forces influence the cost lever and competitive discount	183
8.9	Porter's strategy models can be used to analyse the levers of the VPF	184
8.10	A value chain analysis of the MVNO project reveals numerous value and cost drivers	185
8.11	Multiple value drivers create perceived use value mainly in three dimensions	186
8.12	Perceived use value and costs for the Sony BMG MVNO would both have been high	187
8.13	The German wireless telecommunications industry is of relatively low attractiveness	189
8.14	The five forces analysis indicates a high competitive discount	190
8.15	Perceived use value has to be extremely high to achieve profitability	191
9.1	During the 1990s, the PC industry became increasingly fragmented	197
9.2	The clicks-and-mortar spectrum spans from integration to separation of a company's e-business activities	203
9.3	The traditional corporation can be unbundled into three distinct businesses	210
9.4	Different businesses within a corporation have different imperatives regarding economics, culture and competition	211
9.5	Alternative views to the conflict–performance link in distribution channels	212
9.6	The channel conflict matrix analyses how different types of channel conflicts should be resolved	213
10.1	The B2B e-commerce matrix classifies different types of B2B e-marketplaces	223
10.2	e-Procurement solutions cover different parts of the supply chain	227
11.1	Evolution of the business–customer mind-set with the advent of Web 2.0	234
11.2	Evolution of the Web and related applications	236
11.3	Web 2.0: a four-factors model	237
11.4	Activities for embracing Web 2.0 in existing Internet businesses	238
11.5	Social networking sites help users to pursue their motives of discovery, homogeneity and sharing by providing various communication tools	242
11.6	The advanced capabilities of the Internet help to dissolve the trade-off between richness and reach	244
11.7	Customer relationship management consists of four elements	246

Exhibits

11.8	Embedding social CRM into companies	248
11.9	The mass-customisation value chain puts the user in charge of many steps traditionally performed by the company	251
11.10	The 'long tail' represents a large addition to the product range of traditional retailers	257
11.11	The 'long tail' of social networking can give users access to previously inaccessible market niches	258
12.1	The mobile e-commerce value network outlines the key players	267
12.2	m-Commerce consumer services and applications	271
12.3	m-Commerce business services and applications	272
12.4	Mobile e-commerce applications for consumers and businesses	275
12.5	Wired e-commerce vs. mobile e-commerce (m-commerce)	276
12.6	Impact of wireless technologies on the value chain	279
12.7	Impact of wireless technologies on the industry's five forces	282
12.8	Wired e-commerce vs. mobile commerce	284
12.9	The evolution of markets: from traditional to ubiquitous markets	287
12.10	The evolution of IT-based commerce	289
12.11	U-space: types of commerce and marketing forms associated	290
13.1	The roadmap for e-business strategy implementation addresses nine interrelated issues	301
13.2	A mission statement serves multiple purposes	302
14.1	Fostering creativity and analytical ability helps a manager to become a catalyst for change	323
14.2	New ideas can be found by analysing state-of-the-art companies within one's own industry and also across industries	325
14.3	Effective strategy formulation requires the ability to cover a broad analysis horizon and to perform selective, in-depth analyses of crucial issues	330

Foreword

The emergence of e-business

by F. Warren McFarlan

Harvard Business School, Boston, Massachusetts

We are over a quarter of the way into the second half of the Information Age revolution. Very little of what is now accepted management practice and application opportunity today was even conceived of some 15 years ago. The first half of the Information Age took place between 1955 and 1995. 1955 was the year when IBM built, in short order, its 701, 702 and 703 computers, while Univac launched its Univac I. Large, rather unreliable and with a vastly limited processing capacity in terms of today's machines, those machines and their clumsy (by today's standards) languages nonetheless provoked a revolution in back-office transaction processing, leading to sharp improvements in cost, quality and services. Insurance, banking, airline reservations were where some of the most exciting IT applications took place in those early days, with the structures of those industries being profoundly impacted over a long period of time (over 15 years, for example, one insurance firm's premium notice department gradually withered from 150 people to one). Additionally, a heavy focus, of course, was on financial processes relating to accounting, payroll, etc., with overall IT responsibility being most often housed in the financial function. All of this was done mostly in the context of home-grown systems, where the prevailing model was to build and run. Large IT departments, filled with highly specialised technical skills, emerged to develop and operate these systems. They made intense efforts to learn how to plan their activities, better manage projects and assess and manage risk. This work evolved in a more or less linear way over two decades, creating the great legacy systems, many of which still run today. How to cope managerially with this world was captured by the first generation of IT literature, which was heavily executional in its focus.

In the late 1970s, a sharp shift in the technology cost performance allowed the emergence of the PC, with desktop computing soon becoming a standard part of corporate life. The technology rapidly spread across the desktops of the firm, causing great angst to the operators of large data centres, whose processes were severely challenged. Nevertheless, all through the 1980s much of the prevailing focus of a firm's IT activities still remained in the *build* and *run* category. Near the end of the decade, however, the first big outsourcing of IT resource deals emerged. This fact, combined with the explosion of the applications software industry (SAP, Oracle, etc.), caused the monopoly role of the in-house IT department to *build* and *deliver* systems to begin to disappear. It was increasingly replaced by the *source* and *manage* model. This resulted in a genuine revolution. Early adapters, Eastman-Kodak and General Dynamics, found fundamentally different, and more effective, corporate operating models.

Increasingly, over the next two decades, managers came to focus on how IT could deliver a competitive advantage and they worried less about the mechanics of how to build and operate systems, but turned that over to the burgeoning software and service industry

(represented by companies such as IBM, Accenture, CSC and EDS, plus a host of smaller ones.) Conventional wisdom about how to manage IT and its impact was severely challenged, creating a new literature. For the first time, IT as a competitive weapon began to be extensively talked about.

The thunder clouds of even more dramatic changes, however, were to emerge. Tom Friedman, in his remarkable book *The World is Flat* (Farrar, Straus & Giroux, 2005), identified three dominant events that have shaped this new world. From the 1990s until today, the first was the fall of the Berlin Wall in 1989, which, combined with the emergence of China, effectively delivered more than 3 billion people into the world markets (this topic is not dealt with in this text), creating new sources of supply and demand for all forms of products and services, and turning the IT world inside out.

The second event was the stream of activities that were triggered by the Netscape IPO in October 1995. This is widely seen as the beginning of the Internet I Era, the emergence of e-business, and the concurrent propulsion of the world towards open systems and widely accessible data. The third event was the massive overinvestment by telecommunications companies in fibre networks, which collectively created the wide, almost zero-cost highways for today's digital economy. Tom notes that these trends led to the words insourcing, outsourcing and offshoring, supply chaining and informing, which fundamentally transformed the operation and performance of global enterprises. This text wisely ignores the issues of where work is done globally (a separate book by itself), and chooses instead to focus on the other aspects of this revolution – namely, on how the core processes and products of a firm are shaped by these new opportunities in a world of essentially free telecommunication and Internet-enabled interconnections. In doing this, they bring enormous insight to the task. The text is a tour de force:

- 1 First, the text is grounded in a deep sense of history. It richly catches the forces that led to the emergence of the e-business world and to its tremendous growth, which ultimately led to the Bubble. They effectively document the Bubble's collapse, the underlying reason for it, and identify the exciting opportunities beyond. As one reads about the brief existence of Webvan, for example, nostalgic memories surge of an exciting, yet fundamentally flawed vision. The text captures brilliantly both the opportunities and the drivers towards excess of the early days. It provides useful warnings for today.
- 2 Secondly, the text has deep and informed command of the relevant literatures as they relate to company and industry competitive strategy and dynamics (Porter et al.). The discussion of the opportunities and risks of new technologies are firmly rooted in value chain and other contemporary forms of strategic analysis. It is worth noting that there is not a strategic framework the authors use that existed before 1982. They avail themselves of the latest insights in this area. In short, the text combines the latest of strategic thinking with the opportunities posed by the new technologies.
- 3 The text is built on informed understanding of detailed management practice. A particular strength is the assembly of a rich collection of articles from the *Financial Times*, which illustrate the key moves made by different players during this period and, in so doing, give useful insight on the breadth of applications. Those articles ensure that the book is as well rooted in management practice as theory, and make the text as relevant to the manager as to the MBA student.
- 4 The text demonstrates a broad command of the general IT literature (summarised in the Appendix, now on the Companion Website, along with an appropriate set of technical

definitions for those new to this area). This link between strategy, theory, IT application literatures and the world of practice makes this a very unusual and impactful text.

- 5 The text reaches from the past to the absolute current leading edge of practice and application. For example, the chapter on Internet II is as good a piece as I have seen on this rapidly emerging technology.
- 6 Behind the articles for those readers who are interested in more ‘depth of applications’ lie a series of intensively researched and comprehensive IT application case studies. Some 23 detailed, leading-edge, field-based case studies from different industries and countries are presented for those who need deeper insight in the issues of contemporary management practice. Combined with the chapters, these cases make this a compelling text for MBAs.

This, however, is much more than just a text for an MBA course, although it has all the material for a first-rate course. It is also a text for the thoughtful practitioner who is trying to position his/her organisation to take advantage of these fast-moving technologies. The text gives a detailed structure and guidance for how to find profitable business opportunities. It contains a panoply of practical, easy-to-understand examples of applications. It also spends an appropriate amount of time on the problems of implementation.

In short, the text is rich, high impact and very well thought-out.

This page is intentionally left blank.

Preface

People tend to over-estimate new technology in the short run and under-estimate it in the long run.

(Roy Amara, Institute for the Future)

Context and positioning of the text

When we talked to colleagues and friends in autumn 2003 about writing the first edition of our e-business book, many of them asked whether we were arriving too late with the text. They reminded us that the Internet bubble had burst three years ago and that most online companies had since gone bankrupt. Since then, the thinking has changed. Both traditional bricks-and-mortar corporations such as Tesco, Sony BMG or Mercedes-Benz and pure online companies such as Amazon, Google or eBay have continued to develop and implement e-business strategies, albeit initially with less public attention and media coverage than before. Due to the recent rapid growth of so-called Web 2.0 applications, online companies such as Facebook and Twitter once again dominate the headlines of the business press.

Similar to other important technological revolutions, such as railways or steam engines, the Internet has also undergone a typical cycle of boom and bust. Following a bust, technological revolutions rebound, and it is only then – during the ‘golden age’ – that they show their true impact. At the time of writing this third edition of the text, it looks as if e-business has entered this golden age.

During our research for this text, we found very few books published after the collapse of the dotcom bubble that specifically address e-business strategy issues. We also noticed that there were many excellent books on strategy and many books on e-business, yet there were relatively few books that attempted to bring the two fields together in a comprehensive and rigorous manner.

This text, as its title suggests, attempts to close this gap. It aims at providing readers with a holistic and integrated view of the realms of strategy and e-business by focusing on strategic management concepts and linking them to actual case studies of companies engaged in e-business activities. It also aims at going beyond the hype by closely analysing examples of failure as well as success, in order to help readers assess the underlying drivers for a successful e-business strategy.

Target readers

Strategies for e-Business is a text targeted at senior managers, business strategists, entrepreneurs and consultants, as well as participants enrolled in MBA, Masters and executive education programmes and students in the final year of their undergraduate education. It should be of interest to general management programmes and seminars, as well as to those

specialising in e-business, electronic commerce, technology management, marketing, entrepreneurship, innovation management and business strategy.

Key features

The key differentiating features of this text include the following:

- *A comprehensive e-business strategy framework.* This framework serves as a comprehensive basis for e-business strategy formulation. It is based on rigorous and time-proven concepts from the field of strategic management, which were adapted to the specific context of e-business.
- *An e-business roadmap.* Chapter 13 of the text contains an e-business roadmap that is meant as a guide to help in the formulation and implementation process of an e-business strategy. It provides an overview of the key issues involved in this process. At the same time, extensive cross-references to the more detailed e-business strategy framework allow the reader to obtain more in-depth information when needed.
- *A detailed study approach for e-business strategy.* Creativity and analytical ability are of fundamental importance in the strategy formulation process. Chapter 14 of this text discusses how to improve these qualities through the use of concepts and case studies.
- *In-depth case studies.* The text contains 23 real-world case studies, which provide in-depth accounts of how companies in several industries (ranging from finance and insurance to manufacturing to telecommunications and media) and different countries (in Europe, North America, Africa and Asia) have developed and implemented e-business, electronic commerce or mobile e-commerce strategies. All the case studies result from first-hand field-based research, which the case authors have personally conducted in cooperation with executives and top-level managers of the companies involved.
- *Geographic focus on developed and emerging markets.* While most of the existing e-business casebooks focus on companies that are based in the USA, this text focuses on companies in developed markets operating in Europe and the USA as well as emerging markets in Africa and Asia. In addition to the USA, developed countries covered by the case studies contained in this text include Canada, Estonia, Germany, Finland, Italy, Norway, Spain, Sweden and the UK. With regard to emerging markets, the case studies cover India, Kenya, Tanzania and Tunisia. In addition to the technological aspects discussed in the case studies, the wide variety of countries that are involved helps to provide insights into the specific business environment and national culture that characterise the different countries covered.

Structure and content

Content-wise, Part 1 presents the broader context of the text. It introduces the key terminology and evolution of e-business and provides an historic overview of the distinct phases that technological revolutions typically go through before reaching their full potential.

Part 2 suggests a strategy framework for the formulation of e-business strategies. Chapter 3 discusses the external environment of e-business ventures. This includes an analysis

of the macro-environment and the industry structure. Chapter 4 focuses on the internal dimension of e-business strategy formulation. Chapter 5 is concerned with generic strategy options, which determine the overall strategic direction of an e-business venture. The issue of sustaining a competitive advantage over time and the dangers that threaten to erode such an advantage are discussed in Chapter 6. Chapter 7 provides a systematic approach for developing innovations that aim to make the competition irrelevant. Chapter 8 presents the value-process framework, which integrates different perspectives of strategy into a holistic model. Chapters 9 to 11 address three strategic issues that are of special relevance for e-business companies. These include the internal organisation of an e-business venture (Chapter 9), its relations with suppliers (Chapter 10) and its relations with customers/users (Chapter 11). Chapter 12 presents conceptual frameworks that are specific to mobile e-commerce applications.

Part 3 provides a roadmap for the formulation of an e-business strategy. Through the use of cross-references, this roadmap (presented in Chapter 13) is closely linked to the e-business strategy framework presented in Part 2.

Part 4 first provides an introduction to case study work by discussing how the concepts and cases presented in the text can help managers and students interested in e-business strategies to expand their skills along the dimensions of creativity and analytical ability (Chapter 14). Following this, a brief synopsis section provides an overview of the key topics in the cases, which is then followed by the full-length case studies.

Getting the most from *Strategies in e-Business*

In order to benefit most from this text, we recommend that you try to achieve the following when working through the chapters:

- Thoroughly understand the theoretical concepts presented in the e-business strategy framework.
- Critically assess the strengths and weaknesses of each concept and determine the context for its appropriate use.
- Apply the concepts when analysing the case studies and make action-orientated recommendations backed up by logical reasoning and supporting arguments.
- Expand the usage of the concepts and the frameworks into other business situations that you encounter in your daily work or study.

To make your learning experience more effective and enriching, the text contains the following features:

- *Chapter at a glance* at the beginning of each chapter provides a quick overview of the most important topics discussed in the chapter.
- *Related case studies* are included at the beginning of each chapter to illustrate which cases are most relevant for the topics discussed. For more information on this, Exhibit P.1 on p. xxxi illustrates the relationships between the case studies and specific chapters and sections of the text.
- *Learning outcomes* offer a brief description of what you should have achieved after reading the chapter.

- Different types of boxes are contained in the text body of each chapter to provide added information about the concepts that are discussed:
 - *FT articles* are taken from the *Financial Times* to provide a journalistic perspective (within the timeframe context) of the issue discussed in the section.
 - *Critical perspectives* present a different, if not opposing, view to the position taken in the main text of the chapter. For instance, the resource-based view is presented as a critical perspective on Porter's market-based view to strategy formulation. Weighing the merits of each view is a valuable exercise for gaining a more in-depth understanding of the concept that is presented.
 - *Blog boxes* contain excerpts from blog writers, who provide their opinions on current developments in the e-business world. These excerpts provide an additional and at times different perspective to the concepts discussed in the chapters.
 - *Strategy in action* boxes are examples that provide additional background to the concepts discussed in the chapters.
- *Summaries* at the end of each chapter allow you to review the most important points that were discussed in the chapter.
- *Review questions* help you assess your understanding of the material presented in the chapter. In general, the answers to these questions are straightforward since they are based on the material presented in the chapter.
- *Discussion questions* help you to transfer the concepts from the chapter into different business contexts. They are also meant as a starting point for discussion with your colleagues and peers.
- Recommended key reading provides a select list of additional books and articles that you can read if you wish to find out more about a specific topic.
- Useful third-party weblinks provide additional information on some material contained in the chapter.

Exhibit P.1 The cases cover several industries and focus on different themes

Case study type	Case study name	Chapter										
		3	4	5	6	7	8	9	10	11	12	13
		External analysis	Internal analysis	Strategy options	Sustaining competitive advantage	New market spaces	Value process framework	Internal organisation	Relationship with suppliers	Relationship with users/ customers	e-Government	Implementation
B2C e-commerce	1 Tesco	●		●●●	●●	●		●●●				●●
	2 Nordea			●●●		●●		●●●				●
	3 Ducati vs. Harley		●●●		●●	●			●●			●●●
	4 American Well	●●	●			●●●	●●	●		●●		
B2B e-commerce	5 IBX				●	●●			●●●			●
	6 SATEC	●	●●●				●●●	●●	●			●
	7 Otis		●●●	●●	●●		●					●●
	8 TopCoder		●		●	●●●		●●		●●●		
	9 Appirio	●●	●			●●●		●				
	10 e-choupal	●●	●		●			●●	●●●		●●	
G2B2C e-government	11 e-Estonia	●						●●		●	●●●	
	12 ICT in Tunisia	●●			●	●	●				●●●	●
	13 Kundra@USgov	●	●●			●					●●●	●●
B2E e-communities	14 KM at Booz		●●					●●●	●●		●●	
C2C e-communities	15 Spreadshirt				●●	●●●	●	●●	●●	●●●		●
	16 Brockhaus vs. Wikipedia	●●			●●	●●●		●●		●●		●
	17 Netzwerk	●				●●●	●●	●		●●●		
	18 Licia Chery	●		●●		●●	●			●●●		
m-commerce	19 Novartis SMS for Life	●●		●●	●		●	●●	●●●			
	20 NTT DoCoMo	●●			●●		●●					●
	21 M-PESA	●			●●	●●●	●●●	●●	●●			●●
	22 Tunisiana	●●	●	●●●	●●●							●
	23 12snap	●	●		●●●	●●		●●				●

●●● Primary focus of the case study ●● Secondary focus of the case study ● Tertiary focus of the case study

This page is intentionally left blank.

Authors' acknowledgements

Throughout the writing and publication process of this text, we have received valuable support and contributions from many people. Therefore, we would like to thank and express our gratitude to the following individuals:

- Stephanie Ludwig, Research Associate at the ENPC School of International Management (Paris), who has significantly contributed to the content of this text. Her strong dedication and quality management of the project were highly appreciated.
- Our colleague Professor Benoit Leleux at IMD, who kindly contributed some of his brilliant case study writing to this text.
- The authors who worked with us during the development of the case studies. These include Kenneth Campbell (CEO of Tunisiana), Professor Charles Waldman (INSEAD, France), Stefanie Leenen (BASS, Germany) and André Achtstätter, past MBA participant at the ENPC School of International Management (Paris).
- Our colleagues and students at the Department of Management at the University of Nuremberg (Germany), who conducted case study research with us. In particular, we would like to thank our colleagues Prof. Harald Hungenberg and Andreas König, and our students Sebastian Bartz, Henning Blarr, Hans Denker, Fernando Endarra, Thomas Engelbertz, Sebastian Mauch, Matthias Promny and Maria Štšekotovitš. We also acknowledge the help provided by Dhruv Bhatli, Research Associate, as well as Yingting Cheng and Linda Crofton, Programme Coordinators, all at the ENPC School of International Management.
- The authors who contributed the remaining case studies contained in the text. These include Professor F. Warren McFarlan, Professor John Deighton and Leora Kornfeld, as well as Professor Karim Lakhani, David Garvin and Eric Lonstein (all from Harvard Business School), Bala Iyer and Erik Noyes (both from Babson College), Saurabh Bhatnagar and Professor Ali Farhoomand (both from University of Hong Kong), Professor Markus Kreutzer and Marina Altuchov (both from University of St Gallen), Syeda Maseeha Qumer and Debapratim Purkayastha (both from ICMR Centre for Management Research), Professor Elie Ofek and Dr Ron Laufer (Indiana University Kelley School of Business), Stephanie Weg (IMD Lausanne), as well as Catherine Daar and Victor Lugger (CommNation and MyMajorCompany).
- Professor F. Warren McFarlan (Emeritus Professor of Harvard Business School) for taking time out of his busy schedule to write the foreword for the text.
- The students on several MBA and Executive MBA programmes in different countries, as well as the managers in executive education programmes and seminars at business schools, corporate universities and companies, who, through their analysis and discussion of the case studies, contributed to the shaping of the text.
- The executives and managers of the companies featured in the case studies contained in the text.

Authors' acknowledgements

- The numerous reviewers who provided valuable insights through their detailed feedback on the second edition of the text.
- Last, but not least, special thanks to our families, to whom we dedicate this text for their unlimited support and much appreciated encouragement of this project. Furthermore:
 - Tawfik Jelassi: I would like to dedicate this text to the digital generation in my home country – Tunisia – who used information technology and Facebook to help topple a 23-year-old dictatorship. The freedom, democracy and dignity which these youth brought about inspired people's revolutions in the Arab Spring countries and further afield. I am very pleased that Albrecht Enders also joins me in this dedication.
 - Francisco J. Martínez-López: I would like to deeply thank my co-authors Tawfik and Albrecht for their kind invitation to join them in this new edition of the text; it has been a really enriching experience. Also, a significant part of my work on this last edition was done during a stay as visiting scholar at the Zicklin School of Business, the City University of New York (NY, USA). I am grateful to my colleague, Professor David Luna, for his sincere and generous support during my stay there. Also, I really appreciated the emotional support of my friends in NYC (Marta, Susan, Elizabeth, Chen, Charles, Shirley, Gary and more) during my time writing this new edition of the text. Finally, I thank the financial support received from 'Programa José Castillejo' (Ministry of Education, Spain) and Research Project ECO2012-31712 (Ministry of Economy and Competitiveness, Spain).

Feedback

We are interested in hearing your comments about this text. We appreciate both critical and supportive feedback, which can help us to improve future editions of this text. You can reach us via email at: jelassi@enpcmbaparis.com, albrecht.enders@imd.ch and fjmlopez@ugr.es. In the spirit of the concepts and case studies presented in this text, we also encourage you to provide feedback on the Amazon.com websites so that others can find out about your opinion.

Tawfik Jelassi, Albrecht Enders and Francisco J. Martínez-López
July 2013

The authors



Tawfik Jelassi is Professor of e-Business & Information Technology and Dean of the School of International Management at Ecole Nationale des Ponts et Chaussées (Paris). He is also Chairman of the Board of Directors of Tunisiana, the leading mobile telecom operator in Tunisia. Dr Jelassi was Associate Professor and Coordinator of the Technology Management Area at INSEAD (Fontainebleau) and Faculty Guest at Harvard Business School (USA). He holds a PhD degree from the Stern School of Business at New York University (USA). His research focuses on e-business/electronic commerce, the strategic use of IT and technology-based innovation.

His research has appeared in his books: *Competing through Information Technology: Strategy and Implementation* (Prentice Hall, 1994), *Strategic Information Systems: A European Perspective* (Wiley, 1994) and *Strategies for e-Business: Creating Value through Electronic and Mobile Commerce* (Financial Times/Prentice Hall, 2005 and 2008). Professor Jelassi has published over 90 research articles in leading conference proceedings and academic journals, including *MIS Quarterly*, *Journal of MIS*, *Decision Support Systems*, *Information & Management*, *Decision Sciences*, *European Journal of Operational Research*, *MIS Quarterly Executive* and *OMEGA*. He has also written over 60 field-based case studies on several industries in different countries, and been granted numerous research and teaching research excellence awards in the USA and Europe. Professor Jelassi has taught extensively on MBA, Executive MBA and management development programmes in over a dozen countries around the world. He has also served as adviser to several companies and governments.

Albrecht Enders is Professor of Strategy and Innovation at IMD. His major interest is the reaction of companies to radical changes in their environment. He has worked for global corporations from different industries, including financial services, consumer goods, industrial goods and the travel industry.



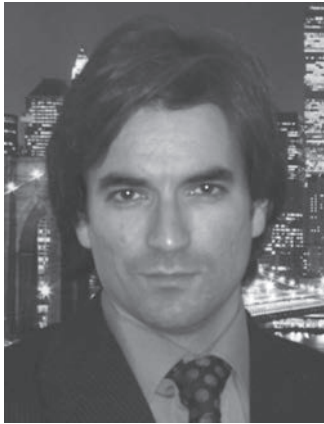
In addition to running highly customised company-specific programmes that focus on corporate transformation, he is also the Program Director of Advanced Strategic Management, one of IMD's core general management programmes. Before joining IMD, he was an Assistant Professor at the University of Nuremberg and spent three years with The Boston Consulting Group in the company's Cologne office.

Professor Enders has published articles in academic journals such as *Administrative Science Quarterly*, *Academy of Management Review* and *Research Policy*, and in practitioner-orientated publications such as *Harvard Business Manager*,

The authors

Management Information Systems Quarterly Executive and the *Financial Times*. His research and case writing efforts have been recognised by awards from the BPS division of the Academy of Management in 2011 and 2012, EFMD in 1999, ECCH in 2001 and 2002 and SIM in 2005 and 2008.

Professor Enders holds a PhD in strategic management from the Leipzig Graduate School of Management and a BA in economics from Dartmouth College.



Francisco J. Martínez-López holds an MSc in Marketing and a European PhD in Business Administration, with Extraordinary Doctoral Prize (University of Granada, Spain), and is Professor of Business Administration at the University of Granada and of Marketing at the Open University of Catalonia (Barcelona) in Spain. He has been visiting scholar at the Zicklin School of Business (NY, USA), Aston Business School (Birmingham, UK), the University of Chicago Booth School of Business (USA), the Michael Smurfit School of Business (Dublin, Ireland) and the Complutense University Business School (Madrid, Spain). He is the Editor-in-Chief of the *International Journal of Business Environment* (Inderscience Publishers), Associate Editor of the *European Journal of Marketing* (Emerald) and is a member of the

Editorial Board of *Industrial Marketing Management* (Elsevier). Dr Martínez-López has co-edited several international journals' special issues and research books for leading publishers of business and management research, such as Springer and Elsevier; for example, he has edited the *Handbook of Strategic e-Business Management* (Springer). In addition, he has published more than 70 papers in international journals and conference proceedings.

Publisher's acknowledgements

We are grateful to the following for permission to reproduce copyright material:

Figures

Figure on p. 10 adapted from *Technological Revolutions and Financial Capital: The Dynamics of Bubbles and Golden Ages*, 1 ed., Edward Elgar Publishing Ltd (Perez, C., 2002) p. 48, used by permission; Figure on p. 13 adapted from Yahoo! Finance, <http://finance.yahoo.com/>, reprinted with permission from Yahoo. © 2013 Yahoo; Figure on p. 35 adapted from *Strategisches Management in Unternehmen*, 4 edn, Gabler (Hungenberg, H., 2006) 83, with kind permission of Springer Science+Business Media; Figure on p. 43 adapted from *Strategisches Management in Unternehmen*, 4 edn, Gabler (Hungenberg, H., 2006) 90, with kind permission of Springer Science+Business Media; Figures on pp. 63 and 89, p. 89 from 'Strategy and the Internet', *Harvard Business Review* (Porter, M.), [Exhibit RO 103D] Copyright © 2001 by the Harvard Business School Publishing Corporation, all rights reserved, reprinted by permission of *Harvard Business Review*; Figure on p. 52 adapted from The Free Press edition of *Competitive Strategy: Techniques for Analyzing Industries and Competitors*, Copyright © 1980, 1998 by The Free Press, a Division of Simon & Schuster, Inc., all rights reserved (Porter, Michael E.) reprinted with the permission of Simon & Schuster Publishing Group; Figure on p. 63 adapted from *Co-opetition*, Currency Doubleday (Brandenburger, A. and B. Nalebuff, 1998) p. 17; Figure on p. 71 after *Marketing Management*, Prentice Hall (Kotler, P., 2005) pp. 251–96; Figure on p. 74 adapted from 'Strategy and Structure: Public Policy Implications' in *Proceedings of Marketing and the Public Interest*, Marketing Science Institute (Abell, D., 1977); Figure on p. 81 adapted from Adapted from H. Hungenberg, *Strategisches Management in Unternehmen*, Gabler (Hungenberg, H., 2006) p. 143, with kind permission of Springer Science+Business Media; Figure on p. 83 from 'Value creation in e-business', *Strategic Management Journal*, vol. 22, no. 6, p. 504 (Amit, R and C. Zott 2001), used by permission; Figure on p. 85 from 'E-business capability research: A systematic literature review', *Proceedings of the 3rd International Conference on Information Management, Innovation Management and Industrial Engineering*, IEEE (Wu, J.-N, L. Liu, 2010) p. 145, reprinted with permission; Figure on p. 87 adapted from *Competitive Advantage: Creating and Sustaining Superior Performance*, Simon & Schuster (Porter, Michael E.) Copyright © 1985, 1998 by Michael E. Porter, adapted from Figure 2.2, p. 36, reprinted with the permission of Simon & Schuster Publishing Group; Figure on p. 90 adapted from 'e-Banking to e-Business at Nordea (Scandinavia) – The World's Biggest Clicks-and-Mortar Bank', *Management Information Systems Quarterly Executive*, vol. 5, no. 1, pp. 31–44 (Enders, A. and T. Jelassi, 2006); Figure on p. 92 after 'Designing mature internet strategies: the ICDT model', *European Management Journal*, vol. 21 no. 1, pp. 38–47. (Angehrn, A., 1997); Figure on p. 98 adapted from E-Business and E-Commerce Management, *Financial Times*, p. 330 (Chaffey, D., 2011),

FT/Prentice Hall, © The Financial Times Limited. All Rights Reserved. Used by permission; Figures on pp. 106 and 107 adapted from *Strategisches Management in Unternehmen*, Gabler (Hungenberg, H., 2006) p. 185; with kind permission of Springer Science+Business Media; Figure on p. 108 adapted from *Strategisches Management in Unternehmen*, Gabler (Hungenberg, H., 2006) p. 189, with kind permission of Springer Science+Business Media; Figure on p. 114 adapted from *Strategisches Management in Unternehmen*, Gabler (Hungenberg, H., 2006) p. 194, with kind permission of Springer Science+Business Media; Figure on p. 116 adapted from *Strategisches Management in Unternehmen*, Gabler (Hungenberg, H., 2006) p. 251, with kind permission of Springer Science+Business Media; Figure on p. 117 from 'Value creation in e-business models', in F.J. Martínez-López (ed.) *Handbook of Strategic e-business Management*, Series PROGRESS in IS, Springer (Rodríguez, A., F. Sandulli and D. Sánchez, 2013); Figure on p. 129 adapted from *Adapted from Strategisches Management in Unternehmen*, Gabler (Hungenberg, H., 2006) p. 251, with kind permission of Springer Science+Business Media; F Figure on p. 132 from 'Developing e-business dynamic capabilities: an analysis of e-commerce innovation from I-, M-, to U-commerce', *Journal of Organizational Computing and Electronic Commerce*, vol. 18, p. 97 (Wu, J.-H. and T.-L. Hisa, 2008), reprinted by permission of the publisher (Taylor & Francis Ltd, <http://www.tandf.co.uk/journals>); Figure on p. 134 from The Innovator's Solution, *Harvard Business Review*, p. 33 (Christensen, C. and M. Raynor, 2004), Copyright © 2004 by the Harvard Business School Publishing Corporation; all rights reserved. Reprinted by permission of *Harvard Business Review*; Figure on p. 148 adapted from 'Change in the presence of residual fit', *Organizational Science*, vol. 17, no. 1, p. 152. (Gilbert, C. 2006), used by permission; Figure on p. 148 adapted from Change in the presence of residual fit', *Organizational Science*, vol. 17, no. 1, p. 152. (Gilbert, C., 2006), The Institute for Operations Research and the Management Sciences (INFORMS), reprinted by permission; Figure on p. 154 from 'Creating new market space', *Harvard Business Review* (Kim, C. and R. Mauborgne), January–February 1999, Copyright © 1999 by the Harvard Business School Publishing Corporation, all rights reserved, Reprinted by permission of *Harvard Business Review*; Figure on p. 155 adapted from 'Creating new market space', *Harvard Business Review*, 1999, January–February, pp. 83–93. (Kim, C. and R. Mauborgne), reprinted by permission of *Harvard Business Review*; Figure on p. 197 adapted from *Wettbewerb jenseits von Industriegrenzen*, Campus (Heuskel, D. 1999) p. 53, used by permission; Figure on p. 203 from 'Get the Right Mix of Bricks and Clicks', *Harvard Business Review* [Exhibit ROO 313] (Gulati, R. and J. Garino), May–June 2000. Copyright © 2000 by the Harvard Business School Publishing Corporation, all rights reserved. Reprinted by permission of *Harvard Business Review*; Figure on p. 210 from 'Unbundling the Corporation' *Harvard Business Review* [Exhibit 99205] (Hagel J. and M. Singer), March–April 1999. Copyright © 1999 by the Harvard Business School Publishing Corporation, all rights reserved. Reprinted by permission of *Harvard Business Review*; Figure on p. 211 from 'Unbundling the Corporation', *Harvard Business Review* [Exhibit 99205] (Hagel, J. and M. Singer), March–April 1999. Copyright © 1999 by the Harvard Business School Publishing Corporation, all rights reserved. Reprinted by permission of *Harvard Business Review*; Figure on p. 212 adapted from 'Testing the conflict-performance assumption in business-to-business relationships', *Industrial Marketing Management*, vol. 32 (2), pp. 91–9 (Duarte, M. and G. Davis 2003), reprinted with permission from Elsevier; Figure on p. 213 adapted from (Bucklin, C., P. Thomas-Graham and E. Webster), 'Channel conflict: when is it dangerous', August 1997, no. 3, pp. 36–43, McKinsey Quarterly, www.mckinsey.com/insights/

mckinsey_quarterly. McKinsey & Company, reprinted by permission; Figure on p. 223 from 'E Hubs: The New B2B Marketplaces', *Harvard Business Review* [Exhibit ROO 306] (Kaplan, S. and M. Sawhney), May–June 2000. Copyright © 2000 by the Harvard Business School Publishing Corporation, all rights reserved. Reprinted by permission of *Harvard Business Review*; Figure on p. 227 from E-business and E-Commerce Management, *Financial Times/Prentice Hall*, pp. 368. (Chaffey, D.), 2011, © The Financial Times Limited. All Rights Reserved; Figure on p. 234 from 'Social CRM: How companies can link into the social web of consumers', *Journal of Direct, Data and Digital Marketing Practice*, vol.13, p. 4 (Acker, O. et al. 2011), reprinted by permission from Macmillan Publishers Ltd; Figure on p. 236 from Spivack, N., Evolution of the Web and related applications, <http://bblfish.net/work/presentations/2007/BOF-6747.pdf>, Radar Networks & Nova Spivack (2007). Used by permission of N. Spivack; Figure on p. 237 from 'Strategic development of business models. Implications of the Web 2.0 for creating value on the Internet', *Long Range Planning*, vol. 43, p. 279 (Wirtz, B. et al. 2010), reprinted with permission from Elsevier ; Figure on p. 238 from 'Strategic development of business models. Implications of the Web 2.0 for creating value on the Internet', *Long Range Planning*, vol. 43, p. 284. (Wirtz, B et al. 2010), reprinted with permission from Elsevier ; Figure on p. 244 from Blown to Bits, *Harvard Business School Press*, p. 24 (Evans, P and T. Wurster), Boston, MA, 1999, Copyright © 1999 by the Harvard Business School Publishing Corporation, all rights reserved. Reprinted by permission of *Harvard Business Review*; Figure on p. 248 from 'Social CRM: How companies can link into the social web of consumers', *Journal of Direct, Data and Digital Marketing Practice*, vol.13, p. 9. (Acker, O. et al., 2011), reprinted by permission from Macmillan Publishers Ltd; Figure on p. 251 adapted from *Mass-Customization*, Gabler (Piller, F., 2006) p. 175, with kind permission of Springer Science+Business Media; Figures on pp. 257 and 258 from *The Long Tail. How Endless Choice is Creating Unlimited Demand*, Hachette (Anderson, C., 2006), or Why the Future of Business Is Selling Less of More by Chris Anderson. Copyright (c) 2006, 2008 by Chris Anderson. By permission of Hachette Book Group, Inc. All rights reserved; Figure on p. 267 adapted from F. Müller-Veerse et al., UMTS report – An investment perspective, Durlacher Research, 2001, p. 23. Reprinted by permission of Panmure Gordon & Co.; Figures on p. 271, p. 272 adapted from F. Müller-Veerse et al., UMTS report – An investment perspective, Durlacher Research, 2001, p. 80. Reprinted by permission of Panmure Gordon & Co.; Figure on p. 276 adapted from 'Emerging value propositions for m-commerce', *Journal of Business Strategies*, vol. 25(2) (Clarke, I. 2008), used by permission; Figure on p. 279 from *The Mobile Revolution: the making of mobile services worldwide*, 1 ed., Kogan Page Business Books (Steinbock, D., 2005) p. 260, ISBN 13: 978-0749442965; Figure on p. 282 from *The Mobile Revolution: the making of mobile services worldwide*, 1 ed., Kogan Page Business Books (Steinbock, D., 2005) p. 266, ISBN 13: 978-0749442965; Figure on p. 284 from 'Understanding usability in mobile commerce', *Communications of the ACM*, vol. 46(12), pp. 53–6 (Venkatesh, V. et al., 2003), Association for Computing Machinery, Inc., reprinted by permission; Figure on p. 287 after 'Marketing in the age of the network: from marketplace to u-space', *Business Horizons*, vol. 47 (6) p. 36. (Watson, R.T. et al., 2004); Figure on p. 289 adapted from 'U-commerce: emerging trends and research issues', *Industrial Management and Data Systems*, vol. 104 (8/9), p. 745 (Galanxhi-Janaqi, H. and F. Fui-Hoon Ha, 2004); Figure on p. 290 after 'Marketing in the age of the network: from marketplace to u-space', *Business Horizons*, vol. 47 (6) p. 37 (Watson, R.T. et al., 2004).

Text

Article on p. 5 from 'It's too early for e-business to drop its "e"', *Financial Times*, 21/05/2012 (Bowen, D.), used by permission of David Bowen; Article on p. 14 from 'EDI update', FT. Freelance, 19/10/2011 (Bird, J.), © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 17 from Boo.com founder fears net bubble *Financial Times*, 11/04/2011 (Watkins, M. and T. Bradshaw), FT.com, © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 21 from A billion-dollar mistake: Webvan's failure has been an expensive lesson for the Internet', *Financial Times*, 10/07/2001 (Abrahams, P. and A. Edgecliffe-Johnson), © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 22 from Netscape to the Next Big Thing: how a dotcom decade changed our lives', *Financial Times*, 05/08/2005 (Waters, R.), © The Financial Times Limited. All Rights Reserved. Used by permission; Box on p. 27 from Google Blogoscoped, Philipp Lenssen, April 14, 2007, <http://blogoscoped.com/archive/2007-04-14-n32.html>, used by permission; Epigraph on p. 41 from Warren Buffett, used by permission; Article on p. 43 from Online gambling: The sector has been able to cash in on a regulatory regime set up in Alderney, *Financial Times*, 18/11/2010 (Serwood, B.), © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 45 from Publishers sued over e-book price 'collusion', *Financial Times*, 12/04/2012 (Gelles, D. and A. Edgecliffe-Johnson), © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 47 from UK online economy valued at £82bn *Financial Times*, 05/02/2012 (Thomas, D. and Telecoms Correspondent), FT.com, © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 48 from 'A social network links our personal and office lives', *Financial Times*, 09/04/2012 (Mattu, R.), © The Financial Times Limited. All Rights Reserved. Used by permission; Box on p. 49 from 'How Facebook Got Its Green Back [Sustainability Infographic]' <http://techcrunch.com/2012/03/16/facebook-sustainability/>, Constine, J., 16 March 2012, © [2012] TechCrunch. Used with permission; Article on p. 51 from 'Trying on the future', *Financial Times*, 23/09/2011 (Harkin, F.), © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 53 adapted from 'Michael Porter, Management thinker – Academic who shares his values', *Financial Times*, 26/09/2010 (Hill, A.), © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 57 from Cloud computing cuts start-up costs, *Financial Times*, 29/02/2012 (M. Palmer), FT.com, © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 60 adapted from Facebook shows it gets the message with Instagram deal, *Financial Times*, 12/04/2012 (Waters, R.), © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 61 from Google buys UK price comparison website for £37.7m, *Financial Times* 07/03/2011 (Watkins, M.), FT.com, © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 64 from Nokia and Microsoft talk up benefits of co-dependence', *Financial Times*, 12/01/2012 (Waters, R.), © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 72 adapted from Vodafone and Facebook team up on smartphone, *Financial Times*, 27/07/2011 (Bradshaw, T. and Digital Media Correspondent), © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 75 from 'Google searches to become personalized', *Financial Times*, 10/01/2012 (Waters, R. and T. Bradshaw), FT.com, © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 84 from 'IT linked to financial performance', *Financial Times*, 31/01/2012 (Taylor, P.), FT.com, © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 93 from 'Advertisers

rush to master fresh set of skills', *Financial Times*, 07/03/2012 (Gelles, D.), FT.com, © The Financial Times Limited. All Rights Reserved. Used by permission; Box on p. 95 from Moving back to personalised interaction – e-Diets.com, www.ediets.com, adapted by permission; Article on p. 97 from Outsourcing supply chain operations', *Financial Times*, 15/06/2011 (Taylor, P), FT.com, © The Financial Times Limited. All Rights Reserved. Used by permission; Box on p. 119 from 'Stats: Facebook Made \$9.51 in Ad Revenue Per User Last Year In The US and Canada', <http://techcrunch.com/2012/05/03/stats-facebook-made-9-51-in-ad-revenue-per-user-last-year-in-the-u-s-and-canada/>, Cutler, K.-M., 5 March 2012, © [2012] TechCrunch. Used with permission; Box on p. 121 adapted from The easyJet concept, <http://casestudy17.wordpress.com/the-easyjet-concept/>, www.easyjet.com. Used by permission; Article on p. 122 from 'Airlines ditch simple model for complexity', *Financial Times*, 10/01/2012 (Jacobs, R.), FT.com, © The Financial Times Limited. All Rights Reserved. Used by permission; Box on p. 132 from Shmilovici, U., 'Strategy for Startups: The Innovator's Dilemma', <http://techcrunch.com/2012/04/08/strategy-for-startups-the-innovators-dilemma/>, 8 April 2012. Used by permission of U. Shmilovici; Article on p. 136 from 'Why disruption can be good for business', *Financial Times*, 02/10/2003 (London, S.), FT.com, © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 140 adapted from 'Light reading', *Financial Times* 13/08/2011 (Wilkinson, C.), © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 144 from 'Snapshot of a humbled giant', *Financial Times*, 13/04/2012 (Hill, A.), © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 156 from 'The way we shop now', *Financial Times*, 20/03/2012 (Jopson, B.), FT.com, © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 161 adapted from 'The first-mover advantage myth', *Financial Times* (Jopson, B.), © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 165 adapted from 'Inside Match.com', *Financial Times*, 29/07/2012 (Gelles, D.), © The Financial Times Limited. All Rights Reserved. Used by permission; Epigraph on p. 175 from An interview with Michael Porter, *The Academy of Management Executive*, vol. 16, pp. 43–52 (Argyres, N. and A.M. McGahan 2002), Number 2, S. 45 u. S. 49, republished with permission of Academy of Management ; permission conveyed through Copyright Clearance Center, Inc.; Article on p. 201 adapted from 'Everyone's a critic now – or are they?', *Financial Times*, 03/02/2012 (Hartford, T.), FT.com, © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 205 adapted from 'Last bookstores standing may turn digital p.', *Financial Times*, 22/05/2011 (Gelles, D., A. Edgecliffe-Johnson and C. Barrett), FT.com, © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 208 from 'Model that works even in turbulent times', *Financial Times*, 29/06/2011 (Taylor, P.), © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 214 from 'Expedia stops American Airlines ticket sales', *Financial Times*, 01/01/2011 (Lemer, J.), FT.com, © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 221 from 'Supply chain leaders identified', *Financial Times* (Taylor, P.), FT.com, © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 224 from 'Amazon noses into industrial supply chain', *Financial Times*, 20/05/2012 (Weitzman, H.), FT.com, © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 228 from 'Supply chain is a strategic discipline', *Financial Times*, 25/01/2011 (Taylor, P.), FT.com, © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 241 from 'Facebook shows off new marketing tools', *Financial Times*, 29/02/2012 (Dembsky, A.), © The Financial Times Limited. All Rights Reserved. Used by permission;

Article on p. 245 from Dell to broaden sales model', *Financial Times*, 16/05/2007 (Allison, K.), FT.com, © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 249 from 'Social CRM mirrors rise in customer power', *Financial Times*, 31/01/2012 (Taylor, P), FT.com, © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 253 from Lights, camera, blender! How to create a hit, *Financial Times*, 07/03/2012 (Dembosky, A.), © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 259 from 'Lulu aims to wag the Internet "long tail"', *Financial Times*, 24/08/2006 (Braithwaite, T.), FT.com, © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 273 from Extract from 'FT series E-commerce In the second of a two-part series, Jonathan Birchall looks at retailers' increasing use of smartphones to reach consumers – Codes open new front in retail wars', *Financial Times*, 18/05/2010 (Birchall, J.), © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 280 from 'Mobile: Nirvana is tantalisingly close', *Financial Times*, 07/03/2012 (Bradshaw, T.), © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 285 from 'E-Commerce FT Series In the first of a two-part series, Jonathan Birchall looks at the online challenges facing retailers – Stores tap into shoppers as mobiles ring the changes', *Financial Times*, 11/05/2010 (Birchall, J.), © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 291 from Extracted from 'Welcome to a new reality', *Financial Times*, 25/07/2011 (Palmer, M.), © The Financial Times Limited. All Rights Reserved. Used by permission; Quote on p. 300 from Nordea Bank Polska S.A. Annual Report 2006, page 2, <http://s.nordea.pl/asset/b/5/3/b538ac4b-467ca83d3d542e0d93cadc8c.pdf>, Nordea Bank; Quote on p. 301 from Spreadshirt mission, <http://www.spreadshirt.com/our-mission-C69>, used by permission; Quote on p. 301 from Google.com, <http://www.google.com/about/company/>; Quote on p. 301 from Amazon.com, Annual Report 2002, Part I, p. 1.; Quote on p. 302 from President and CEO, Masao Nakamura, & President and CEO, Europe, Yuichi Kato, NTT DoCoMo, used by permission; Quote on p. 302 from Xing.com, used by permission; Quote on page 302 from Otis Elevator, used by permission; Quote on p. 301 from Spreadshirt mission, <http://www.spreadshirt.com/our-mission-C69>, used by permission; Quote on p. 302 from President and CEO, Masao Nakamura, & President and CEO, Europe, Yuichi Kato, NTT DoCoMo, used by permission; Article on p. 307 from 'LinkedIn vows to tighten security after password breach', *Financial Times*, 11/06/2012 (Mahmudova, A. and P. Taylor), © The Financial Times Limited. All Rights Reserved. Used by permission; Article on p. 320 from #521 Innovative Leader Volume 10, Number 3, March 2001. 'On Creativity' by William J. Altier, CMC, FIMC http://www.winstonbrill.com/bril001/html/article_index/articles/501-550/article521_body.html, Winston J. Brill and Associates. Used by permission of Winston J. Brill; Article on p. 327 from *Perspectives on Strategy* by C. Stern and G. Stalk (eds), John Wiley & Sons, Inc. (Henderson, B. 'Business thinking' 1998) pp. 260–3, reproduced with permission of John Wiley & Sons, Inc.; Article on p. 332 from *Perspectives on Strategy* by C. Stern and G. Stalk (eds), John Wiley & Sons, Inc. (Isaacs, J, 'Probing' 1998) pp. 276–8, reproduced with permission of John Wiley & Sons, Inc.; Case Study no.4 from Ofek, E. and Laufer, R., 25/04/2011, Harvard Business School Publishing; Case Study no. 8 from Lakhani, D.R., Garvin, D.A. and Lonstein, E., 15/01/2010, Harvard Business School Publishing; Case Study no. 9 from Bala Iyer and Erik Noyes, 01/02/2012, Associate Professor and Assistant Professor, Technology Operations and Information Management, Babson College, academicservices@babson.edu; Case Study no. 10 from Asia Case Research Centre at the University of Hong Kong; Case Study no. 13 from Syeda Maseeha Qumer under direction of Debapratim Purkayastha,

International Centre for Management Research, info@icmrindia.org; Case Study no. 14 from Dr Markus Kreutzer and Marina Altuchov, University of St Gallen, ecch@ecch.com, ECCH; Case Study no. 17 from John Deighton and Leora Kornfeld, 17/03/2010, Harvard Business School Publishing; Case Study no. 22 from Campbell, K, CEO of Tunisiana; Jelassi T., Professor of e-Business and Information Technology at the School of International Management, Ecole Nationale des Ponts et Chaussées, Paris, Copyright © 2013 ENPC School of International Management, Paris, <http://www.enpcmbaparis.com/about-the-school>, used by permission.

In some instances we have been unable to trace the owners of copyright material, and we would appreciate any information that would enable us to do so.

PART 1

Introduction

Part overview

This introductory part sets up the overall context for the text. It contains the following elements:

- A definition of the key terminology used throughout the text;
- An overview of the evolution of e-business over time.

The goal of this introductory part is to provide a guide and a context for the content of the text. Chapter 1 starts out with some definitions of the most important terms used in the text, such as e-business, electronic commerce and mobile e-commerce, and the concepts of strategy and value creation. It then provides an overview of the evolution of e-business over the last decade and recognises four distinct periods: (1) the 'grassroots of e-business', (2) the 'rise of the Internet', (3) the 'crash' (or the burst of the dotcom bubble) and (4) the 'synergy phase'.

This page is intentionally left blank.

Chapter 1

Key terminology and evolution of e-business

Chapter at a glance

- 1.1 Key terminology** 4
 - 1.1.1 e-business 4
 - 1.1.2 Electronic commerce 4
 - 1.1.3 Mobile e-commerce 4
 - 1.1.4 The concept of strategy 6
 - 1.1.5 The concept of value creation and capturing 9
- 1.2 The evolution of e-business** 9
 - 1.2.1 The grassroots of e-business 14
 - 1.2.2 The rise of the Internet 16
 - 1.2.3 The crash 18
 - 1.2.4 The synergy phase 22

Learning outcomes

After completing this chapter, you should be able to:

- Understand what the terms 'e-business', 'electronic commerce' and 'mobile e-commerce' mean.
- Define the concept of strategy and recognise the different levels of strategy development.
- Describe the life cycle of technological revolutions and illustrate it through different examples.
- Recognise the four main periods of e-business evolution over the past decade and explain the peculiar characteristics of each period.

Introduction

The purpose of this chapter is to set the stage for the remainder of the text. Since, due to the relative novelty of e-business, there is not yet a clear and shared view of what this domain entails, we first want to ensure a common understanding of the key terminology used throughout the text. Section 1.1 includes the definition of e-business-related terms and concepts, as well as some strategy-specific perspectives. Following that, Section 1.2 provides a framework that describes the typical stages of technological revolutions and positions the evolution of electronic business during the past decade within this framework.

1.1 Key terminology

1.1.1 e-business

The term *e-business* is defined here as the use of electronic means to conduct an organisation's business internally and/or externally.¹ Internal e-business activities include the linking of an organisation's employees with each other through an intranet to improve information sharing, facilitate knowledge dissemination and support management reporting. e-Business activities also include supporting after-sales service activities and collaborating with business partners, e.g. conducting joint research, developing a new product and formulating a sales promotion.

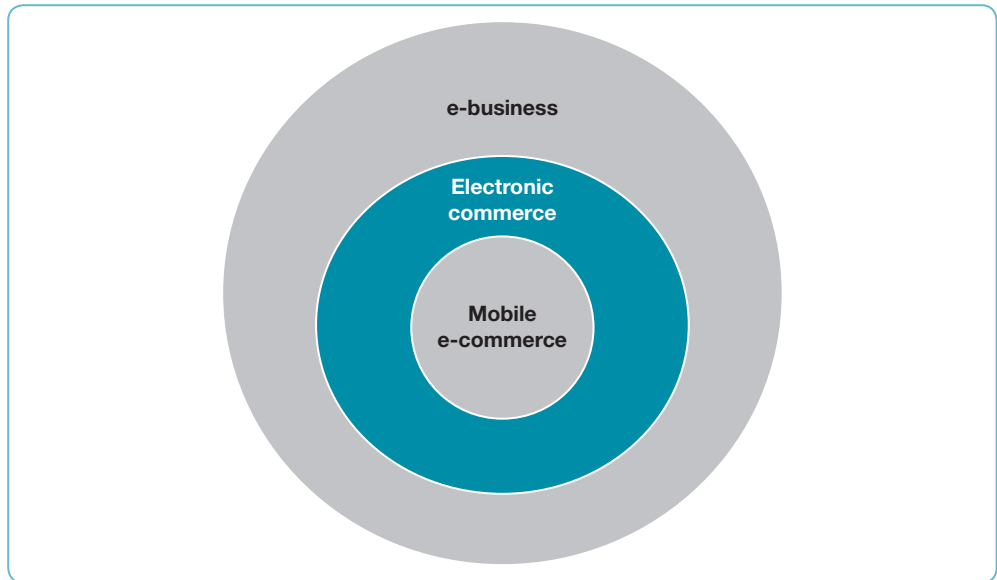
In spite of the distinct terminology that is used, e-business should not be viewed in isolation from the remaining activities of a firm. Instead, an organisation should integrate online e-business activities with its offline business into a coherent whole. The *Financial Times* (FT) article 'It's too early for e-business to drop its "e"' provides a further discussion of the importance of the 'e' in e-business.

1.1.2 Electronic commerce

Electronic commerce, or *e-commerce*, is more specific than e-business and can be thought of as a subset of the latter (see Exhibit 1.1). Electronic commerce deals with the facilitation of transactions and selling of products and services online, i.e. via the Internet or any other telecommunications network. This involves the electronic trading of physical and digital goods – quite often encompassing all the trading steps, such as online marketing, online ordering, e-payment and, for digital goods, online distribution (i.e. for after-sales support activities). e-Commerce applications with external orientation are buy-side e-commerce activities with suppliers and sell-side activities with customers.

1.1.3 Mobile e-commerce

Mobile e-commerce, or *m-commerce*, is a subset of electronic commerce. While it refers to online activities similar to those mentioned in the electronic commerce category, the underlying technology is different since mobile commerce is limited to mobile telecommunication networks, which are accessed through wireless hand-held devices such as mobile phones, smart phones, hand-held computers and tablets.

Exhibit 1.1 Electronic business includes electronic commerce and mobile electronic commerce

Source: Adapted from D. Chaffey, *E-Business and E-Commerce Management*, FT Prentice Hall, 2002, p. 9.

It's too early for e-business to drop its 'e'

Jargon is used to make the banal sound enthralling, the simple sophisticated. It is often used to disguise the fact that the speaker, or writer, does not know what he is talking about, or cannot be bothered to find a more precise word. In the past five years, one letter has come to symbolize the worst of jargon. The fifth letter in the Roman alphabet, it has been used in front of business, commerce, finance, procurement, learning, enablement, government. Almost any noun you can think of has probably been an e-noun. Companies have used 'e' liberally to give themselves a buzz on the stock market.

Now, 'e' is on its way out. Yet, despite everything I have said, this is bad news. The 'e' has been chased away by the dotcom crash, which transformed it from magic drug to kiss of stock market death. But, even before that, it was going out of fashion. One senior consultant told me in 2000 that the 'e' would be dropped by his organization within a year or two (it was). His argument – widely accepted – was that Internet-based business would become so pervasive

that it would be pointless, indeed damaging, to talk about it as a separate discipline.

E-business would and should disappear into business. And so it should; but not yet. At the Richmond Events e-forum last October, several hundred senior managers from blue-chip companies gathered on a cruise ship to be assaulted by a mixture of cabernet sauvignon and hard sell from vendors of e-services of various sorts. There was a 'last days of Rome' feeling about it, as delegate after delegate let slip that he or she had either just left their e-job, or was about to.

What was particularly interesting was that people were revealing their 'real selves' beneath their e-titles: they were either information technology people, or they were something else. While a few could talk strategy and technology with equal fluency, most gave their backgrounds away. They were happy speaking about marketing and strategy, or about integration issues; not both. I have since received a letter from Richmond Events announcing the death of e-forum, saying that its functions would be rolled into either the IT directors or the

