

Digital Innovation Strategy

Based on applied economics and from the perspective of an innovator seeking to develop a new digital business, this textbook is aimed at MBA and advanced undergraduate audiences interested in innovation strategy and competition in digital industries. Step-by-step, the book guides innovators through a dynamic market analysis and business model design, leading to an assessment of the future evolution of the market and the broader innovation ecosystem, and what the innovator can do to position the innovation for continued success. Each chapter defines and provides references for key concepts that can be further explored through suggested readings and study questions. Real-world case studies further facilitate forming a comprehensive view on how to resolve strategic challenges of digital innovation. The topics covered in this text are essential for a broad range of managers, consultants, entrepreneurs, technologists, and analysts to understand in depth.

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Contents

List of Figures	<i>page</i> xi
List of Tables	xiii
Preface	xv

Part I Introduction

1 What is Special about Digital Business Innovation?	3
1.1 Origins of Digitalization	4
1.2 What are the Challenges of Digital Business Innovation?	6
1.3 Why are Information and Communication Technologies so Critical to Economic Performance?	8
Key Ideas	11
Definitions	11
Discussion Questions	12
Further Reading	12
2 Digital Disruption	13
2.1 Disruptive Innovations Offer a New Performance Trajectory	13
2.2 Why is Disruption Challenging for Incumbents?	15
2.3 Why <i>Digital</i> Disruption?	19
Key Ideas	21
Definitions	22
Discussion Questions	22
Further Reading	23
3 Disruptive Communication Networks	24
3.1 Invention of the Internet	24
3.2 The Triple Helix of Government, Academia, and Private Enterprise Innovating Networks	26
3.3 The Internet as an Evolving Technological and Social System	29
3.4 Innovating a Mobile Internet: The Emergence of 5G	32
3.5 Innovating Communication Services: The Web	35
3.6 Summary: A Framework for Innovating the Digital Society	39
Key ideas	41
Definitions	41
Discussion Questions	42
Further Reading	42

vi	Contents	
	Case 1: Barnes & Noble and the E-Book Revolution	42
	Case 1.1 Entry into E-Commerce	43
	Case 1.2 The Book Ecosystem	47
	Case 1.3 E-Book Pricing Debacles	48
	Discussion Questions	51
	Case Data Appendix	52
	Part II Information Products and Sources	
4	Production of Information Goods	57
	4.1 Economics of Information Production	57
	4.2 Differentiation Strategy	60
	4.3 Cost Leadership	62
	Key Ideas	64
	Definitions	64
	Discussion Questions	64
	Further Reading	65
5	Pricing of Information	66
	5.1 Personalized Pricing	67
	5.2 Group Pricing	69
	5.3 Versioning	70
	5.4 Versioning and Freemium	72
	Key Ideas	74
	Definitions	75
	Discussion Questions	76
	Further Reading	77
6	Consumption of Information	78
	6.1 Cognitive Biases and Digital Markets	78
	6.2 Valuation of Information	80
	6.3 Judgment and News Consumption Online	81
	6.4 Machine Decisions	84
	Key Ideas	86
	Definitions	86
	Discussion Questions	87
	Further Reading	87
7	Building and Commercializing Data Assets	88
	7.1 Building Data Value	90
	7.2 Instrumentation: Building the First Digital Twin	92
	7.3 Commercialization of Data Assets	96
	Key Ideas	100
	Definitions	100

	Contents	vii
Discussion Questions	101	
Further Reading	101	
8 Business Model Design for Information Goods	102	
8.1 Business Model Principles for Data and Information Products	104	
8.2 Redesigning the Business Model at <i>The New York Times</i>	104	
8.3 Business Modeling Digital Twins	106	
Key Ideas	107	
Discussion Questions	107	
Further Reading	108	
Case 2: <i>The New York Times</i> in Search of a Revenue Model	108	
Case 2.1 Digital Transformation of News	108	
Case 2.2 Cost Cutting	110	
Case 2.3 Digital Business Model Discovery	111	
Discussion Questions: Challenges of Redesign	114	
Part III Networks		
9 Networks and Systems	117	
9.1 Network Effects	119	
9.2 Demand for Network Goods and Critical Mass	121	
9.3 Network Strategies: Reaching Critical Mass	123	
9.4 Network Strategies: Switching Costs and Consumer Lock In	124	
Key Ideas	126	
Definitions	126	
Discussion Questions	127	
Further Reading	128	
10 Network Competition	129	
10.1 Performance versus Compatibility	131	
10.2 Openness versus Control	132	
10.3 Communication Standards Development	134	
Key Ideas	137	
Definitions	138	
Discussion Questions	138	
Further Reading	139	
11 Platform Strategies	140	
11.1 Multisided Markets	142	
11.2 Chickens and Eggs	143	
Key Ideas	146	
Definitions	147	
Discussion Questions	147	
Further Reading	148	

viii	Contents	
	Case 3: Epic Games: Unreal Battle Royale	148
	Case 3.1 History	149
	Case 3.2 Revenue Model	150
	Case 3.3 Cost Structure	151
	Case 3.4 Competition	152
	Case 3.5 Epic Platform Strategies	153
	Case 3.6 Litigation	154
	Discussion Questions	156
	Part IV Organizing Digital Innovations	
12	The Inverted Firm	159
	12.1 Hierarchical Firms versus Market Contracts	159
	12.2 Digitization Makes Market Contracts More Attractive	161
	12.3 Why Do Some Hierarchical Firms Still Prosper in the Digital Age?	163
	Key Ideas	166
	Definitions	166
	Discussion Questions	166
	Further Reading	167
13	Digital Business Models	168
	13.1 Assessing Value Configurations and Envisioning a Business Model	168
	13.2 A Configuration for Creating Exceptional Value	168
	13.3 Value Proposition: Does the Innovation Enhance Demand or Reduce the Cost of Operations?	171
	13.4 Digital Service Revenue Mechanisms	172
	13.5 Hardware and System Revenue Mechanisms	176
	Key Ideas	178
	Definitions	178
	Discussion Questions	179
	Further Reading	179
14	Business Model Framework	180
	14.1 From Value Proposition to Implementation	180
	14.2 Business Model Framework	182
	14.3 Business Model Example: AR Fashion Network	185
	Key Ideas	188
	Definitions	188
	Discussion Questions	189
	Further Reading	189
	Case 4: Uber and the Innovation of Shared Mobility	189
	Case 4.1 Value Creation through Ride Sharing	190
	Case 4.2 The Uber Experience	191

	Contents	ix
Case 4.3 Competition Closing In	193	
Case 4.4 Inside Uber	194	
Case 4.5 Prospects for Profitability?	195	
Case 4.6 Regulatory Challenges and Resistance	196	
Discussion Questions	198	
Part V Gaining Ecosystem Momentum		
15 Launching a New Digital Business Model	201	
15.1 Acquire Customers: “If You Build It, They Might NOT Come”	201	
15.2 Validating the Business Model through Experimentation	207	
15.3 Gain Platform Momentum and Develop the Ecosystem	212	
Key Ideas	213	
Definitions	214	
Discussion Questions	214	
Further Reading	215	
16 Sources of Competitive Advantage in Digital Ecosystems	216	
16.1 Profiting from a Digital Innovation: Deriving Value from an Ecosystem	216	
16.2 Architectural Strategies	222	
Key Ideas	226	
Definitions	227	
Discussion Questions	227	
Further Reading	227	
17 Intellectual Property Rights and Digital Technologies	228	
17.1 Copyright in the Digital Age	229	
17.2 Evolution of the US Copyright Regime	231	
17.3 Software Patents	234	
Key Ideas	239	
Definitions	240	
Discussion Questions	240	
Further Reading	240	
Case 5: Spotify: “Listening Is Everything”	241	
Case 5.1 Background	242	
Case 5.2 Business Model	243	
Case 5.3 Licensing Agreements	244	
Case 5.4 Operations and Financials	245	
Case 5.5 Other Activities and Associated Costs	246	
Case 5.6 Competition in the Ecosystem	247	
Discussion Questions	250	

x	Contents	
	Epilogue: Recognizing Opportunities for Innovation with Next-Generation Communication Networks	251
	E.1 Cycles of Innovation in Communication Systems	251
	E.2 From Wireless Telecommunication to Data Networks to the Internet of Everything: What Comes Next?	254
	E.3 Assessment of Opportunities for Innovation	256
	E.4 Playing the Tape Forward: How Will the Digital Economy Evolve?	264
	Key Ideas	267
	Discussion Questions	268
	Further Reading	268
	Index	269

Figures

1.1 Total cross-sector technology flows by field and decade as measured via patent citations	page 6
2.1 Worldwide website traffic by device type	16
2.2 Global smartphone operating system market shares	18
2.3 Producer Price Index: portable computers and computer equipment (June 2007 = 100) and computer storage devices (December 2004 = 100)	21
2.4 IT investment share of revenue	21
3.1 Paul Baran's original illustration of a distributed communication network	25
3.2 NSFNET backbone network in 1991	28
3.3 Internet users per 100 inhabitants	30
3.4 1996 Compaq Internet Solutions Division strategy memo	31
C1.1 US book unit sales 2004–2015	45
C1.2 Market share of e-book publisher types by gross sales	46
C1.3 Traditional and e-book industry ecosystems	47
A1.1 Barnes & Noble revenue 2009–2019	52
A1.2 US publishers' e-book sales revenue	53
4.1 Cost structure of information goods when marginal cost is constant	59
4.2 The impact of price pressure on firm profitability in information markets	59
4.3 Monopolistic seller with a downward sloping demand curve	61
4.4 Competitive seller with a flat demand curve	63
5.1 Personalized prices	68
5.2 Group pricing	69
5.3 Nonlinear pricing	70
5.4 Pricing versions of information products	72
5.5 Profit-maximizing version pricing	73
5.6 Version pricing when the lowest version is free	75
7.1 Data value chain	92
C2.1 US newspaper industry revenues (\$ million)	108
C2.2 US print newspaper revenues by category (\$ billion)	109
C2.3 US newspapers' print and online advertising revenues (\$ billion)	109
C2.4 US newspapers' newsroom employees	110
C2.5 Print newspapers' operating expenditures	110
9.1 Network of five nodes	120
9.2 Two-mode network of children and books	121
9.3 Network demand when customers have heterogeneous preferences	122

xii	List of Figures	
	9.4 Network growth and multiple equilibria	123
	10.1 Network competition with two competing technologies	130
	11.1 Game-theoretic illustration of attendance at a trading event	144
	11.2 Platform pricing strategies to induce attendance	145
	11.3 The Amazon platform ecosystem in e-books	146
	12.1 Traditional hierarchy	161
	12.2 Inverted firm	165
	13.1 Value configurations for digital innovations	169
	14.1 Digital innovation ecosystem	181
	14.2 Snapchat ecosystem	182
	14.3 Initial Business Model Assessment	183
	16.1 Innovation strategy framework	220
	16.2 Supply ecosystem with competitive supply of inputs and monopsony of the end user	224
	16.3 Digital music ecosystem	224
	16.4 Alternative digital music ecosystem with Apple's iTunes controlling distribution	225
	17.1 Music industry revenues by format	234
	17.2 Patent litigation 1980–2020	236
	17.3 Amazon's one-click ordering patent	237
	17.4 The volume of software-related patents versus other patents	238
	C5.1 Worldwide Spotify users and premium users (subscribers), millions	244
	C5.2 Spotify's global market share in 2021	248
	C5.3 Growth of the main music platforms, millions of users 2016–2021	249
	E.1 Technology cycle	252
	E.2 Industry life cycle	253

Tables

1.1 The world's most valuable companies by stock market capitalization, 2000–2020	<i>page 9</i>
C1.1 Typical profit and loss of paper book and e-book publishing	50
A1.1 Barnes & Noble financial statement 2008–2013	52
6.1 Some common cognitive biases	79
7.1 Complements of data in value creation	97
C2.1 <i>The New York Times</i> Company financials (in \$ millions)	113
11.1 The world's most valuable companies by stock market capitalization and their main services, 2021	142
13.1 Competitor grid example: a (fictional) new electronic device	172
13.2 Revenue mechanisms for digital consumer services	175
13.3 Revenue mechanisms for hardware products and systems	177
14.1 AR Fashion competitor grid	186
C4.1 Uber's financial results (in \$ millions)	196
15.1 Target market segment grid for individual users	203
15.2 Target market segment grid for organizational (business) users	203
16.1 Strategies to enhance differentiation of digital innovations	219
16.2 Ecosystem strategies	226
C5.1 Spotify revenue, 2017–2021 (millions of euros)	245
C5.2 Spotify cost of revenue, 2017–2021 (millions of euros)	246
C5.3 Spotify operations data, 2017–2021 (millions of euros)	247
E.1 Stages of the innovation cycle	254
E.2 Multiplayer AR gaming opportunity assessment	258
E.3 Autonomous trucking opportunity assessment	261
E.4 Smart seaport opportunity assessment	263

Preface

Overview

This is a textbook aimed at MBA and advanced undergraduate audiences interested in innovation strategy and competition in digital industries. The content is based on applied economics and innovation from the perspective of an innovator seeking to develop a new digital business. The book describes the context and evolution of information and communication technologies, including the internet, and ends with the prospect of an Internet of Things based on 5th generation wireless communication systems. It reviews the strategies related to pricing, networks, standards, and platforms and then embeds the insights in a business model framework to enable bottom-up application of the conceptual frameworks in developing and launching new digital products and services. The final section previews the 5G-enabled Internet of Things to suggest avenues for further exploration of the topics in the evolving communication technology environment. The book is based on the content from a Cornell University course, Digital Business Strategy, taught since 2002.

This book aims to be a rigorous and research-based text on innovation strategy in the digital economy. The book updates and extends beyond currently available materials by providing a comprehensive analysis of digital innovation and competition and by offering a unique perspective into the future of digital industries via case studies of 5G and the Internet of Things. The topics covered are essential for a broad range of managers, consultants, entrepreneurs, and technologists to understand in depth. Digital strategy is emerging as a core course in all leading business schools and will be central in the business curricula for the next decade.

The book updates and extends the basic insights from the economics of information goods and communication networks with recent examples and advances in the strategy literatures on platforms, competition in digital markets, and the roles of intellectual property rights and other institutional and regulatory drivers in the digital economy. Applying basic economic principles, it develops an integrative framework for designing and experimenting with digital business models. Finally, the core conceptual insights are elaborated in the context of the Internet of Things.

The book contains conceptual material illustrated with many timely examples. Each chapter offers examples and each of the seven parts offers a full case reading followed by study questions to discuss and apply the insights. References are included.

The book is intended for professional students and advanced undergraduates in business or applied economics. It is accessible to anyone with knowledge of introductory economics and business fundamentals. It is primarily descriptive but contains some economics material with mostly graphic explanations. Ideally, the reader will have completed a course on introductory microeconomics and introductory business management. However, the examples and business modeling make it also a valuable basic resource for graduate students and strategy professionals in digital industries.