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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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.