

Corporate Information Strategy AND Management

SIXTH EDITION

THE CHALLENGES OF MANAGERG IN A NETWORK ECONOMY

NNOT FOR RESEARCH M. APPLEGATE ROBERT D. AUSTIN

F. WARREN MCFARLAN

Corporate Information Strategy and Management

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The Challenges of Managing in a Network Economy

Sixth Edition

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Dedicated to our colleague and mentor of many years, James L. McKenney.

Preface

Corporate Information Strategy and Management examines how information technology (IT) enables organizations to conduct business in radically different and more effective ways. The commercialization of the Internet has created a seismic change in the business environment. New channels of supply and distribution are emerging. New electronic marketplaces and exchanges are being created. The infrastructures of firms and the industries within which they operate have been permanently altered.

This is a fast-moving and global phenomenon. For established companies, the resulting challenges have been deep and pervasive. In many cases, the changes have threatened not just a firm's competitiveness but also its survival. Executives bear an enormous burden as they attempt to understand the challenges, keep abreast of events, and make intelligent decisions and plans.

The objective of this book is to provide readers with a better understanding of the influence of 21st-century technologies on business decisions. The book discusses to-day's challenges from the point of view of the executives who are grappling with them. It recounts stories of success and failure, focusing on the issues faced and the decisions made by executives in companies around the world.

The information presented here is organized in an Introduction, four modules, and a Conclusion. The first module is aimed at understanding the impact of IT on industries and markets. It discusses issues of strategic positioning and explains how 21st-century IT provides opportunities to alter market/industry structure, power, and relationships. The second module shifts the focus from the external environment to the internal organization. It explores new organizational capabilities, management/leadership principles, and sources of value that arise within networked companies. The third module turns the reader's attention to operational issues at the interface of business and technology as it examines approaches to designing and managing open-standard, networked technology infrastructures. The fourth module concentrates on leadership and management of IT activities, focusing on the issues that arise at the boundary as four key constituents—business executives, IT executives, users, and IT partners—work together to leverage technology to create a sustainable advantage. The Conclusion summarizes key frameworks, insights, and themes.

The material presented here is the outgrowth of field-based research we have conducted at the Harvard Business School since the early 1970s. To both Dean John McArthur and Dean Kim Clark we express our appreciation for making the time and resources available for us to complete this work.

We are particularly indebted to the executives who provided so much time and insight during the course of our research. Without the cooperation of many executives, the preparation of this book would not have been possible.

We are grateful as well for the many valuable suggestions and insights provided by our Harvard Business School colleagues, especially Jim Cash, Alan MacCormack, Andrew McAfee, Jim McKenney, Richard Nolan, Kash Rangan, and David Upton. In addition, we acknowledge the valued work of our doctoral students, fellows, and research assistants. Our heartfelt thanks go to Nancy Bartlett, Alastair Brown, Meredith Collura, Mark Cotteleer, Melissa Dailey, LeGrand Elebash, Cedric Escalle, Evelyn Goldman, Kristin Kohler, David Lane, Marc Mandel, Felipe Monteiro, Tom Rodd, Mary Rotelli, Deb Sole, George Westerman, and Fred Young. We also acknowledge the support of the directors of Harvard Business School research centers, including Christina Darwall of the California Research Center; Gustavo Herrero, Director of the Latin America Research Center; Camille Tang Yeh, Director of the Asia Pacific Center; and Carin Knoop, Executive Director of Global Research. Thanks go to Alan Murray, a superlative friend and former colleague, who provided important reviews of technical details, especially in the chapter on computer security. Finally, we express our appreciation to our editor, Tom Cameron, and to Jennifer Chalfin, Maureen Donovan, Brooke Spangler, and Maurie SuDock, who provided administrative support.

Lynda M. Applegate
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F. Warren McFarlan

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