

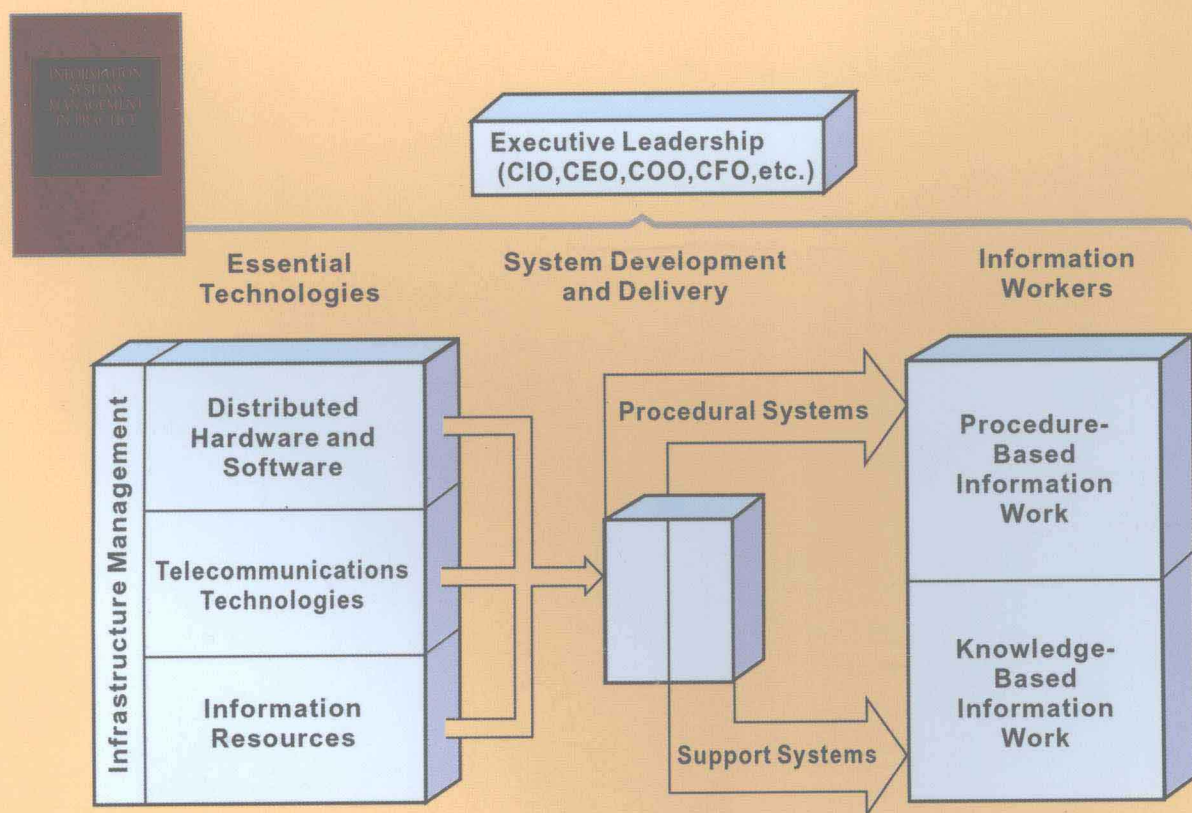
信息管理系统管理实践

Information Systems Management in Practice

(Seventh Edition)

〔美〕芭芭拉·C·麦克纳林 著
拉尔夫·H·小斯普拉格

(第七版影印版)



Barbara C. McNurlin Ralph H. Sprague, Jr.

 国外名校最新教材精选

Information Systems Management in Practice

信息系统管理实践

(第七版影印版)

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西安交通大学出版社

Xi'an Jiaotong University Press

Original edition, entitled INFORMATION SYSTEMS MANAGEMENT IN PRACTICE, 7E, 9780131854710 by MCNURLIN, BARBARA C.; SPRAGUE, RALPH H., published by Pearson Education, Inc, publishing as Prentice Hall, Copyright © 2006 by Pearson Education, Inc.

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China edition published by PEARSON EDUCATION ASIA LTD., and XIAN JIAOTONG UNIVERSITY PRESS Copyright © 2008.

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图书在版编目(CIP)数据

信息系统管理实践=Information Systems Management in Practice:第七版:英文/(美)麦克纳林,(美)小斯普拉格著.一影印本.一西安:西安交通大学出版社,2008.5
ISBN 978-7-5605-2757-4

I. 信… II. ①麦… ②小… III. 管理信息系统-英文 IV. C931.6

中国版本图书馆 CIP 数据核字(2008)第 052105 号

书 名 信息系统管理实践(第七版影印版)
著 者 (美)芭芭拉·C·麦克纳林,(美)拉尔夫·H·小斯普拉格
策划编辑 贺峰涛
责任编辑 鲍媛

出版发行 西安交通大学出版社
(西安市兴庆南路 10 号 邮政编码 710049)

网 址 <http://www.xjtpress.com>
电 话 (029)82668357 82667874(发行中心)
(029)82668315 82669096(总编办)

传 真 (029)82668280
印 刷 西安交通大学印刷厂

开 本 787mm×1 092mm 1/16 印 张 41.75
印 数 0001~3000 字 数 945 千字
版次印次 2008 年 5 月第 1 版 2008 年 5 月第 1 次印刷
书 号 ISBN 978-7-5605-2757-4/C·85
定 价 78.00 元

读者购书、书店添货、如发现印装质量问题,请与本社发行中心联系、调换。

订购热线:(029)82665248 (029)82665249

投稿热线:(029)82665380

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推荐序

由 Prentice Hall 于 2005 年出版、西安交通大学出版社影印出版的 Information Systems Management in Practice (Seventh Edition) (《信息管理系统管理实践》)(第七版)一书是信息管理系统领域一本领先的教科书。

作者 Barbara C. McNurlin 毕业于 University of California, Santa Barbara, 从 1969 年她与自己的父亲 Dick Canning 编写每月一期的新闻通讯 EDP Analyzer, 就开始了信息系统领域的作家生涯, 她特别擅长于从事公司如何创造性地使用信息技术方面的案例写作。她在 Gartner Executive Programs (EXP) 从事研究和写作, 是 MIS Quarterly Executive 的制作编辑, 曾先后两次获得信息管理学会 (Society for Information Management) 的年度论文奖。她还是 California State University, Sacramento 的讲师, 为 MBA 讲授信息系统核心课程。

作者 Ralph H. Sprague, Jr. 是夏威夷大学工商管理学院信息技术管理系的教授, 有 30 多年从事组织中的计算机和信息技术应用的教学、研究和咨询的经验, 他的专长在决策支持系统、战略信息系统规划、信息管理系统以及电子文档管理方面。他发表和出版了数十篇学术论文和专著, 其中关于决策支持系统框架的论文是 1980 年以来信息系统领域引用最多的 25 篇论文之一, 他被公认为是管理信息系统领域 10 位顶尖学者之一。过去的 30 年里, 他曾多次担任 Hawaii International Conference on System Sciences (HICSS) 会议主席或联合主席, 先后给包括 Xerox, Apple, IBM, Coca-Cola of Australia, Fujitsu, Bank of America, the Governments of Egypt and Israel 等机构和组织咨询过。

这两位作者从 1985 年起合作撰写本书的第一版, 2005 年出版的第七版在全球的很多大学和学院使用, 包括 MIS 专业的核心课程和 MBA 的核心课程。

本书论述了当代组织在信息技术 (IT) 管理方面的实践, 重点放在信息系统主管认为重要的一些问题上, 全书的框架便于初学者理解。本书对 MIS 的发展历程进行了细致的描述和回顾, 对各种 IS 管理的风格和战略提供了全面和深刻的见解。第七版增加了如下内容的讨论: 不断增加的 IT 社会风险、数字聚合和短消息等新领域, 对无线技术的最新发展进行了增补, 信息系统外包和信息安全方面得到了更新和加强, 这些工

作使得本书的特色非常突出。首先,本书理论与实践相结合,技术与管理并重。继续保持通过真实世界发生的案例的剖析将理论与实践相结合的风格,其中的许多话题都是当前信息经理们特别关注的,例如领导力问题、信息主管(CIO)的职责、IT 的应用、信息系统规划、关键技术、信息系统的运营管理、系统开发、支持决策的系统和支持知识工作的系统等。

此外,本书的实践性也非常强。本书密切结合信息系统在组织中的实践活动,很多内容来自于作者在一些组织完成的实际工作,如 Gartner EXP, the Sourcing Interest Group, 以及 the Hawaii International Conference on System Science (HICSS)。这些工作不仅仅报告了当前的发展和实践,而且包括为信息系统经理们提供的指南、原理和战略的深思熟虑的解释。本书围绕信息系统经理最为关注的一些问题提供了 90 多个案例,包括每篇结束后的大案例,这些案例与理论和当前的实践密切相关,文笔流畅,内容有趣,反映了信息系统管理中碰到的各种问题和解决方案。

本书特别适合于我国信息管理与信息系统、电子商务、信息工程等专业的本科高年级相关课程的教材和教学参考书,以及工商管理硕士管理信息系统课程的教材和教学参考书,对于我国各类组织的信息系统经理或者高层主管了解信息系统在组织中的应用实践也是一本相当出色的参考书。

王刊良
西安交通大学管理学院
2008 年 4 月

This book is dedicated to our parents
Dick and Peggy Canning
and
Ralph and Virginia Sprague
for all their inspiration, guidance, and support.

Preface

This book deals with the management of information technology (IT) as it is being practiced in organizations today. Successfully managing IT has become crucial for several reasons:

- IT is now a strategic asset that is being used to mold competitive strategies and change organizational processes.
- The situations in which organizations are applying IT have increased in complexity, including more interorganizational environments.
- The capabilities of IT and the complexities of using the technologies are also growing at an accelerating rate.
- As IT and its uses become more complex, developing strategies and systems to deliver the technology has become more difficult.

The net result is a growing need for guidance on the issues, strategies, and tactics for managing the use of IT. To partially satisfy this need, universities and colleges have developed courses that focus on the management of IT. Textual material for these courses has been sparse for two particularly troublesome reasons.

First, IT is changing so rapidly that textbook authors, practitioners, researchers, and academics have a difficult time staying current. For example, two major developments stand out. One has been the fast uptake of business uses of the World Wide Web. This dramatic shift appears to be a precursor of a current revolution—wireless handheld computing—which is beginning to change how we all work, live, and play. Thus, while information systems (IS) departments are busily creating an Internet-based platform for their enterprises, they must also be experimenting with another computing platform: small wireless devices.

The second major development is the changes in the business world itself. Terrorism, corporate malfeasance, cybercrime, regional conflicts, and outsourcing are changing how profit and nonprofit enterprises conduct business. As a result, the work of IS organizations and the roles CIOs need to fill are changing as well. Keeping abreast of these business-world changes, and the responses businesses are making to them, is also difficult.

Another reason for the paucity of IT textual material for these courses is that the principles and strategies of effective management are evolving out of the experiences of practicing managers. Merely collecting reports from current literature fails to provide the interaction needed to decipher principles from the lessons learned in practice. Current developments and experiences need interpretation and coalescence to provide the guidance that new and practicing managers need to further develop their knowledge and managerial skills.

CONTRIBUTION OF THIS BOOK

We believe this book makes a major contribution to addressing both of these challenges. One resource for this book is work we have performed for several organizations—Gartner EXP, the Sourcing Interests Group, and the Hawaii International Conference on System Sciences (HICSS), in particular. Our work for these organizations does not merely report current developments and practices; it includes thoughtful interpretation to provide guidance, principles, and strategies for IS executives.

Our objective in this book is to capture the material of most current importance to IS executives and to organize it around a framework that provides guidance for IS organizations. A key element of our writing continues to be examples of actual work in companies. This book includes over 90 case examples.

USE OF THIS BOOK BY PRACTICING MANAGERS AND CONSULTANTS

In the management of IT, this book is useful to several levels of managers:

- To senior business executives who want an overview of the issues and strategies in managing IT, with examples of what other enterprises are doing
- To CIOs who must implement IT as a strategic resource to help their enterprises attain their overall goals and objectives
- To IS managers who are responsible for major technical areas, such as system development, technology planning, and architecture
- To managers of functional units who (1) want to better understand the issues and processes of providing IT support for their areas of responsibility, (2) want to promote the use of IT in their organization, or (3) are now responsible for overseeing the management of IT in their function

We believe that managers of all types will find this book valuable. By focusing on issues and strategies while explaining technical concepts, this book provides an overview of IS management for business executives and managers. By combining the experiences of successful executives this book provides a real-world perspective for all IS managers.

Consultants to executives and managers will also find this book a useful reference for staying up-to-date on important issues in the field.

USE OF THIS BOOK AS A TEXT

Future IS managers who are graduate or undergraduate students will find that this book presents a view of what “the real world” has in store. As a text, it is intended for students who have had at least one IS course.

At the graduate level, it has been used since its first edition in 1986 for the second course, beyond the required IS course. It is especially well suited for the final course in a graduate curriculum on IS management. In addition, as MBA students have become more computer literate, the book has been increasingly used as the text in the MBA IS core course. In both uses, the book gives students conceptual and practical guidelines for dealing with the management of today’s IS function.

The Instructor's Guide includes:

- Outlines for the six course approaches
- An expanded outline of each chapter
- Answers to the review questions in each chapter
- Study notes for the Part Discussion Cases
- A listing of case studies appropriate for each chapter
- An Image Library of all the figures in the text
- Suggestions on how to conduct site visit exercises
- Several sample syllabi
- An approach to using simulation software
- Critical questions for each chapter and how to create them
- A PowerPoint presentation for each chapter by Michael Matthew. (See Web site description below.)
- Test Item File in Microsoft Word. (See Web site description below.)

These critical questions deserve a short explanation. Like the discussion questions in the text, critical questions are designed to stimulate critical thinking and discussion among students. In the Instructor's Guide, we present critical questions for each chapter, as well as an explanation of how Jerry has helped his students create them, thereby stimulating their critical thinking.

A course in IS management can be exciting—to teach and to take. We have provided the Instructor's Guide to make this one of those exciting courses.

WEB SITE: WWW.PRENHALL.COM/MCNUURLIN

The Web site for this text, provided by Prentice Hall, houses the Instructor's Guide, the Test Item File in Word, TestGen and TestGen in WebCT/BlackBoard-ready files, and the Image Library in a secure area for faculty download only. PowerPoint slides are available in the student area of the Web site. In addition, other items relevant to this text can be found at www.cal.net/~mcnurlin.

FORMAT AND CONTENTS

This book is divided into five major parts, each dealing with a major portion of the field of IT. Chapter 1 precedes Part I because it serves as the framework around which the rest of the book is built. It traces the growing importance of IS management and presents a conceptual model to show the key areas, how they fit together, and the principal issues for executives in each area. It also presents a very interesting longitudinal case example of how these ideas have been implemented in a company over the lifetime of this book—since 1986. In a nutshell, it presents a 19-year historical view of the evolution of IS management.

Part I deals with *leadership issues*, including the top IS jobs, strategic uses of IT, and approaches to systems planning. Part II treats the all-important issues in *managing*

At the undergraduate level, the book can serve as the text for a course dealing specifically with the management of IT or in the capstone course that summarizes the practice of IS for students about to begin their careers. Most undergraduate majors in IT take entry-level positions in the IS organization and then proceed into management. In the short term, they work with IS managers who are facing the problems and using the principles dealt with in this book.

Although this book has not been aimed at students majoring in other areas, non-IS majors are taking IS courses in increasing numbers to better understand how to work with systems professionals. All the chapters are pertinent to them because the theory is illustrated by real-life case studies, which are easily understood by students in all business disciplines.

At the end of each chapter are three types of questions and exercises to reinforce the material in the text.

- *Review questions* are based directly on the material in the chapter, allowing the reader to assess comprehension of the chapter's key principles, topics, and ideas.
- *Discussion questions* are based on a few topics in the chapter for which there is a legitimate basis for a difference of opinion. These questions focus discussion on these issues when the book is used in a seminar or classroom setting.
- *Exercises* provide an opportunity for the reader to put some of the concepts and ideas into practice on a small scale. In particular, one exercise in each chapter requires a student, or a team of students, to visit a local company and discover how the ideas in the chapter are being implemented in that company.

THE INSTRUCTOR'S GUIDE

We accompany this seventh edition with an Instructor's Guide, originally prepared by Jerry McBride of Marist College in Poughkeepsie, New York. Again, Jerry supplies the all-important critical questions in the guide. The purposes of the guide are (1) to help instructors prepare a strategy and outline for conducting an advanced systems course using this text and (2) to provide support materials and techniques to enhance the course.

We believe there are six approaches for using this text. The six course modes are:

1. A lecture-based course
2. A seminar-based course
3. A directed study course
4. An independent study course
5. An action research course
6. An Internet-based course

In the Instructor's Guide, Jerry suggests some interesting resources to use in these approaches. For example, he explains how he has used a computer-based simulation game to help his students understand the consequences of their actions as they try to introduce technology innovation into an organization.

the essential technologies, including distributed systems, telecommunications, information resources, and operations. Part III deals with *managing system development*; its evolution continues to present management with important, yet risky, challenges. Part IV explores *systems for supporting decision making, collaboration, and knowledge work*. Part V concludes the book and discusses the challenges ahead. At the end of Parts I through IV is a Part Discussion Case, which is meant to give students an open-ended case with real-life quandaries that require decisions. These cases are intended to elicit creative thinking and class discussion.

Throughout the book, our objectives have been to keep the material practical, to give examples, and to derive guidance for today's and tomorrow's IS executives based on the experiences of others. To that end, chapters are sprinkled with company examples. These are not so much case studies that require solutions or recommendations; rather, they are case examples of how companies have put some of the ideas in a chapter into practice.

ACKNOWLEDGMENTS

We wish to acknowledge the contribution of Richard G. Canning, Barbara's father. His insight and foresight originally made this book possible in 1986. In the early 1960s, he recognized the data processing executive's need for case studies, practical research findings, and thoughtful analysis. Through publishing and editing *EDP Analyzer* from 1963 until his retirement in 1986, Dick Canning devoted a major portion of his professional career to that purpose. His legacy continues in this book.

We also wish to thank the organizations that have allowed us to draw on work we performed for them—Gartner EXP, the Sourcing Interests Group, and HICSS in particular.

Reviewers for this edition were:

Phil Beck, University of Texas
 Rajiv Kohli, University of Notre Dame
 Roberta Lamb, University of Hawaii
 Mark Lewis, University of Mississippi
 Chunlei Liu, Troy State University
 Karen Reaves, High Point University

Finally, we thank Bill Chismar, Jerry McBride, Michael Matthew, and Tracia McNurlin Barbieri. Bill Chismar was a significant contributor to the fifth and sixth editions. His ideas live on. Jerry was again instrumental in creating the all-important Instructor's Guide. Michael has contributed the thorough PowerPoint slides on the Prentice Hall Web site. And without Tracia's assistance, the Instructor's Guide would not be so thorough.

Barbara Canning McNurlin
Ralph H. Sprague, Jr.
July 2004

The Instructor's Guide includes:

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