

MANAGEMENT INFORMATION SYSTEMS

Strategy and Action

SECOND EDITION
Charles Parker
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Mitchell McGRAW-HILL

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MANAGEMENT INFORMATION SYSTEMS, SECOND EDITION

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Advances in information technology (IT) continue to accelerate. To be competitive in such a dynamic environment, today's graduates can expect to be challenged daily to keep pace with the technical and managerial issues and opportunities surrounding the development and use of information systems. This book is designed for business students and information systems majors who need to understand the emerging role of information systems in business.

Information is the lifeblood of an organization. As managers, graduates will depend on accurate, accessible and useful information. They will depend on information systems to be responsive to their unique information needs, to empower them to think and act strategically, develop effective plans, and make decisions that increase their own and their organization's competitiveness.

Management Information Systems: Strategy and Action, Second Edition, recognizes that access to the right information at the right time is pivotal to developing a strategic posture that exploits opportunities and thwarts threats posed by the dynamic business environment of the 1990s.

MAJOR THEMES OF THIS TEXT

To prepare graduates to meet the challenges of the 1990s, the following themes guided the development of this text:

Corporate Strategy

Most organizations are guided by a corporate strategy. Increasingly, IT plays a crucial role in the development and implementation of such strategies. The importance of strategy, critical success factors, and competitive applications of IT is a theme of this text, and demonstrates IT's potential to enhance management's productivity, operational efficiency, and the overall effectiveness of organizations.

Bias Toward Action

Ultimately, people - managers, users, and IS specialists working together are responsible for the success or failure of an information system. Therefore this text balances technical issues with managerial issues. This theme is punctuated by:

- the integrated use of real-world examples throughout the text
- boxed feature articles highlighting the issues surrounding IT in a broad spectrum of organizations

 case studies illustrating how actual businesses have applied IT to enhance their competitive advantage

Networking and International Issues

As international competition increases, organizations have become increasingly alert to opportunities to integrate computing and communication technologies in new and innovative ways. As a result, organizations have managed to increase their productivity and market share, improve and expand product lines, and leverage existing services on both domestic and international fronts. While the focus of Chapter 8, the pervasive nature of networking, the emergence of global information systems, and associated management issues are addressed throughout this book.

CURRENT COVERAGE

All of the topics of concern to tomorrow's managers are covered in this text. The following figure summarizes many of them.

Topic Primary Coverage

Backbone networks Chapter 8

CASE technology Chapters 6, 14, 15, and 16

CISC versus RISC processors Chapter 5
Client-server systems Chapter 8

Computer security Chapters 16 and 19
Critical success factors Chapters 3 and 18

Data administration Chapter 7
Database management Chapter 7

Distributed systems Chapter 8, and throughout the text

Distributed databases Chapter 7

Downsizing Chapter 18, and throughout the text Chapters 8, 9, 13, and throughout the text

End-user development Chapter 17

Ethical issues Chapters 6 and 19

Expert systems/AI Chapter 11

Ergonomics Chapters 2 and 15

Executive information systems Chapter 10

External databases Chapters 7, 8, and 10

Fourth generation languages Chapters 6, 10, 15, 16, and 17

Fuzzy logic systems Chapter 11

Global networks Chapters 8, 18, and 19

Graphical user interfaces Chapter 6
GDSSs Chapter 10

Groupware Chapters 10 and 12 Imaging systems Chapters 5 and 12

xviii PREFACE TO THE INSTRUCTOR

Topic

Information centers

Intelligent copiers

International issues

Interorganizational MISs

ISDN JAD

Local area networks

Management of quality

MRP II

Multimedia systems

Natural language systems Network management Network operating systems

Neural networks

Object-oriented programming

Optical disk technologies

Outsourcing

Parallel processing

Personal digital assistants

Pen-based computers

Prototyping

RAD

RAID systems Robotics

Smart-card systems

Strategic MISs

Strategic planning

SQL

Telecommunications

Telecommuting

Teleconferencing

Voice-based systems

Wide area networks

Wireless networks

Primary Coverage

Chapter 17

Chapter 12

Chapters 8, 18, 19, and throughout the text

Chapters 1, 3, 7, 8, 12, 18, and 19

Chapter 8

Chapter 15

Chapters 5 and 8

Chapters 3, 4, and 12

Chapter 13

Chapter 7

Chapters 6, 11, and 12

Chapters 8, and 19

Chapters 5 and 8

Chapter 11

Chapters 6, 15, and 16

Chapters 5 and 12

Chapters 6 and 18

Chapters 5 and 6

Chapter 12

Chapter 5

Chapters 14, 15, 16, and 17

Chapter 15

Chapter 5

Chapters 11 and 14

Chapter 5

Chapter 1, 18, and throughout the text

Chapters 3 and 18

Chapter 7

Chapter 8

Chapter 12

Chapter 12

Chapters 5, 11, and 12

Chapters 8 and 19

Chapter 8

PRIMARY CHANGES

The reception to the First Edition of Management Information Systems: Strategy & Action was overwhemingly positive. Adopters and reviewers have helped us keep pace with their students' needs and course objectives. Below is a summary of their primary suggestions and how we've responded in the Second Edition.

Suggested Change

Increase emphasis on managerial issues

Reduce coverage of hardware details

Integrate coverage of distributed systems and networking

Increase coverage of EDI and interorganizational systems

Highlight international issues where most relevant

Alert students to the ethical issues raised by the use of information technology

Include coverage of GDSS, groupware, and workgroup computing

Increase coverage of downsizing and outsourcing

Increase emphasis on the use of information systems in small business

Improve text design

Our Response

Increased emphasis throughout the text, especially in chapters 14-17

Consolidated and updated previous chapters 5 and 8 into new Chapter 5

Coverage integrated throughout the text, especially in chapters 8, 18, 19

Expanded coverage in chapters 8, 9, 18, and 19 demonstrates strategic importance of electronic links between firms

Examples of international issues added to each chapter; expanded coverage in chapters 8, 18, and 19 illustrates the role of global networking in multinational firms

Expanded coverage of ethics in chapters 6 and 19; examples interspersed throughout the text

New coverage added to chapters 10 and 12 illustrate the types of systems available to support workgroup activities

New coverage added to Chapter 18 illustrates why these are key managerial issues for the 1990s

Several new end-of-chapter cases stress small business issues; more small business examples integrated throughout the text

New design of figures makes the subject easier and more interesting to understand

FLEXIBLE, MODULAR ORGANIZATION

The modular approach of this book provides maximum instructional flexibility. The text is divided into six parts:

Part One: Introduction covers the major roles played by information systems and how they have emerged as strategic weapons in the corporate arsenal. MIS fundamentals along with examples illustrating the goals and potential benefits of information systems are included.

Part Two: People, Organizations, Systems, and Management covers the role of people and human factors in information systems, how information systems vary across different types of organizations, how organizational systems can help develop and implement long-range plans to compete in

our dynamic business environment, and how information systems can help managers make effective decisions and fulfill the many roles they are asked to play.

Part Three: Information Technology Concepts overviews fundamental hardware, software, database management, and telecommunications concepts that are important for the manager of the 1990s to understand.

Part Four: MIS in Practice addresses transaction processing systems, management reporting systems, decision support systems, workgroup support systems, executive information systems, knowledge-based systems, and office information systems. Information technology related to the functional areas of business are also discussed.

Part Five: Building MISs examines both traditional and emerging systems development practices. The roles of managers and users in systems development are emphasized as well as the importance of user training and the utilization of newer approaches that often enable organizations to implement new systems quickly and effectively.

Part Six: Information Systems Management covers several management-related topics including linking MIS plans with corporate strategic plans, international issues, downsizing, outsourcing, computer ethics, computer security, and future information technology developments.

This modular organization recognizes that various approaches are used to teach MIS, and enables instructors to customize the text to meet their specific course objectives.

Instructor's Supporting Materials

Management Information Systems: Strategy & Action, Second Edition, is accompanied by the following support materials:

Instructor's Manual The author-written Instructor's Manual contains lecture outlines, teaching tips and strategies, and answers to all review, discussion, and in-text case study questions for each chapter.

Transparency Masters A set of more than 100 ready-to-use transparency masters supports this text. The set includes figures in the text and original figures. The masters are keyed to the lecture outlines in the Instructor's Manual.

Computerized Test Bank The author-developed Test Bank, available in hardcopy and computerized formats, contains approximately 3000 true/false, multiple choice, fill-in, and matching questions.

Ethical Decision Making and Information Technology: An Introduction with Cases, by Kallman and Grillo is designed for use as a case study supplement in any MIS course. Chapter 1 defines ethics. Chapter 2 relates ethics to the use of IT. And by applying a 4-step analysis process to an ethical dilemma, Chapter 3 illustrates how to reach a defensible decision. The 18 cases that follow challenge students to apply the knowledge they've gained

in chapters 1-3 to recognize, evaluate, and react responsibly to ethical dilemmas. Mitchell McGraw-Hill, 1993, ISBN: 0-07-033884-1.

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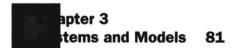
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