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# PLANNING AND IMPLEMENTING END-USER INFORMATION SYSTEMS

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OFFICE AND END-USER SYSTEMS MANAGEMENT



Gerald L. Hershey Donna L. Kizzier



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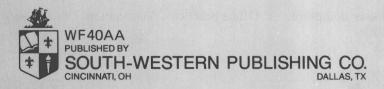
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Cincinnati, Ohio

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ISBN: 0-538-70219-2

### 1234567890 MT 0987654321

Printed in the United States of America

Acquisitions Editor:

Randy R. Sims Gayle Entrup

Developmental Editor:
Production Editor:

Martha G. Conway

Designer:

Darren Wright

Production Artist:

Sophia Renieris

Associate Photo Editor/Stylist:

Mike O'Donnell

### Library of Congress Cataloging-in-Publication Data

Hershey, Gerald L.

Planning and implementing end-user information systems: office and end-user systems management / Gerald L. Hershey, Donna L. Kizzier with Joel D. Levy, Robert A. Miller, Amy D. Wohl.

p. cm.

Includes index.

ISBN: 0-538-70219-2

1. System design. 2. End-user computing. 3. Office practice—Automation. I. Kizzier, Donna L. McAlister. II. Title.

OA76.9.S88H46 1992

651.8'421—dc20

91-18747

### **PREFACE**

This book is designed to introduce students to guidelines, techniques, and principles for planning and implementing end-user and office information systems. The textbook and its accompanying supplemental materials were reviewed and endorsed by the Office Systems Research Association (OSRA) for use in OSRA curriculum courses OS-2 (Office Systems Planning) and OS-3 (Office Systems Implementation).

This book reflects the philosophy and experiences of its authors and also draws upon the experiences of hundreds of other end-user systems (EUS) professionals. The text breaks new ground not only by adapting proven traditional planning and implementation strategies to EUS but also by developing new guidelines, techniques, and principles which can be used in the EUS environment. We share with you some of our philosophy and focus in writing this book.

- We agree with the hundreds of publications during the last few years which emphasized that information systems professionals need to better understand the "business" of the organizations in which they work. Thus, throughout this text, we have included several examples and exercises which require students to think about the "business" to be supported by end-user and office information systems. The comprehensive A&B Manufacturing case study provided within this textbook demands students' attention to cross-functional and business issues.

  We believe that end-user and office information systems are the "life-
- We believe that end-user and office information systems are the "lifelines" of many organizations. Those employed to plan, implement, and support such systems will interact with employees at every level of the organization and with every type of business function and activity. These EUS professionals must develop important skills, abilities, and understandings which go far beyond technical competence. Throughout this book, we emphasize the importance of the following skills:
  - —honing interpersonal and communication skills
  - -understanding the political aspects of decision making
  - —developing a client-oriented approach
  - -recognizing and respecting human factors
  - -focusing on the "business" of the business
- We believe in linking the guidelines, principles, and strategies presented in the text with real-world practice. Thus, real-world examples

are sprinkled throughout the chapters. In particular, the "EUS in Action" section at the end of each chapter summarizes key ideas from selected publications. You will also find discussions of topics seldom mentioned in other textbooks—such as resolving conflict, working with vendors, and fitting systems to match corporate cultures. The content of every chapter is flavored with reality—the reality of learning about the differences among organizations and how these differences affect the work of EUS professionals.

In summary, we have attempted to provide a textbook and learning activities based on real-world situations. We also believe the EUS professionals of tomorrow will need to be more flexible and versatile than ever. They will need to continue their education and adjust to a rapidly changing environment. Study of this text and completion of the accompanying activities and case study will help prepare students for successful careers in planning and implementing end-user information systems.

### ORGANIZATION OF TEXT

This text provides you with 19 chapters, 3 appendices, and a comprehensive case study. The chapters are divided into six major parts.

Part I, "Development of EUS," traces the development of the concept of EUS and defines and distinguishes among the concepts of office information systems, management information systems, end-user systems, and related information systems. Part I also provides an overview of EUS planning and implementation issues, contrasting traditional data processing planning with EUS planning and presenting the challenges to merging new EUS systems with existing operations. New and emerging careers in EUS are presented as are EUS technology trends and how EUS interacts with business practice, with society, and with business personnel.

Part II, "EUS Culture and Personnel," discusses organizational changes and issues, the impact of EUS on personnel, and how to integrate personnel into EUS planning and implementation. Part II introduces some of the policy, political, interpersonal, ergonomic, and productivity perspectives which need to be considered when planning and implementing EUS in an organization.

Part III, "Planning Considerations and Approaches," discusses how to plan the EUS project, document the current system, conduct the feasibility study, use data collection tools and processes, and analyze and report planning results. The A&B case is first referred to in Part III.

Part IV, "Design Requirements," describes how to define requirements, develop specifications, and incorporate human factors in the design process.

Part V, "OIS Integration Issues," includes information on how to integrate systems, obtain external assistance, and develop internal supporting services.

Part VI, "Implementation," examines how to coordinate implementation, implement EUS training and development programs and activities, and evaluate, revise, and maintain an EUS system.

The A&B Manufacturing Company case study is placed after Chapter 19 and before the three appendices. The case is introduced at the beginning of Part III and is referred to throughout the rest of the textbook.

The three appendices supplement the chapter material. Appendix A provides a description of and instructions for the 12 decision assistant tools. Appendix B, "Project Management," provides students with information and tools to help them manage projects. Appendix C, "Communications Analysis Tools," provides students with information and tools to help them analyze communication patterns and relationships within organizations.

### SPECIAL FEATURES FOR STUDENTS

Within each chapter, students will find the following special features helpful:

- Behavioral objectives at the beginning of each chapter.
- EUS in Action, to blend real-life examples with chapter content.
- Chapter summary.
- Key terms in boldface within the text are defined in the margin and listed at the end of the chapter.
- Review questions.
- Discussion questions.
- Situational Activities or A&B Case Applications.
- Multiple diagrams and illustrations.
- Relevant references.

At the end of the book, students will find the following helpful features:

- Glossary, with key terms defined in more depth than in the margin definitions.
- Comprehensive A&B Manufacturing Company case.
- Decision Assistant Appendix.
- Project Management Tools Appendix.
- Communications Analysis Tools Appendix.

Also packaged with this book you will find the Decision Assistant diskette, which contains 12 software tools to assist students with solving problems related to the A&B Case. The decision tools include:

- Framework for Organizational Change.
- Evaluating Human Resources.
- Organizational Goals Analysis.
- Decision Process Selection.

- Multi-Attribute Scoring.
- Five Core Job Characteristics.
- Cost/Benefit Analysis.
- Evaluation Matrix.
- Project Planning Chart.
- Centralization and Decentralization.
- Pro-Con Choice Analysis.
- Key Actor Analysis.

### SPECIAL FEATURES FOR INSTRUCTORS

To assist the instructor, the instructor's manual contains solutions to the review questions, discussion questions, situational activities, and case applications (including decision assistant tools) found at the end of each textbook chapter. In addition, the instructor's manual contains true-false, multiple-choice, and essay test items and answers. These test questions are also available on the computerized test bank.

To help the instructor plan individual classes more efficiently as they relate to specific chapters, we have provided teaching ideas and a teaching outline for each chapter. At least three transparency masters are also included for each chapter.

Additionally, the instructor's manual provides the instructor with suggestions for planning either a one- or two-semester course in EUS planning and implementation. The two-semester plan allows in-depth coverage and use of the A&B case as well as heavy use of other end-of-chapter student activities. We strongly believe that student involvement such as that provided by the A&B case is essential to mastery of the text materials.

### **ACKNOWLEDGEMENTS**

The authors would like to thank those who have had an influence on this text and supplemental material:

- The following reviewers for their many useful comments and suggestions: Ms. Rebecca I. Ford (Atlanta, Georgia); Mr. Cory K. Foster, Miami University (Oxford, Ohio); Ms. Ann Goodine (Redondo Beach, California); Dr. C. Steven Hunt, Western Kentucky University (Bowling Green, Kentucky); Dr. Robert M. Schramm, University of Wisconsin-Whitewater (Whitewater, Wisconsin); Dr. E. Ray Smith, Western Illinois University (Macomb, Illinois); and Dr. Robert D. Spillman, Radford University (Radford, Virginia).
- OSRA, for their endorsement and careful review of this project.
- Connie Pollard, who competently and enthusiastically cowrote part of the instructor's manual and provided many helpful suggestions for the project.

- Our colleagues at the University of North Carolina-Greensboro and the University of Nebraska-Lincoln for their encouragement and valuable advice.
- Our family and friends for their support, love, encouragement, and patience, especially Cherry, Debra, and Michael, and Ryan, Nicole, and Gail.

We want to meet the needs of students and instructors. Please send us your ideas and suggestions for improvements.

Gerald L. Hershey and Donna L. Kizzier

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# PART 1

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