

Instructor's Resource Manual with Test Bank to Accompany

# ***MANAGEMENT INFORMATION SYSTEMS***

## ***A USER PERSPECTIVE***



***SECOND EDITION***

***JAMES O. HICKS JR.***

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# **MANAGEMENT INFORMATION SYSTEMS: A USER PERSPECTIVE**

*SECOND EDITION*

***James O. Hicks, Jr.***

*Virginia Polytechnic Institute and State University*

West Publishing Company  
St. Paul New York Los Angeles San Francisco

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50 West Kellogg Boulevard  
P.O. Box 64526  
St. Paul, MN 55164-1003

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Printed in the United States of America

ISBN 0-314-34788-7

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## **PREFACE**

This manual has been developed as a teaching aid for use with Management Information Systems: A User Perspective. It provides the instructor with the following resources:

### **AUTHOR'S NOTES**

These sections provide some of the rationale behind each chapter from the author's viewpoint. Where appropriate I have also included my experiences from the classroom, especially how students usually respond to the material in the chapter. I hope these sections will be helpful to you. I invite you to contribute your own ideas and techniques for a new section (credited to you, of course) in future resource manuals and/or updates to be called "User Notes" (See the questionnaire accompanying this preface).

### **CHAPTER OVERVIEW**

The overview does not summarize the chapter. It briefly describes the topics covered to give you a quick review.

### **LECTURE OUTLINE**

The lecture outline parallels the content of a chapter. You will note that the lecture outline is more than just a major heading outline of the chapter. It is an expanded outline which gives you enough detail to quickly review the material in the chapter without having to read all the details of the chapter. I have also double-spaced this outline to give you space to write your own notes within the lecture outline. In addition, the lecture outlines are available to you on a Lecture Outline Diskette from West Publishing Company. You can read this diskette with your word processor, enabling you to modify the lecture outlines to fit your needs. I hope you will find this to be a productive method for creating your own custom lecture outlines.

The transparencies that are useful in illustrating the points in the lecture outline are identified throughout the outline. Also, the key terms which are listed at the end of each chapter are identified in the lecture outline through underlining.

### **TRANSPARENCIES**

The transparencies for this text come in a separate package from the Instructor's Resource Manual. They can be used on an overhead projector or copied onto ditto masters for reproduction as handouts to the student. Most of the transparencies are adapted from the non-photo figures in the text. Those that come from the text are identified with text figure numbers. Thus, the students will know that they are text figures and can listen to your lecture rather than frantically attempting to copy down important information from the overhead. This text is accompanied by a particularly large number number of transparencies. I have attempted to illustrate as many points as possible through transparencies.



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## CHAPTER REVIEW QUESTIONS

The review questions are open-ended questions that can be answered from the material in each chapter. I have found them very useful for asking students review questions in the classroom environment.

## DISCUSSION QUESTIONS AND CASES

These class discussion questions and cases provide often controversial issues to which there is no single answer. They may be used in the classroom to generate student discussion. A possible response is included in the resource manual to each of these discussion questions.

## MIS STRATEGIES DISCUSSION

The MIS Strategies are designed to give the student's a feel for some of the current areas that MIS practitioners are concerned with. The discussion questions at the end of each MIS Strategy encourage students to think about the material presented. A response is included in the instructor's resource manual for each of these questions.

## TEST BANK

A major feature of Management Information Systems: A User Perspective is its accompanying test bank. This test bank is printed in the instructor's resource manual at the end of each chapter. There are approximately 1,600 multiple choice questions from which you can choose.

## INSTRUCTOR'S SUGGESTIONS

I am sure you have many good ideas that enhance your teaching of information systems. I would be grateful to hear from you about them. Forms for your response is provided following this preface. Please feel free to add additional pages if the form does not provide sufficient space for your response. If you will share your ideas, I will in turn share them (with credit) with all the other instructors who use this text - in the next Instructor's Resource Manual and/or update. I would appreciate hearing from you about:

- Strategies you use in class to enhance student interest, involvement, and learning.
- Slides or transparencies you use to illustrate information systems concepts.
- Films and other audio visual aids you have found to be of high quality.
- References you think instructors should be aware of.
- Your favorite test questions.
- Your suggestions for improvement of the text or any of the ancillary materials that are part of this information systems teaching and learning package.

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# MANAGEMENT INFORMATION SYSTEMS: A USER PERSPECTIVE

James O. Hicks, Jr.

## EVALUATION OF THE INSTRUCTOR'S RESOURCE MANUAL

Please complete this questionnaire using the following rating system:

- 1 Useful: Expand next time
- 2 Useful: Keep as is
- 3 Not useful: Eliminate

Use the space on the bottom and the Instructor's Suggestions form for your suggested improvements. Please include any references that we might need.

Author's Notes	1	2	3
Chapter Overview	1	2	3
Lecture Outline	1	2	3
Transparencies	1	2	3
Chapter Review Questions	1	2	3
Discussion Questions and Cases	1	2	3
MIS Strategies Discussion	1	2	3

SUGGESTED IMPROVEMENTS:

## INSTRUCTOR'S SUGGESTIONS

1. My favorite teaching strategies:

2. Slides or transparencies I show to illustrate information systems concepts: (please provide information regarding copyright or source so that we may obtain appropriate permissions and give credit where due)
3. Films and other audiovisual aids I have found to be of high quality: (please provide information regarding copyright or source, or addresses from which these items can be obtained)

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4. References I think other instructors should be aware of: (please supply author(s), title, journal number and issue or book title, date, pages, and (if book) publisher and place of publication for each)
  
  
  
  
  
  
  
  
  
  
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  6. My own favorite test questions: (Do you wish to be given credit for their use? If so, by what name and title?)
  
  
  
  
  
  
  
  
  
  
  7. Specific problems I encountered while using the Instructor's Resource Manual, Test Bank, Study Guide, and/or text:



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## CONTENTS

<b>PREFACE</b>	.....v
<b>CHAPTER 1</b>	<b>An Introduction to Data and Information Processing .....1-1</b>
<b>CHAPTER 2</b>	<b>Management Information Systems Concepts .....2-1</b>
<b>CHAPTER 3</b>	<b>Information Processing Applications .....3-1</b>
<b>CHAPTER 4</b>	<b>Personal Computers .....4-1</b>
<b>CHAPTER 5</b>	<b>The Central Processing Unit and Storage Devices .....5-1</b>
<b>CHAPTER 6</b>	<b>Data Entry and Information Response .....6-1</b>
<b>CHAPTER 7</b>	<b>Data Storage and Processing .....7-1</b>
<b>CHAPTER 8</b>	<b>Data-Base Management Systems .....8-1</b>
<b>CHAPTER 9</b>	<b>System Software .....9-1</b>
<b>CHAPTER 10</b>	<b>Distributed Data Processing and Office Automation .....10-1</b>
<b>CHAPTER 11</b>	<b>Behavioral &amp; Organizational Concepts .....11-1</b>
<b>CHAPTER 12</b>	<b>Systems Fundamentals .....12-1</b>
<b>CHAPTER 13</b>	<b>Systems Analysis .....13-1</b>
<b>CHAPTER 14</b>	<b>Systems Design and Implementation .....14-1</b>
<b>CHAPTER 15</b>	<b>Programming Languages .....15-1</b>
<b>CHAPTER 16</b>	<b>Application Development by Users .....16-1</b>
<b>CHAPTER 17</b>	<b>Decision Support Systems .....17-1</b>
<b>CHAPTER 18</b>	<b>Computer System Evaluation and Acquisition .....18-1</b>
<b>CHAPTER 19</b>	<b>Information Systems Control and Security .....19-1</b>
<b>CHAPTER 20</b>	<b>Management of Information Systems .....20-1</b>
<b>CHAPTER 21</b>	<b>Information Systems and Society .....21-1</b>
<b>CHAPTER 22</b>	<b>Information Systems and You .....22-1</b>

## ***CHAPTER 1***

# ***AN INTRODUCTION TO DATA AND INFORMATION PROCESSING***

### **AUTHOR'S NOTES**

The purpose of this chapter is to introduce the student to basic computer and information processing concepts. These basic concepts will form the necessary foundation for the subsequent material in the book and for class discussions.

### **CHAPTER OVERVIEW**

Computers are an important part of everyday business. This chapter first defines what a computer is and describes the capabilities and characteristics of a computer. An overview of a computer system is covered along with input devices, the central processing unit, secondary storage, and output devices.

The chapter then covers the steps in data processing, discussing the operations in each step. Following a discussion on the qualitative characteristics of information, this chapter concludes with a discussion on the impact of computer data processing on business.

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## LECTURE OUTLINE - AN INTRODUCTION TO DATA AND INFORMATION PROCESSING

- I. A computer can be defined as an information processor that is able to perform substantial computation, including numerous arithmetic or logical operations, without intervention by a human operator.
  - II. A computer should have the following characteristics and capabilities (T-1-1):
    - A. Electronic - A computer operates by the movement of electronic pulses through circuits rather than by the mechanical movement of parts.
    - B. Can perform arithmetic operations - A computer must be able to add, subtract, multiply and divide.
    - C. Can compare - The ability to compare one piece of information with another (to determine whether they are equal, whether one is less than the other, and so on) is essential to the operation of a computer.
    - D. Has internal storage and retrieval of data - Some computers can store several million characters of data within their central processing unit.
    - E. Can execute a stored program - A computer can internally store (or hold) the instructions for operations to be performed on data.
-

This set of instructions for a particular computer run is called a program.

- F. Has choice of alternative execution paths within a program - A computer can choose (or branch) among different sets of program instructions based on the values of the input data.

III. A stored program gives the computer three advantages:

- A. It enables the computer to operate at electronic speeds.
- B. It provides tremendous reliability.
- C. It makes the computer general purpose - the stored program can be changed.

IV. All computer systems have four categories of devices (T-1-2; T-1-3; T-1-4):

- A. Input - Input devices include keyboards, cathode ray tubes, optical scanners, voice recognition devices and various other devices (T-1-3).
  - B. Processing - The processing role in a computer system is performed by the central processing unit (CPU). The CPU has three components (T-1-5):
    - 1. the control unit
    - 2. the arithmetic-logic unit
-

3. primary storage

- C. Storage - Secondary storage is used for relatively long-term storage of data. The most widely used secondary storage devices are magnetic disk and magnetic tape (T-1-3).
- D. Output - Output devices include printers, cathode ray tubes, voice output, graphics terminals and many other devices (T-1-3).

V. Data versus Information

- A. Data processing is the capture, storage, and processing of data for the purpose of transforming it into information useful for decision making.
- B. Data are collected facts that are generally not useful for decision making without further processing.
- C. Information is directly useful in decision making. It is based on processed data and therefore is the output of a data processing system.

VI. Steps in data processing (T-1-6) illustrate how data is transformed into information through the steps in data processing.

- A. Input