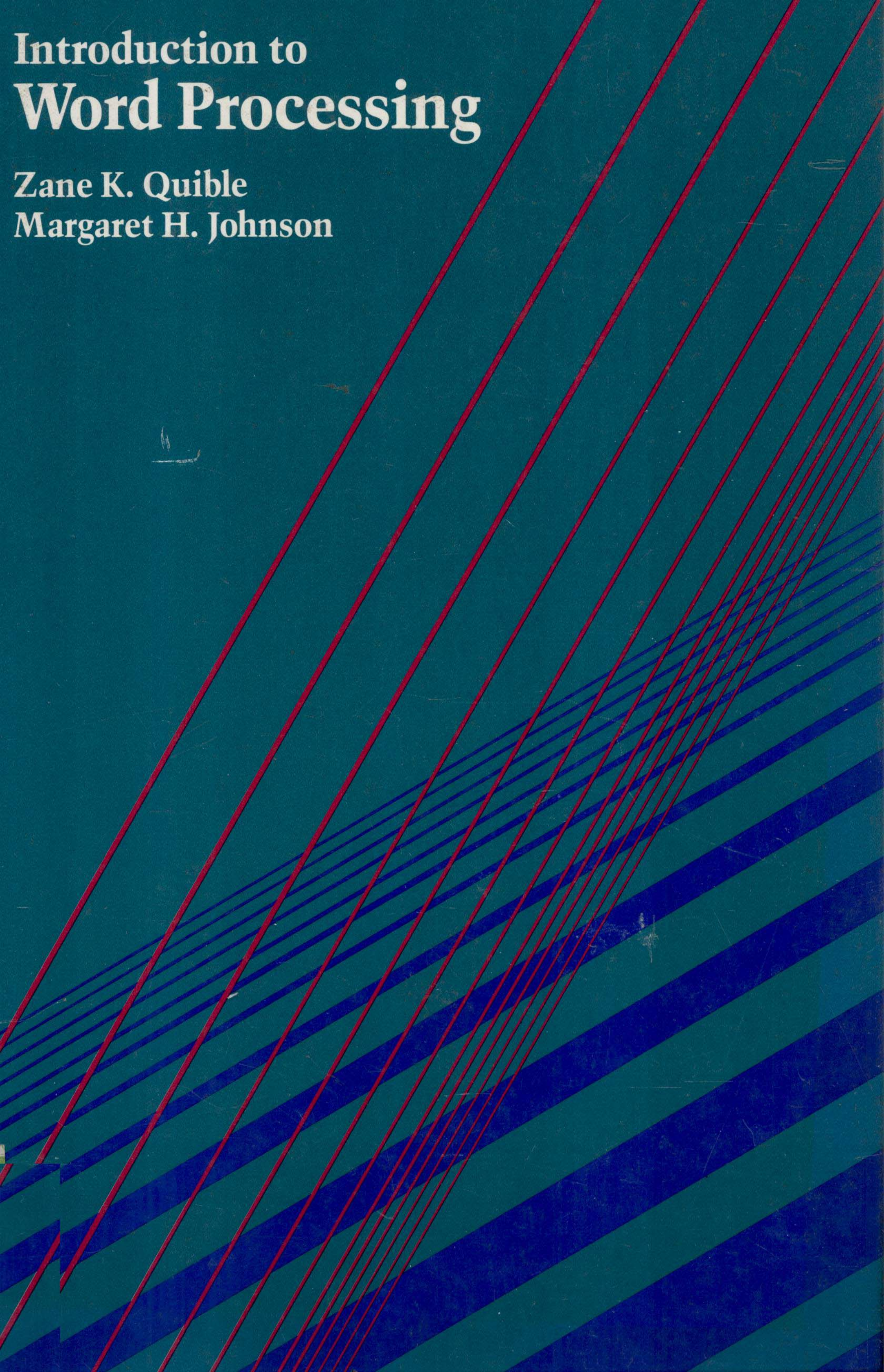
Introduction to Word Processing

Zane K. Quible
Margaret H. Johnson



Introduction to Word Processing

Zane K. Quible, *Michigan State University*
Margaret H. Johnson, *University of Nebraska*

Winthrop Publishers, Inc. Cambridge, Massachusetts

Library of Congress Cataloging in Publication Data

Quible, Zane K
Introduction to word processing.

Includes index.
1. Word processing (Office practice)
I. Johnson, Margaret H., joint author.
II. Title.
HF5547.5.Q52 651.7 79-27935
ISBN 0-87626-446-1

For Clare and Kenneth Quible and Mary Ruth and George Higgins

Cover and interior design by Dianne Smith Schaefer

© 1980 by Winthrop Publishers, Inc.
17 Dunster Street, Cambridge, Massachusetts 02138

All rights reserved. No part of this book may be reproduced in any form or by any means without permission in writing from the publisher.

Printed in the United States of America

10 9 8 7 6 5 4 3 2 1

Preface

Word processing is here to stay. At the time the concept was first introduced in this country, many people were skeptical, claiming that word processing was nothing more than a fad that would vanish about as rapidly as it emerged. As a system for expediting paperwork, its use continues to expand and will become even more prominent in the office of the future. In time, the word processing concept will likely emerge into information processing.

The short history of word processing has taught us many things, including the following:

The use of microprocessors in the design of equipment is enabling word processing technology to develop very rapidly.
The unique characteristics of each organization prevent the design of one common word processing system suitable for all organizations.
One large centralized word processing center in an organization may not be as satisfactory as several small decentralized centers.
Most problems associated with word processing originate with people, not with the equipment or procedures that comprise the systems.
Not every organization has a need for the installation of a word processing system.
Word processing does not eliminate the need for secretaries who possess shorthand skills.

The authors of this text recognize that the rapidly developing technology may result in certain portions of this text being obsolete by the time it is printed. We have made every effort to include, as reasonably as possible, the most up-to-date material available at the time the text went into production.

An increasing number of colleges and universities are developing word processing courses and curricula. The primary use of this text will be in such programs. It can also be used effectively as a reference for those wishing to learn more about the word processing concept. Employees of organizations investigating the feasibility of installing a word processing system will find the text extremely helpful, as will employees of organizations involved in the installation of a word processing system.

In preparing this text, the authors have kept in mind the need to present the material in a straightforward manner, as simply and as clearly as possible. Technical material has been kept to a minimum.

The chapter sequencing is chronological in nature. That is, the text begins with a discussion of the first phase of installing a word processing system and continues through the several other phases. Chapter 10 is designed to provide the reader with a preview of the word processing concept in the office of the future.

Several aids have been incorporated into this text to help the learner master the material easily and quickly. Each chapter begins with a chapter outline and ends with a series of review questions. Each chapter also contains two cases, which are designed to give learners an opportunity to apply chapter concepts in solving realistic situations.

No text of this nature could be prepared without the assistance of others. For their part in this undertaking, the authors wish to acknowledge the following individuals: Kathy Cavill, Sherri Toohey, Marlene Riggs, Dianne Koch, and Beverlee Bornemeier.

此为试读，需要完整PDF请访问：www.ertongbook.com

Contents

Preface ix

CHAPTER 1 *Word Processing: An Overview* 2

Word processing defined 3
Components of word processing systems 3
The administrative support concept 9
Structure of word processing/administrative support systems 9
Advantages of word processing 12
Historical development of word processing 14
A word processing system illustrated: A narrative 17
Review questions 19
Cases 20

CHAPTER 2 *Determining the Feasibility of Word Processing* 22

Steps in determining feasibility 23
Review questions 43
Cases 44

CHAPTER 3 *Installation of the Word Processing System* 46

Steps in the installation 50
Review questions 70
Cases 70

CHAPTER 4 *Equipment Used in Word Processing* 72

Text-editing typewriters 73
Dictation/recording equipment 83
Copier equipment 91
Telecommunications in word processing 92
Photocomposition equipment 96
Equipment evaluation 99
Review questions 99
Cases 105

CHAPTER 5 *Input-Output Processes in Word Processing* 108

Input 109
Output 121
Distribution methods 129
Review questions 132
Cases 132

CHAPTER 6 *Word Processing Personnel* 134

The word processing/administrative support concept 135
Personnel involved in word processing 139
Human relations in word processing 153
Review questions 155
Cases 156

CHAPTER 7 *The Administrative Support Concept* 158

Objectives of the administrative support concept 159
Personnel involved in the administrative support concept 162
Organization of the administrative support concept 170
The administrative support center 173
Evaluation of administrative support 174
Review questions 180
Cases 180

CHAPTER 8 *Control in Word Processing Systems* 182

Quantity control 183
Quality control 196
Cost control 201
Scheduling control 208
Measuring the overall performance of the word processing system 210
Review questions 218
Cases 218

CHAPTER 9 *Records Management* 220

The records management program 221
Micrographics 236
Records management in the word processing system 239

Review questions 242
Cases 243

CHAPTER 10 *Word Processing and the Office of the Future: A Preview* 246

Characteristics of the office of the future 247
Equipment in the office of the future 249
Procedures of the office of the future 251
Advantages of the office of the future 254
Review questions 255
Cases 255

APPENDIX 1 *Word Processing User's Guide* 257

APPENDIX 2 *Publications* 265

Glossary 267

Index 273

Introduction to
Word Processing

CHAPTER 1

Word processing: An overview

- **Word processing defined**
- **Components of word processing systems**
  - PERSONNEL
  - EQUIPMENT
    - *Text-editing typewriters*
    - *Dictation/recording equipment*
    - *Copier equipment*
  - PROCEDURES
- **The administrative support concept**
- **Structure of word processing/administrative support systems**
    - *Centralized structure*
    - *Decentralized structure*
    - *Special-purpose structure*
    - *Integrated structure*
- **Advantages of word processing**
  - COST REDUCTION
  - INCREASED EFFICIENCY
  - GREATER PRODUCTIVITY
  - FASTER TURNAROUND
  - BETTER QUALITY WORK
- **Historical development of word processing**
  - PHASES OF DEVELOPMENT
    - *Phase I: Mechanical text-editing typewriters*
    - *Phase II: Display text editors*
    - *Phase III: Communicating stand-alone text editors*
    - *Phase IV: Integration of data processing and word processing technology*
  - PRESENT STATE OF THE ART
- **A word processing system illustrated: A narrative**

In many of today's offices, word processing systems are emerging as the primary tool for expediting written communication. No office system has had as great an impact on the techniques used for preparing written communication as word processing. Although the word processing concept is very new, it has made phenomenal inroads in the modern office.

Word processing defined

Because of its rather recent origin, no definition of word processing has yet emerged as the universal definition. The fact that the structure of the concept changes from time to time has undoubtedly slowed the emergence of a universal definition.

The most common definition was developed by the American National Standards Institute. According to ANSI, word processing is the "transformation of ideas and information into a readable form of communication through the management of procedures, equipment, and personnel." The use of the term word processing in this text is consistent with the ANSI definition.

Word processing has also been defined as "automated office work," but the concept is much more broad than this definition implies. Personnel is an integral part of word processing, yet the second definition fails to mention, either implicitly or explicitly, the involvement of personnel.

Components of word processing systems

Word processing systems are comprised of three basic components: personnel, equipment, and procedures. The most effective means of providing a description of the word processing concept is to examine each of these components.

PERSONNEL

A crucial component of word processing is the personnel who perform the office functions. Division of labor is extensively used in word processing. One group of office employees, who are typically located in the word processing center, are responsible only for keyboarding and other related activities, such as proofreading. Although the titles of these individuals vary, the following are among the more common: word processing specialist, correspondence secretary, and word processing operator. Hereafter, in this text, the individual whose job is

此为试读，需要完整PDF请访问：www.ertongbook.com

comprised mainly of typing activities is referred to as a word processing specialist.

Another position commonly found in word processing operations is the messenger, whose job tasks include transporting the rough drafts and finished work back and forth between the word processing center and the word originators' offices (hereafter called principals). A principal is anyone who originates documents, generally at the first level of management or higher.

A supply clerk is also found in an increasing number of word processing installations. This individual is responsible for maintaining adequate reserves or supplies.

In some instances, proofreaders are used in word processing installations; they are responsible for verifying the accuracy of the material prepared in the word processing center. In large word processing operations, an expeditor or scheduler is also sometimes used. The primary function of this individual is to schedule work in order to meet deadlines and to facilitate smooth-flowing operations.

Other generally routine office tasks of a nontyping nature are performed by another group of employees, known as administrative secretaries. Examples of tasks these employees perform are filing, serving as receptionists, preparing mail, telephoning, preparing and dictating drafts of material, and completing projects assigned by the principals. While the word processing specialists are typically located in the word processing center, the administrative secretaries are housed in the same areas as the principals for whom they work.

Within each of the typing and nontyping divisions, several levels of positions are often found, depending on the size of the word processing operation and the number of employees. For example, the word processing specialist classification might include two or more levels of word processing specialists and word processing operators. The administrative category is likely to consist of file clerks, receptionists, administrative secretaries, and senior administrative secretaries. Each of these two divisions is also likely to have a manager or supervisor who is responsible for day-by-day operations. In addition, there is likely to be a manager of word processing/administrative support who is ultimately responsible for both areas. In some instances, this individual will be known as an office systems analyst.

EQUIPMENT

As an office system, word processing evolved primarily as a result of the development of several new kinds of office equipment. Before most of this equipment was functional, the use of word processing for expediting written communication was not possible. The primary equipment used in word processing consists of text-editing typewriters (also called word processors), dictation/recording equipment, and copier equipment. Information processors, which generally incorporate computer technology, are also emerging as a newer type of equipment used in word processing systems.

While Chapter 4 contains a detailed description of the various kinds of equipment used in word processing, the following provides an overview of the equipment.

Text-editing typewriters. The primary function of text-editing typewriters is to facilitate the transformation of thoughts and ideas into a typewritten format. These typewriters are used in the typing/transcription process.

Several different types and many different brands of text-editing typewriters are now on the market. While some of this equipment closely resembles conventional electric office typewriters, other types more closely resemble a television screen with an attached keyboard. A distinguishing feature of the text-editing typewriter is its capability of capturing keystrokes in coded form. The keystrokes are generally stored on a magnetic medium—magnetic tapes, magnetic cards, or magnetic disks—although other formats, such as perforated paper tape, have been used.

By storing the keyboarded material on a magnetic medium, editing and revising are easily accomplished. The magnetic medium on which the material is stored is simply inserted into the text editor, and the unchanged material is automatically typed at rates of around seven hundred words a minute, depending on the brand of equipment.

Another distinguishing feature of text-editing typewriters is the ease with which they correct errors. Errors are corrected by backspacing, which erases the incorrect character stored in the typewriter's memory. The correction is made by typing the correct character, which is automatically recorded.

Information processors are becoming important equipment components in many word processing installations, especially larger ones. These processors utilize computer technology, which adds a new dimension to word processing. The use of computer technology facilitates the manipulation of information, a capability not possible when certain types of text-editing typewriters are used.

Dictation/recording equipment. An integral aspect of word processing systems is the recording of dictation for subsequent transcription. This equipment is known as dictation/recording equipment. The word processing center and the principals' offices are likely to be physically separated. The distance makes it impractical for word processing specialists who do the transcribing to be physically present in the principals' offices whenever the principals wish to dictate material. In addition, it is inefficient for the principals to handwrite material that could be easily dictated.

The dictation devices in the principals' offices and the recording units in the word processing center are often connected by telephone lines or direct wires. Some brands of dictation equipment use the telephones in the principals' offices, while other brands utilize special dictation microphones. The dictation is recorded on the magnetic medium (tape, disk, belt) in the recording unit located in the word processing center. This material is later transcribed by a word processing specialist who uses a text-editing typewriter.

Copier equipment. A third type of equipment extensively used in word processing systems is the copier. Because of word processing procedures, the use of carbon paper to make copies of the original documents is no longer efficient. When word processing is used, documents may go through several revisions before the principal releases the final draft for distribution. It is not practical to make a carbon of each draft, nor is it possible to predetermine which draft of a document will be the final draft. The alternative is to use a copier to make a copy of the final draft once it has been approved for distribution.

Reprographics, the reproduction of documents, is becoming increasingly involved in word processing as advanced copy and duplication technology emerges.

PROCEDURES

The procedures that comprise word processing systems are classified as input procedures, output procedures, and distribution procedures. While the characteristics of each category are fully discussed in Chapter 5, the following provides a brief discussion.

The input procedures involve putting into the system the material that is to be typed. Two commonly used types of input are dictation and handwritten material. Dictation input requires the use of dictation/recording units. The principal, using either a standard telephone or a special dictation microphone, dictates the material, which is simultaneously recorded on the recording unit. On the average, the use of dictation equipment rather than shorthand or handwritten material for input reduces the cost of a typical business letter as much as $2.

When the telephone is used as a dictation device, the buttons on the touchtone phone are used to activate the recording unit located in the word processing center. The buttons start and stop the recording unit, playback the dictation to verify its content, erase and rerecord material, or signal an employee in the word processing center. The functional controls on the various brands of dictation equipment that use special dictation microphones operate in much the same way as the systems that utilize telephones. When dial phones are used in the dictation process, a key-pad device may have to be installed on the phone, which activates the various functional controls on the recording unit. Certain other types of material, such as handwritten material, are typically taken by a messenger from the principals' offices to the word processing center.

Two other types of input sometimes used in word processing systems are dictation at the typewriter and form letters. When dictation at the typewriter is used for input, the typist keyboards the material as the principal dictates either in person or over the telephone. Form letters typically have constant material and variable material. The constant material is the same in each letter, while the variable material, such as names and addresses, is different in each.

Once the dictated or handwritten material arrives in the word processing center, it is logged into a schedule book. According to the time of its receipt and priority, the material is assigned to a word processing specialist.

The material is keyboarded on a text-editing typewriter and the keystrokes are simultaneously recorded on a magnetic medium. In some instances, the principal will specify that the first draft is to be a rough draft. In other instances, the principal will specify that the first draft is to be a final draft. The typed document is then returned to the principal either for revision or for authorization for distribution.

If the principal makes revisions on the rough draft, it is returned to the word processing center where a new draft is prepared. The machine automatically types the unchanged material that is stored on the magnetic medium. The word processing specialist stops the machine at the points where the changes are to be made. The desired changes are made manually through keyboarding, which eliminates unwanted keystrokes and captures the new ones in memory.

Once prepared, the new draft is returned to the principal for additional revision or for authorization for distribution. If additional revisions are made, the same steps are repeated. Before the document is distributed, a copy of the document is made on a copier. Depending on the content of the document, the magnetic medium on which the material is recorded is stored (filed) according to a predetermined retention schedule or is reused by recording other material on it.

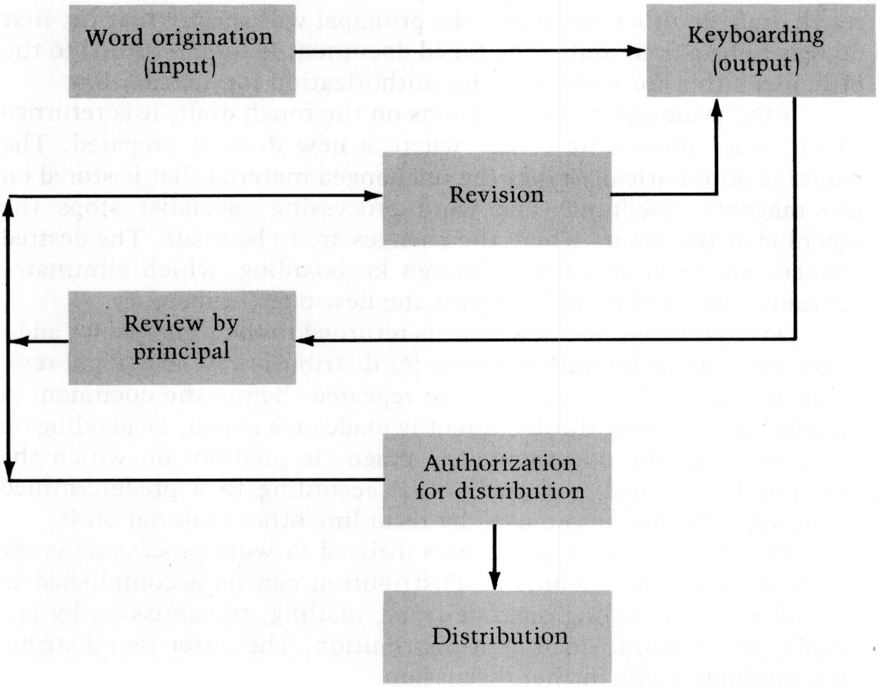
The third phase of procedures utilized in word processing is the distribution of the document. Distribution can be accomplished in several ways, including hand delivery, mailing, transmission by facsimile, or electronic document distribution. The latter two distribution methods merit further discussion.

Facsimile transmission involves the use of facsimile sending/receiving devices. The document to be transmitted is placed in the facsimile sending unit. The recipient's telephone number is dialed, and when the call is connected, the sender's telephone handset is attached to the phone cradle on the facsimile sending unit. The recipient's telephone handset is also attached to the cradle on the receiving facsimile unit. When the units are activated, a duplicate of the document is transmitted electrically over the telephone line in a few seconds. Some facsimile units are automatic and operate without human assistance.

Electronic document distribution (EDD) is another means of transmitting information from one location to another. This technique requires the use of compatible text-editing typewriters. The keyboarded material is recorded and stored on a magnetic medium. Once the material has been released for distribution, the information is electronically transmitted in coded form over ordinary telephone lines. The electronic codes are recorded on a magnetic medium at the destination, which is used to produce automatically the printed document.

Figure 1–1 illustrates the basic flow of work in a word processing system. An examination of Figure 1–1 reveals that after the word

Figure 1–1 WORK FLOW OF WORD PROCESSING SYSTEM



origination (input) takes place, the next step is keyboarding (output) on text-editing typewriters. Once the material has been keyboarded, it is returned to the principal for review. At this point, two alternatives are available: (1) revision of the material or (2) authorization for distribution. The review, revision, and keyboarding steps may take place several times before the material is released for distribution.

The administrative support concept

The administrative support concept, although not formally mentioned in the definition of word processing, is very closely related. Because of the division of labor characteristic of word processing, administrative support is crucial.

As the administrative support concept is evolving, some rather significant trends are emerging in the design of administrative support positions. When the administrative support personnel assume tasks formerly performed by principals, they become assistants to the principals. Consequently, the administrative support personnel perform clerical/secretarial duties of a nontyping nature as well as other tasks assigned them by principals. The abilities of the administrative support personnel are critical to determining which tasks are assigned to them.

The structure of the administrative support concept gives administrative support employees an opportunity to perform at higher levels of job responsibility than their predecessors. If the administrative support personnel are able to relieve the principals of some of their duties, the principals then will be able to devote more time and effort to their managerial tasks.

The fact that the potential abilities of the administrative support personnel are more visible to management may increase for these employees the number of promotional opportunities into middle management positions. In other words, the administrative support positions may be used effectively as a steppingstone to positions of greater responsibility.

Structure of word processing/administrative support systems

Word processing/administrative support systems are designed around the specific needs of particular organizations. Because the needs of organizations vary considerably, so do the structures of word processing/administrative support systems. Nevertheless, some common characteristics can be found.

此为试读，需要完整PDF请访问：www.ertongbook.com