WORD PROCESSING

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WORD
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WORD
PROCESSING

To our spouses

Estherfay Rosen
and
Preston Fielden II

and our children

Paul Rosen
and
Rosemary Theresa Fielden

PREFACE

One of education's prime responsibilities is to bring relevancy into learning programs. Educational institutions must constantly evaluate the developments in the business world so that they can prepare students with the necessary skills and knowledge to understand and work in new and complex surroundings.

Word processing is a relatively recent development that is having a dramatic impact on the modern office. It combines new equipment and procedures that affect both the quality and the quantity of office output.

It is inevitable that word processing will make its way into the schools. Perhaps its entry will parallel the path that data processing took in the early 1950s. Schools were hesitant to adopt data processing at first but gradually developed a course here and there, and as educators observed the need for training young men and women in this field, a full range of courses was offered which eventually emerged into separate departments.

Will this be the path word processing takes as business educators face up to today's challenge of training business students for word processing positions? Teachers must realize that word processing involves much more than working with hardware. Students enrolled in secretarial programs can learn to operate an automatic typewriter in an existing typing course and

can develop much needed transcription skills, including spelling, grammar, punctuation, and vocabulary, in a *full* semester course in machine transcription.

However, word processors need many other skills that cannot be taught in a few days, and business educators must provide the opportunities, the environment, and the learning materials to teach these skills. This text is written with these goals in mind.

Word Processing begins with a history of word processing and introduces the reader to basic concepts and traces the emergence of word processing into office work.

Only a few years ago business men and women were learning a new language—the language of data processing. Today, office employees must know the language of word processing and understand its concepts in order to function in an organization with a word processing installation.

Chapter 4, "Organization and Structure of a Word Processing Installation," deals with the systems approach to communication, pointing out to the reader that this approach makes the handling of information and correspondence easier, faster, and more economical than the traditional one-for-one executive-secretary dictate-transcribe procedure.

In addition to equipment and technique, *people* are an important element in making the word processing system work. Chapter 9, "Personnel," discusses the importance of training men and women so that they will thoroughly understand the word processing concept. The success of the system depends on its acceptance by the people in the organization; acceptance is more likely when the system is understood.

New career paths have emerged as a result of word processing. This section discusses the training, orienting, and promotion of personnel and identifies the role and duties of such new positions as

Correspondence secretary
Manager of word processing and administrative secretarial services
Word processing center coordinator
Word processing proofreader
Manager of word processing
Word processing cost analyst

This section also discusses job opportunities and highlights some of the points that secretarial students should be aware of in their search for a job.

Chapter 12, "Measurement and Control," stresses the importance of managerial guidance in directing the word processing function. Through the use of production controls and quality controls, and the development of a performance measurement system, secretarial performance in the word processing center can be substantially improved compared with that of the traditional secretary working in a non-word-processing environment.

The compilation of material to prepare a book of this scope traditionally involves research into previously written books. But since word processing is so new, there does not now exist a standard textbook in this field. As a result, the authors have had to gather information by visiting word processing installations and talking with secretaries, administrators, and management personnel directly involved with word processing. Through extensive observation, interviews, and personal experience, the authors have endeavored to write *Word Processing* with a practical and comprehensive approach. To stimulate student interest, *Word Processing* contains such study aids as a "Glossary of Word Processing Terms," which is included in the Appendix, and practical case studies, which are included at the end of most chapters. The drawings and photographs of equipment and word processing environments are used to add highlight, interest, and dimension to the appropriate sections.

This book did not result from the work of only two individuals. We are indebted to the many executives who extended every courtesy in making our visits to their headquarters productive and enlightening. Additional appreciation is extended to the many business equipment representatives, authors, and teaching colleagues who, in their own way, made significant contributions to this book. This book profited immensely from the contributions of Dr. Robert Kusek, Illinois State University, Professor Janet Matsuyama, Fullerton College, and Professor Betty Dorfman, University of Bridgeport, who read the manuscript and made many valuable comments and suggestions.
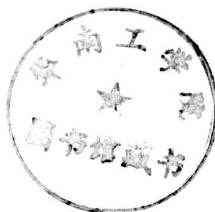
We must especially thank our editor, Charlotte Leonard, whose interest and fruitful ideas led to a cordial working relationship.

The new dimensions of word processing present many new challenges and opportunities for the future. This book is an instructional as well as a pioneering effort to help word processing develop and expand into curricula and instructional programs in schools throughout the country. A book is but one tool in the myriad of teaching materials that business educators can use. To teach word processing concepts more effectively, the teacher should visit companies with word processing installations, talk with personnel, and read pertinent literature in an effort to combine all these resources in making classroom instruction meaningful and exciting.

Considerable strides have been made in this area in recent years, but the road to even greater progress still lies ahead. It is the hope of the authors that their work in writing this book will contribute to the professional goals and growth of their readers and provide practical assistance as a "first" text in this new concept of office procedure.

CONTENTS

When you have finished reading this chapter, you will

■ *Know what single major event shaped the history of the modern office*
■ *Know what brought about the drastic social change that influenced the large-scale entry of women into the labor force*
■ *Know what led to the introduction of a new concept—word processing—as a means to increase productivity, improve the quality of work, and reduce the cost of office operations*

1

INTRODUCTION

HISTORICAL BACKGROUND

When one observes the activities of the typical business office of today, with the astronomical amount of paperwork and equipment required and the elaborate procedures involved, it is interesting to reflect on the simple beginnings that preceded this bustling office environment.

Man has always progressed from the simple to the complex. Simplicity in machines and methods gave way to complexity and sophistication. The objectives have been similar throughout the history of business and commerce—to increase profit and productivity and reduce expenses and drudgery.

In the early history of business and commerce, ways were sought to increase profit. Business offices were primarily engaged in communications with emphasis on the written word. Ways were sought to increase profit not only by decreasing the costs but also by eliminating the drudgery and illegibility of handwriting.

Thus the emergence of the typewriter was undoubtedly the single major event that shaped the history of the modern office. It was this machine that led the way to increasing productivity in communications by saving

time, changing office procedures, and creating the array of related and dependent business machines now being used throughout the world.

Many different individuals played a part in inventing the typewriter, and their countries of origin—Austria, France, Germany, Switzerland, and the United States—were almost as varied as the machines they produced. All of their inventions, however, fell short of practical office applications.

It was Christopher Sholes of Milwaukee, the fifty-second man to invent a typewriter, who perfected the machine to the point where it was at least as fast as writing with a pen. After much experimenting, he was able to develop a more efficient model, which was eventually manufactured by E. Remington and Sons, the firearms makers. Sholes's machine looked complicated and bulky (see Figure 1-1); however, it could operate faster than a man could write and its letters were legible, so the new machine caught on.

FIGURE 1-1
Sholes Typewriter, 1873
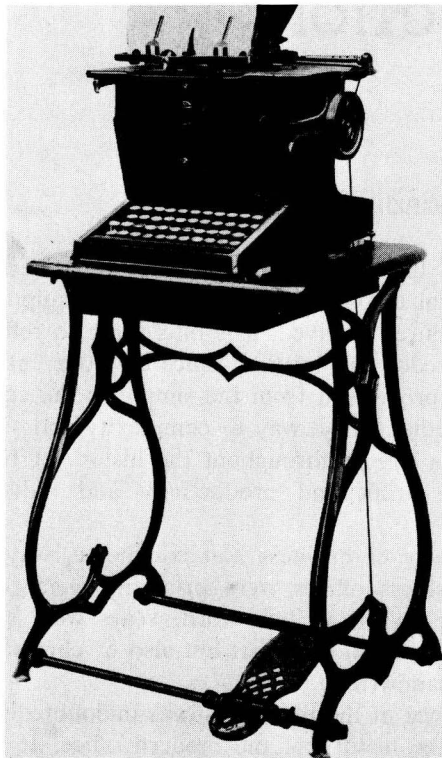
Courtesy of Sperry Remington, Blue Bell, PA 19422

Sholes is commonly known as the father of the typewriter because his was the first machine that could be adapted for commercial production.

Like many innovations, the introduction of this "newfangled" machine first met with apathy and opposition. The typewriter had not yet proved that it could type as fast as a man could write. In addition, businessmen were reluctant to invest $125 in a machine whose work could be done by hand with a one-cent standard quality pen.

There was also staunch opposition to the typewriter because its introduction into an all-male office would permit females to enter what was then an established male domain. The nineteenth-century offices were staffed exclusively with male shorthand stenographers and clerks. (See Figure 1-2.)

FIGURE 1-2
Office of H. B. Marinelli, 1908

Photograph by Byron, The Byron Collection, Museum of the City of New York

The Typewriter and Social Changes in the Office

The Remington Company, manufacturer of the Sholes typewriter, employed a few women typists as demonstrators for its first machines. How-

ever, the marketing approach and advertisements of that era were directed to male secretaries.

Then in 1881 the Central Branch of the YMCA in New York City enrolled eight young ladies in a typewriting course. One contemporary observer described these ladies as being "well-meaning but misguided."

Suddenly the YMCA found itself swamped with hundreds of requests it could not fill. Recognizing the need for training young women for this necessary skill, enterprising private school operators began to emerge. One of the most famous schools was founded by Katharine Gibbs in 1911. Mrs. Gibbs was convinced that women could make an important contribution to business. With one student in her first class, she opened her school in Providence—today the Katharine Gibbs School has over thirty-eight thousand graduates listed on its alumnae rolls.

The succession of developments that characterized the introduction of the typewriter not only revolutionized business communication but also brought about dramatic social changes. According to historians, evolution in any area can be a very slow process. And the evolution of the typewriter into the modern office is no exception. However, typewriters were introduced, and after overcoming the usual overcautious handful of objectors—who seem to resist any kind of change—the advantages of this new machine became apparent. In addition to a more sophisticated means of communication, it served, perhaps, a more important purpose—it took women out of the home and put them into the business office as typists.

At the turn of the century when women "typewriters" (as secretaries were then called) first began to work, there were 200,000 women employed in the stenographic and secretarial field. Today there are approximately 4,325,000, and the number of secretaries is expected to increase rapidly through the mid-1980s as the continued expansion of business creates a growing volume of paperwork.[1]

The early typists were poorly paid. In an article in *Today's Secretary,* Bessie Lyons, an eighty-seven-year-old secretary, relates that when she started work in 1908 she earned ten dollars a week working six days a week as secretary to the president of a paper mill in Lafayette, Indiana.[2] However, compared with other occupational choices available to women at that time, the salary was incentive enough to encourage training on the typewriter. A skilled typist could expect to earn double the amount he or she could get doing other, less appealing, work. Ambitious young women were encouraged to learn typing skills as a means of gaining entrance to the business world, with a view toward obtaining managerial positions. But even though women were allowed to enter the business

[1] *Occupational Outlook Handbook,* 1974–75.
[2] Carla Reiss, "The Making of the Secretary, 1974," *Today's Secretary,* May 1974.

world upon demonstrating typing competency, the path toward management was slow and discouraging. Women typists did achieve some measure of economic independence and helped pave the way for the advances of the feminist movement in the early part of the century. Although typists today are predominantly female, the percentage of women in the supervisory levels of business is still relatively small, and many feminist groups consider the typewriter a symbol of oppression. It is ironic, however, that history relates it was the typewriter, a so-called symbol of oppression, that was directly responsible for the progress women have made in this century.

Further Developments

The evolution of the modern office continued at a slow rate despite the introduction of the mechanical typewriter. Manufacturers introduced new products with new features, but the changes were all minor in terms of productivity of performance. Mae Orr typed one hundred words per minute in an 1881 typing contest that had rather loose accuracy standards. A typing contest held in 1909 was won by Rose Fritz, who typed ninety-five words per minute observing stricter standards for accuracy.

Even with all the wonderful improvements of the mechanical typewriters, productivity has not increased much since the early years of the twentieth century. In the 1920s a good typist could type fifty to sixty words per minute—about as many as a good typist can today with the help of an electric typewriter. Many of the new features did not affect productivity but did improve the quality of the work and helped reduce the effort necessary to produce it.

Touch Typing System.   This brief survey of the early history and development of the modern office and the early equipment used would not be complete without commenting on the important part played by leading typewriter companies, schools, and individuals concerning the advancement and progress of touch typewriting.

When the typewriter was first introduced to the public in 1873, users of these writing machines were not particularly concerned with any definite method of fingering the keyboard. Back in those days the customary manner of operating was to use only one or two fingers, a method in later years aptly dubbed the "hunt and peck" system.

As early as 1878 historical records indicate that Frank E. McGurrin became the first touch typist by teaching himself touch typing while a clerk in a law office in Grand Rapids, Michigan. In 1881 Longley's Shorthand and Typewriter Institute of Cincinnati began systematic instruction of touch typing, or the "all-finger" method as it was then called, being the first on record to do so. The following year the first printed system for

teaching this method, by Mrs. M. V. Longley, was published. Also during this year, W. E. Hickox became the second educator in America and the first in the East to introduce the "all-finger" method in his private short-hand school in Portland, Maine. In the early 1880s the Cooper Union School in New York City organized typewriting classes for women be-cause the founder of the school, Peter Cooper, was interested in "widen-ing the sphere of female employment." (See Figure 1-3.)

FIGURE 1-3
Stenography and Typewriting Class at Bryant High School, New York, 1906

Photograph by Byron, The Byron Collection, Museum of the City of New York

The Dictating Machine

Another significant influence on the evolution of the modern office was the development of the dictating machine. In 1878 Thomas A. Edison, experimenting in his workshop at Menlo Park, New Jersey, became the first person to reproduce sound. The sound was recorded on a sheet of tinfoil. Edison's original machine was a crude device consisting of a drum rotating on a shaft creating an impression against the tinfoil. A mouth-piece was attached to record the sound waves of a person's voice as it vibrated against the tinfoil.

In 1881 Alexander Graham Bell, Charles Sumner Tainter, and Chichester Bell invented a machine on which sound could be commercially recorded and reproduced. This device, a forerunner of the Dictaphone, has been preserved in the Smithsonian Institution, along with the recording. This is probably the oldest recording of the human voice in existence.

A second invention by this illustrious trio consisting of the two Bells and Tainter was a device for transmitting the human voice over short distances by means of light waves—the first wireless transmitter. These successful inventions prompted Charles Tainter to begin manufacturing machines for recording and reproducing sound for business purposes.

Early Acceptance of the Dictating Machine

As with the typewriter, there was strong opposition to the new dictating machine when it was first introduced into business offices. There was the usual fear of the unknown and of breaking with tradition, and perhaps fear that the new method of dictation would mean a change from the old familiar shorthand—a stronghold of security for both dictators and secretaries at that time. In addition, secretaries were afraid that earphones would affect their hearing—a mistaken notion originating from some

FIGURE 1-4
Early Dictating Machine
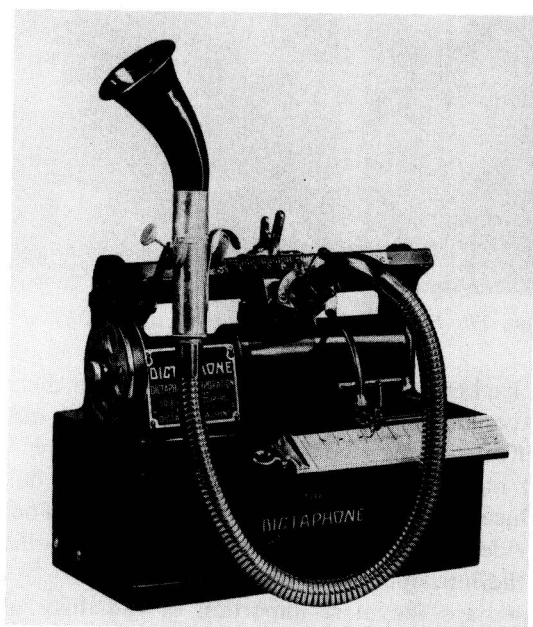
Courtesy of Dictaphone Corporation