APPLICATION OF COMPUTER TO SECRETARIAL FUNCTIONS (A CASE STUDY OF NIGER STATE HOUSING CORPORATION, MINNA).

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ABSTRACT

It is obvious that secretaries handle countless pieces of papers daily in an organisation. Sorting, and retrieving information as fast as possible from the piles of records available can be very stressful. It is in this regard that the researcher tries to proffer solution by applying computer to secretarial functions.

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DEDICATION

I dedicate this project to the Almighty God.

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CERTIFICATION

This project has been examined and found acceptable in partial fulfilment of the requirement for Post Graduate Diploma in Computer Science of Federal University of Technology, Minna.

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DR. S. A. REJU Head of Department	Date
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External Examiner	Date

CHAPTER ONE

1.0 INTRODUCTION

In times past, man had been struggling with burden or stress of keeping piles of records, performing some computational work, retrieving data, controlling production processes manually until the advent of new technology which if not completely eliminated has reduced the stress of keeping and retrieving records to the barest minimum.

1.1 TECHNOLOGICAL DEVELOPMENT

Technological development is the progressive scientific method of achieving practical purposes. Through these scientific development methods users of these technology have experienced increased productivity in all facets of human endeavor. This has almost eliminated manual operations performed by previous machines. In recent time the advent of

this technological development has brought great changes to the office and the office work.

It is worthy of note that technology itself as defined by university dictionary is:-

> "The branch of knowledge that deals with the industrial arts and science, utilization of such knowledge, the knowledge and means used in producing the terminology of an art of science".

The entrance of technological development has given rise to the production of computers, which is advantageous to the performance of many various tasks.

1.2 COMPUTER AS A WORD PROCESSOR

A computer as a word processor is "an electronic device that takes in data as input, processes it as quickly and accurately as possible and send out information as output".

From the forgone definition, word processing takes place when the raw data (ideas or thought) is converted into printed form

through a combination of (processor inside) computer, effective management procedures and trained secretary. The processor that is embeded in the computer contains one or more "chips", which is connected to internal memory for storing programs and data while they are being acted upon. Word processors are mainly used for producing letters memoranda, reports and other business documents. Computer as word processor with the aid of Carthode-Ray- Tube makes it easier for a letter, memoranda and other documents to be typed, text-edit, i.e. shifting paragraphs, re-arrangement of margins before printing is done. These features save time and money and also phases out much of the act of re-typing. The faster a computer is depends on the type of processor chip it is made up of. The more popular micro-computer presently use either a "16-bit" or "32-bit" chips while some of the older machines use one or more "8-bit" chips which process more slowly than machines with "64-bit" processor chips. A number of factors are determinant on how long it takes a computer to process a particular program eg.:-

i- The volume of data to be read from and written to the diskette or other storage medium.

ii- The access and transfer speed of the storage device (i.e. hard disk is several times faster than diskette storage in most cases).

iii- The size of the processor chip. (i.e. A "16-bit" processor can add, compare, etc. twice as fast as an "8-bit" processor).

iv- Whether there are one or two processors - if the diskette input/output is handled by a different chip than the one performing the calculations, the program will take less time.

v- The size of the buses (i.e. the wires carrying data between the processor, memory and the storage devices) differs from another depending on how big or small the buses are. As processors vary in sizes, so do computers.

1.3 TYPES OF COMPUTERS

There are various types of computer such as main-frame computers, mini-computers, personal computers, laptop computers, note-book computers and palm-top computers. The most common way of differentiating the various types of

computers is the technological design. By size and capacity, there are technically three main types of computers e.g. main-frame computers, mini-computers and micro-computers.

For the sake of this study, the researcher wishes to concentrate on the three main types of computers namely:-

1.3.1 Main-Frame Computers

These are "large scale high power computer systems that can handle capacity memory and backing storage devices as well as a member of operators simultaneously" (collins, 1998 p 132).

From the above definition, main-frame computer are computers with large capacities which can be used by many people at the same time using terminals. They are capable of processing several programs doing on-line programming through terminals. For storage, main-frame computers use specially designed magnetic tapes which is meant for high speed drives. These type of computers are expensive because of their large capacities to handle large volume of work. For this reason

government and large corporations acquire these machines to accomplish the aims and objectives of these organizations.

1.3.2 Mini-Computers

Mini-computers are defined as small computers "with a greater range of instructions and processing power than a micro computer, but not able to compete with the speed or data handling capacity of a main-frame computer" (collins, 1988, p 139). Although, mini computers are smaller than main-frame computers, mini can store large amount of information and perform more than one task at once. They are limited volume of work and simultaneous users that they can handle. They also use magnetic tapes for data or information storage like main-frame computers.

Mini computers are expensive though not as expensive as main-frame computers. These mini computers are mainly used by small firms and corporations.

1.3.3 Micro Computers

These are the most recent category of computers. They can also be called personal or portable computers. Examples of these categories of computers are desktops, laptops, notebooks and palmtops. They are small scale, cheap, low-power computer system which are dependent on micro-processor chip and having limited memory capacity. Micro computers unlike main-frame are that micro computers use small inexpensive micro-processor chips. These micro computers allow only one person to interact with the machine. These category of computers use floppy and hard disks for storage. Because of the disk storage limitation, there is control over speed and the volume of work they can execute when compared with main-frame computers.

1.4 IMPORTANCE OF COMPUTERS

The importance of computer usage in modern offices cannot be over-emphasized as they perform the following functions to the advantage of the organization and the secretary:-

i- It can manipulate data at a speed greater than any known being.

ii- It is capable of storing data for long period without distorting any record upon retrieval.

iii- It provides timely information for management decision making.

iv- It increases productivity especially in typing.

v- It reduces fatigue.

vi- It is capable of handling large volumes of routines jobs over long period of time without getting tired.

1.5 SCOPE OF STUDY

The analyst of this project wishes to limit the scope of study to Secretarial functions in Niger State Housing Corporation, Minna. This is due to time constraints and the few materials available for this study.

1.6 STATE OF THE PROBLEM

The existing system used for performing of Secretarial functions is manual (with the aid of machines) and this has been in

existence since the inception of the Organization. The staff strength (both casual and pensionable) have increased tremendously and; this makes it very difficult to get accurate, reliable and fast typewritten letter, retrieve information etc. that requires urgent attention.

1.7 AIM AND OBJECTIVES

The main objective of this study is to carry out investigation on the functions performed by secretaries and try to identify the problems and what is needed, and design how a computer could be used to get a qualitative and timely information.

CHAPTER TWO

2.0 WHO IS A SECRETARY?

It is difficult to define the term "Secretary". This may be partly because there are different types and levels of secretaries. A secretary may be defined by a layman as a person who performs one or two clerical functions eg. The typist, file clerks, receptionist, stenographers etc. But the Professional Secretaries International (PSI) defines a secretary as:

> "An executive assistant who possesses a mastery of office skill, demonstrates the ability to assume responsibility without direct supervision, exercises initiative and judgement, make decisions within the scope of assigned authority".

It may be pertinent to note that secretary personnel are classified according to the level of responsibilities performed. Some specific secretarial job titles and corresponding job descriptions are: social, legal, school, medical and membership secretary.

2.1 Social Secretary:

She coordinates social business and personal affairs of employer. Meets with employer for social functions and sends invitations, arranges for decorations and entertainment. Advises employer on etiquette, dress and current happenings.

2.1.1 Legal Secretary:

Prepares legal papers and correspondence of legal nature eg. summonses, complaints and motions. She may review law journals and other legal publications to identify court decisions important to cases that are pending etc.

2.1.2 School Secretary:

She performs secretarial duties in elementary or secondary schools. Also composes or transcribes correspondence, bulletin, memo from rough draft. She does other duties as receiving and depositing of funds for lunches, school supplies, student activities etc.

2.1.3 Medical Secretary:

She performs secretarial duties such as utilizing knowledge of medical terminology. Also compiles and records medical charts, reports and correspondence. She may prepare and send bills to patients and record appointments.

2.1.3 Membership Secretary:

She compiles and maintains membership lists, records receipts of dues and contributions.

2.2 FUNCTIONS OF A SECRETARY:

Today, many factors such as technological, economical and social changes have made the functions of a secretary dynamic and expanding one. The secretary in years past was only responsible to one executive whose main functions was take dictations from her boss in shorthand and transcribe with manual or electric typewriter, and handles post offices services etc. Every professional secretary is involved with routine functions such as:

a- receives phone calls and attend to her boss's visitors makes arrangements for meetings and prepare minutes.

b- takes dictation and transcribe it as well as type other documents makes a follow-up on correspondence, projects, etc.

c- handles telegram, fascimile, telex, E-mail messages and other postal matters.

d- gathers information and prepares draft memoranda, reports for the boss when necessary.

e- prepares itineraries and making travel arrangements including accommodation where and when necessary for the boss.

f- sorts, reads and annotates incoming mail and documents, attaches appropriate file to facilitate necessary action, determines routing and signatures required.

g- performs other functions as assigned or as judgement or necessity demands.

h- maintains records and files for reference purpose.

i- dispense information on request, routinely or on scheduled basis.

j- Keeping of petty cash for the daily running of the boss's office.

k- Notifies staff of meeting or conference.

2.3 QUALITIES OF A SECRETARY

The secretary is the image-maker of her boss if not for the whole organization. This is because the secretary interacts with all the visitors coming in to see her boss. Here she displays her personality to the outside world. Certain qualities must be eminent in a secretary. These are:

2.3.1 Loyalty:

This is the willingness to carry out her job to the best of her ability, faithfully and diligently. The secretary should support the executive, maintain positive rapport with colleagues and co-workers.

2.3.2 Confidentiality:

Because secretarial assistant actively participate in the day- to-day operation of business, they are entrusted to hold confidential certain information they acquire in the performance

of their jobs.

2.3.3 Honesty:

Honesty as a moral guideline is considered to be basic working social principle. One cannot be ethical without being honest. To be honest is being truthful and fair - that is to do a full days job for a pay. Honesty also involves being punctual to work, not using office supplies like stamps, stationery or photocopier for personal use, not lying, cheating, stealing, bribery or taking bribes which are considered to be dishonest should not be associated with a secretary. On the other hand, honesty is adhering to policies and regulations of the organization.

2.3.4 Mental Alertness:

A secretary should at all times be mentally alert. That is, to be able to grasp instructions quickly and accurately and avoid repeating mistakes.

2.3.5 Cooperation:

This is the act of togetherness in the performance of work by more individuals in order to achieve mutual goals.

2.3.6 Tact and Diplomacy:

A secretary should be able to display courteousness in the handling of visitors and receiving inquiries for her busy boss. She should be very tactful as to communicating negative replies from her boss to a visitor.

2.3.7 Sociability:

A secretary should be able to communicate and mix freely with colleagues, co-workers, and visitors while retaining her personality. She should not be flippant secretary who but exercises her sense of humor. Cheerfulness toward work should be eminent in a secretary.

2.3.8 General Knowledge:

For a secretary to be efficient in discharging her enormous job, she should possess vast knowledge of current affairs and that of a firm in which she is an employee to. Also, sound secretarial skills is not an exception in this regard.

2.3.9 Corporate Appearance:

A secretary should apart from being mentally alert, honest, loyal, tactful and diplomatic etc, should appear neatly and corporately dressed to make her presentable. This makes her confident of herself .

2.4 THE ROLE OF A SECRETARY

The role of a secretary in an organization is that she is an important member of the management team. She is a vital link between making and implementing organization's plans. She is a custodian of office records and also plays a major role in processing reports, implementing schedules and issuing directives. The secretary provides an employer with information needed and keeps an up-to-date filing system.

CHAPTER THREE

3.0 SYSTEM ANALYSIS AND DESIGN

3.1 SYSTEM ANALYSIS

To analyze a system, the analyst has to separate or break a whole into parts or elements and examine in detail about the existing system in order to ascertain the problems and try to find solutions to them. The manual method of processing data concerning every visitor are:

a- issuing of fill-in forms

b- filing of forms

c- retrieving of forms (when necessary)

From the existing system, the study highlights those problems as listed below:

a- inaccurate filing of forms

b- large storage space

c- urgent and timely information cannot be retrieved due to high volume of work load.

3.1.1 Primary Investigation:

The existing system has adversely affected the organization in area of time management. And "time they say is money". So the analyst has examined the possible ways of regaining this time wasted every working days. The investigation indicates the possibility of computer application in this area.

3.1.2 Feasibility Study:

This phase of study analyses the feasible ways in which the application of computer to secretarial functions could be made possible. These are:

a- Resource person: This means the availability of a personnel to handle/operate the computer. This does not require any recruitment of personnel.

b- Equipment: The equipment for the operation of functions are available. Such equipment are: the hardware, un-interrupted power supply (UPS), automatic voltage regulator (AVR) with input 160v - 260v 50HZ; output 220v 50HZ), printer (deskjet 895 CXI).

c- Funding: At this phase, the organization stands to gain because there is little or no funds needed since all the machineries available.

d- General Effects on the Corporation: The introduction of computer application to secretarial functions will positively have effect on the organization because of the following enhanced operation:

i- there is effective management of visitors data in that records could be updated (removed, added or modified).

ii- Information regarding any particular visitor can be accessed without any stress.

iii- The proposed system guarantees security of records (physical, data and software protection, access control, password control etc.).

iv- In retrieving data, DBMS allows easy access to information needed for management decision.

3.2 SYSTEM DESIGN

This is the phase that begins with the completion and approval of the system requirement specification. Since the data in the system has to be stored and retrieved, the choice of Database Management (DBM) software is unique for this system. This is unique because the system is not a large one which would necessitate writing programs in modules. It is easy-to-use.

In structuring a database file, the two main approaches are:

a- Field Specification: Fields are data items required for building of records. A database is a file of structured data - organized for easy management of information. Structuring a database file involves basically specifying the field name, determining the field type and appropriate field width. Eg.

FIELD NAME	FIELD TYPE	FIELD WIDTH	DECIMAL	INDEX

i- Field Name: This is a data item which allows data be supplied into name.

ii- Field Type: This could be numeric, alphanumeric, date and calculations.

iii- Field Width: This refers to the numbers of characters that a field can accept. The width is determined by the amount of data or information one wants to insert in a particular field.

b- File Structuring: In file structuring, the outstanding components of a database file are, field name, field type, field width, decimal and index. However, data supplied to database file are arranged under the corresponding data items as shown below:

FIELD NAME	FIELD TYPE	FIELD WIDTH	DECIMAL	INDEX
LNAME	CHARACTER	12		
FNAME	CHARACTER	12		
SEX	CHARACTER	1		
ADDRESS	CHARACTER	40		
WHO	CHARACTER	17		
PURPOSE	CHARACTER	15		
DATE	CHARACTER	10		
TIME	CHARACTER	8		
REMARKS	CHARACTER	40		

For effective management of database file, the user must be familiar with some dbase commands such as:

i- Create: This is used for creating the file structure.

ii- Use: (file name): This opens the file.

iii- Append: Pastes the structure of file for data.

iv- Clear: Clears whatever is on the screen.

v- Modify Structure: Appends the structure for modification.

vi- Browse: Displays the records according to their different fields.

vii- Quit: This quits of vacates the database environment.

CHAPTER FOUR

4.0 SYSTEM IMPLEMENTATION

This phase is putting into operation or use the new system. The activities required in this phase are:

a- System Adaptation: This implementation takes place to ascertain if the new system adapts all the activities of the former manual method.

b- System Testing: This phase enables the user test of its validity.

c- Conversion: This is converting from the old system to the new system. The conversion stage could be carried out in the following ways:

i- Parallel conversion

ii- Direct conversion

iii- Pilot conversion

Parallel conversion is the running side by side of both the old and the new systems before a complete switch over is done. For this purpose the parallel conversion is recommended in this case to allow smooth change over. The new system needs a hardware support with minimum specification of computer hard disk of about 100MB running at a speed of 50MHZ enhanced speed facilities of 8MB and Uninterrupted Power Supply (UPS) to allow the user store and power off and her work when there is interruption in power supply and printer, floppy disk drive of 1.44MB and other peripherals.

4.1 OPERATION MANUAL

To operate the system, dbase environment is needed since in this case the system was developed from a dbase software. A dbase iv or any of the higher version is suitable for the system.

4.2.1 MAINTENANCE

System maintenance is inevitable and in the development of

this system facilities for easy maintenance are fully incorporated, should there be any need in the future.

CHAPTER FIVE

5.0 CONCLUSION

The introduction of DBMS package (software) will enable any user to sort, modify, and retrieve information as fast as possible.

5.1 RECOMMENDATION

Having carefully considered the countless pieces of papers secretaries handle daily as regards visitors in organizations, I wish therefore to recommend the database management package for effective management of information to both private and public organizations.

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