

**TITLE PAGE**

**THE USE OF COMPUTER IN RECORDING ACCOUNTING INFORMATION,  
PROBLEMS AND PROSPECTS  
(A STUDY OF BENDEL FEEDS AND FLOUR MILL, EWU, EDO STATE)**

**BY**

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**APPROVAL PAGE**

This project work has been read and approved as satisfying the requirement of the department of accountancy, management and social science faculty, Caritas University, Amorji-Nike, Emene, Enugu state.

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## **DEDICATION**

This project is dedicated to my loving Lord and savior Jesus Christ.

## ACKNOWLEDGMENT

I have come to the realization that no writer writes alone and no thinker is self-department. On this ground, I hereby express my profound gratitude for the assistance render to me in the course of this project writing as well as their concern towards the completion of my academic study.

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Above all, I thank God for making all things possible and also thanks to you all and remain blessed in Jesus name, Amen.

### **ABSTRACT**

This research work is aimed at ascertaining the various roles played by using computer in recording accounting information problems and prospects in the modern business world using Bendel feed and flour mill, Ewu, Edo state as a case study. The importance of using computer in recording accounting information will be apparent when considering the fact from the data that is gathered in the course of this work, from the related literature as well as, from interviews and discussions. Also questionnaires were distributed equally and collected which yielded or revealed that the use of computer in recording accounting information [played a positive role in initiating computer use in the modern business world. The information supplied by the Chief accountant in Bendel feed and flour mill Ewu, Edo state contributed to the success of the exercise. The statistical analysis that used in the study includes the hypothesis testing in which the questionnaire is analyzed under their related hypothesis and the use of chi-square test of homogeneity. It was also discovered that it is important among other groups of professionals needed for this implementation of the exercise. Therefore, they formed the pillar on which any successful establishment rests upon. We recommended that the use of computer in recording accounting information should be give a free hand in implementation exercise in order to enhance the importance of the use of computer in recoding accounting information.

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## **CHAPTER ONE**

### **1.0 INTRODUCTION**

#### **1.1 BACKGROUND OF STUDY**

In this present world, individual, business men, firms and government have seen the effects of computer in the area of recording and safe keeping of information,.

However, this computer cannot function unless the day-to-day business activities are well documented and fed into it properly.

Every business set up has different levels of management and each of these levels of management needs information to enable them make decision on how the objective of the organization can be achieved likewise, the government.

In Nigeria before the advent of computer, nearly all clerical works are, done by paper and pen. This gives rise to

→ Mismanagement of stationeries.

→ Errors and omissions in accounting enterprises

→ Monotonous work and tiredness and other, associated clerical problems. But since the introduction of computer, problems are minimized. Therefore, the use of computer in recording accounting information in this modern world cannot be over sighted. In the past, recording, filing and safekeeping of information was known as “routine clerical work” but with the advent of sophisticated, electronic business machines it is now known as “data processing”.

Today, no business can survive without the use of computer especially, in recording accounting information.

## **1.2 STATEMENT OF THE PROBLEMS**

The problems of computerized accounting and computer are as follows:

a. DATA/INFORMATION INPUT:

“Garbage in garbage out” is a general phenomenon in computer. Electronic computer has no self-judgment and as such devoid of human errors because it’s what you feed into the computer (input) that it gives out (output). For example, if one

feeds in wrong data into the computer, no matter how efficient the programming may be, wrong output will be the outcome because the computer has been misled.

b. COMPUTER LANGUAGE:

Computer has its own language and all data are programmed and written in this special language. Therefore, it required a lot of training without which computer will not make any meaning to the users.

c. ENVIRONMENTAL CONDITIONS:

Computer does not function effectively in a hot environment, for this reason it requires huge amount in installing air-conditions to enhance efficiency.

d. COST:

Small businesses cannot afford computer because it is costly to buy and maintain which constitutes a bottleneck in getting correct information and as such, the small businesses cannot thrive in the present of the big ones.

e. AWARENESS:

Some individuals, business men, firms, and government are not fully aware or do not know about the importance, advantages, disadvantages, and in-depth problems/prospects study of the use of computer in keeping accounting records and information.

### **1.3 OBJECTIVES OF THE STUDY**

This research work on “The use of computer in recording accounting information, problems and prospects” is to investigate or require for the following:

- a. To make known the brief history of computer, understand some important components of the computer, advantages, disadvantages, and importance to users that is individuals, business men, firms, and government as a part of awareness on computerized accounting.
- b. To make known to small scale businesses affordability of computer in that the cost of different types of computers that can help in recording

accounting information and transactions are made known to them so that they could thrive in the presence of the big businesses.

- c. To make known users of computer in recording accounting information to know how to keep computer running in a perfect condition, the environment it's to be kept in should be conducive and cool for effective and efficient performance of the computer system.
- d. To make known to users of computer in recording accounting information to understand that there are languages that computers understand and use, so therefore they should go for training in this languages to enable them communicate perfectly with the computers.
- e. To make known to the users of computer in recording accounting information to make sure that the data/information we want to input into the computer is correct, valid, trustworthy, and accurate so that when we need back those information, we won't get something else from what we are looking for.

## 1.4 RESEARCH QUESTIONS

The following are some of the questions the researcher would like to find answer to in order for him to carry out the project effectively:

- a. What made individuals, firms and government adopt computer system?
- b. What has been the effect of the use of computer on old and new staff?
- c. “Routine clerical work” and “Data processing” which is more economical?
- d. What improvement has computer made to the general accounting system in the firm and country?
- e. What are the problems that generate from the use of computer?
- f. What are needed to make computer use effective?
- g. What effect has the use of computer in the labourmarket?
- h. In modern accounting, can computer be left out in recording information?



## 1.5 RESEARCH HYPOTHESIS

The following hypothesis shall be treated in the course of carrying out this research work:

1. **HO:** There is no significant relationship between the electronic data processing approach and the manual system approach.

**Hi:** There is significant relationship between the electronic data processing approach and the manual system approach.

2. **HO:** Computer has no positive effect in recording accounting information.

**Hi:** Computer has positive effect in recording accounting information.

3. **HO:** Information from the computer is not always correct, reliable, and accurate.

**Hi:** Information from the computer is always correct, reliable, and accurate.

4. **HO:** Not all employees have access to programmed data.

**Hi:** All employees have access to programmed data.

5. **HO:** The use of compute has not cause unemployment.

**Hi:** The use of compute has cause unemployment

## **1.6 SIGNIFICANCE OF THE STUDY**

The significance of this study cannot be over-emphasis because of the nature of modern day organizations. It is embarked on to poultry the importance of computer of an organization with peculiar reference to modern accounting system. These importances are stated down below:

- i. The importance of this study is to make the accountants and the auditors realize that computer should not see as an enemy but as an aid to them and their business functions.
- ii. This study is to help remove the in concept concealed by the junior workers that computer introduction will lead to retrenchment of workers which is a fallacy because without human being, computer cannot work or operate.
- iii. This research work will help disclose the benefits of computerized accounting system with the understanding that if the third world

countries like Nigeria can undertake this system, they can compete with the advanced countries.

- iv. This will also help see accuracy and efficiency of work carried out as well as increased productivity.
- v. This research work will also help other renders and researchers to widen their scope of knowledge academically, occupationally, socially and economically as a base for other research work.

## **1.7 SCOPE, LIMITATIONS, AND DELIMITATIONS OF STUDY**

### **1.7.1 SCOPE OF THE STUDY**

This project is designed to cover the use of computer in recording accounting information by individuals, firms and government. But generally, business organizations were concentrated upon with a case study of Bendel feeds and flourmill, Edo state.

However, particular attentions were to the following areas.

- i. Application and use of computer in financial accounting.
- ii. The use of electronic computer in management decision making.

- iii. The advantages derived in the use of computer.

### **1.7.2 LIMITATIONS OF THE STUDY**

It is the researcher's desire to carry out an elaborate research work on the selected topic for accuracy, reliability and efficiency. Also as an indispensable data base for interested person or groups of persons. But the following difficulties brought limitation to be:

- I. **LACKS OF COOPERATION FROM THE RESPONDENTS:** The reluctance of the officers of the organization involved to attend to the researcher limited the researcher in getting full details.
- ii. **FINANCE:** Inadequate finance was a core problem for the researcher and this adversely delayed the progress of the work.
- iii. **SECRECY:** Some information needed by the researcher is tagged "Confidential" and this limited him from getting the information.
- iv. **TIME:**The time available to complete and submit this research work is too short; as such the researcher is limited to elaborate research.

### **1.7.3 DELIMITATION**

The research work on the use of computer in recording accounting information would have cover the importance it has contributed to individuals, firms and government but, due to time availability, finance, strenuous academics, works all these sectors mentioned were not reached, therefore, the researcher is limited to only business organization [firms] with a case study of Bendel feeds and flour mill, Ewu, Benin city.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 LITERATURE REVIEW**

#### **2.1 HISTORY OF COMPUTER.**

Scientists and engineers to help them solve complex problems originally developed computers.

Charles Babbage (1792-1871) built what can be called the first computer, which was essentially an analogue rather than a digital computer.

Between 1939 and 1944 De Howard Aiken developed the first electrometric computer, which was first put to use in 1944. Between 1943 and 1946 the first large scale more schools at the University of Pennsylvania built electronic computer. The computer was named electronic numerical integrator and the computer was mainly for solving complex engineering problems. The machine however, was slow, non-flexible and unreliable.

There is no doubt that reasonable progress had been made in arriving at the present day computers. In the 1940s the same university of Pennsylvania

developed another type of electronic computer called EDVAC (Electronic Discrete variable Automatic computer).

The idea of building a computer with memory was first put forward by Dr. John Von Neumlian. In 1950 another computer was developed. It use paper tape as input and it was called SEAC (Standard Electronic Automatic Computer). NRC (National Case Register) entered into the computer world 1953 by purchasing and existing electronic computer and manufactures the NCR 304 which was released for sale in 1958. The Sperry Rand Univac and IBM 701 were released in 1953. From the late 1950s, the use of computer started to grow on a rapid state.

As the world continue to progress more sophisticated computer were developed from the very heavy and slow working computer to the very small and efficient ones. Recently a small firm in California surprised the world, by their new, small and efficient product. The 2kg devise in this computer is about the size and shape of a clip board in place of keyboard and an electronic mouse. There is a large liquid-crystal screen and a small electron stylus.

### **2.1.1 DEFINITION:**

A computer is any machine or device, which under the control of stored program, can accept data in prescribed form, process data and supply the results as information in specified form.

Let us briefly look at the generation of computer.

- a. **FIRST GENERATION COMPUTER:** Was in the Second World War, the first electronic computers were built in Germany. It was used to design the German flying bomb and missiles.

Colossus was a very large computer built by British in the year 1943. It is used to send messages.

- b. **SECOND GENERATION:** This second generation succeeds the first generation which was when William Shockley invented transistors in 1948.
- c. **THIRD AND FOURTH GENERATION:** very small electronic circuits, which were put on to a small piece of material called silicon, replaced individual transistors. These circuits are called integrated circuits.



## **2.2 COMPARISON OF MANUAL AND COMPUTER INFORMATION PROCESSING.**

The basic principle of conventional method of data processing is essentially the same. The computer is merely substituted for manual aids or human labour. However, the time and efficiency of information processing differ to a great extent. Note should be taken that, in computer information processing, all the steps in a given procedure will not be taken over by the computer. The data may first be collected and recorded by conventional method before they are feed into the computer.

To further highlight the different between the manual and computer system o data processing let us consider a simple invoicing application:

- i. The customer's rewards are held in a magnetic device compared to the visible records as with the manual system. Similarly stocks are held in magnetic form.
- ii. Then orders are received; it is now the computer system, which will process them. However, the computer cannot accept them on the pieces of paper rather it has to be feed in by the computer operator

through the keyboard. When the information has been keyed in, the computer now processes the orders and produce invoices on appropriate stationary using a printer.

### **2.3 ELECTRONIC DATA PROCESING (EDP)**

An EDP system is not just a computer as is sometime through; it is a number of elements, each of which performs a function in the system. An EDP system consists of the following:

- i. The central processing unit (CPU) of computer. This central element performs arithmetic, logic, storage and control functions.
- ii. Associated peripheral equipment such as data preparation equipment, input and output devices.
- iii. Procedures that tell what data are needed and when what medium the data will be stored, when the data are obtained, and how they are used.
- iv. Instruction routines for the CPU or a stored program.

- v. Personnel to maintained and operate equipment analyzed and set up procedures, prepare instructions. Provide input data, utilized report review results and supervise the entire operation.

The characteristic that distinguished electronic data processing system from all other data processing techniques. A side from greater speed is the ability of the computer to out coded instructions placed in the computer prior to the processing of data. The computer carries out these instructions via a control unit (a system of control circuits). The instructions themselves are called a program. The program must be carefully prepared to ensure that all necessary processing instruction are included and placed in the logical order that will bring about the desired result.

### **2.3.1 ADVANTAGES, WHICH EDP HAS OVER OTHER METHODS OF DATA PROCESSING.**

- a. **SPEED:** EDP processing data faster them other method of processing data.

- b. SPACE: The equipment is more complete in respect of compactness and saved a lot of space.
- c. ACCURACY: Accuracy is doubly sure, provided that the incoming data is error free and the programmer programs them accurately.
- d. CHEAPNESS: Electronic computer processes more cheaply than the manual method of data processing.
- e. CAPABILITY: Electronic computer process information faster, accurately and cheaply. It provides capability, which would have otherwise been impossible. For example the International Business Machine (IBM) system 370.145 modes II computers can process a company's journals, assets register, balance sheet, trial balance, profit and loss account, departmental statement and customers' accounts receivables in approximately "10 minutes 24 seconds every month"
- f. UNINTERRUPTED: Once data is feed into the computer, processing goes on uninterrupted.

## **2.4 DATA INPUT/OUTPUT AND THE MEDIA SYSTEM**

Data input or output must be able to accept data in the users' language and then transcribe into computer sensitive language before going to the master file involved for program development. When the inputs have been processed, there should also be an output device that the already processed document can be passed out to the user.

Some input devices are considered below:

### **2.4.1 THE VISUAL DISPLAY UNIT (VDU):**

There are many visual display units (VDU) in use today. It is a dual purpose device with a key board for data input and a cathode ray tube display for output. The latter is similar to a television screen. The KEYBOARD resembles that of ordinary typewriter keyboard, but usually has several keys, which are used to control and edit the display. Characters are displayed on the screen in a manner which resembles printed text.

Some features of the VDU include:

- i. **CURSOR CONTROL:** A cursor is a small character sized symbol displayed on the screen which can be moved about the screen both vertically and horizontally by means of special key and the keyboard.
- ii. **INBUILT MICROPROSSESOR:** The numerous internal functions of the VDU are controlled by the inbuilt microprocessor. These devices are sometimes capable of limited amount of processing with further enhancement these devices can often be turned into small microcomputers of their own right.
- iii. **MICE AND JOYSTICK:** This device has a variety of uses as alternative to the keyboard. In simple cases they can be used to move the cursor bout the screen.

#### **2.4.2 TERMINAL TYPEWRITERS**

A terminal typewriter is also a dual purpose device. It has a keyboard for data input and a small printer for output. It closely resembles electric typewriter hence, its name.

The printer is usually a character printer as in the case of a VDU. The terminal typewriter may be used either as a terminal or as part of some other data entry system features include.

- I. CONSOL:A console is a device which is used for communication between the operator and the program which is controlling the computer. This special program is after called the monitor. Terminal typewriters and VDUs can both be used as console through because of the permanent printed records.
- II. DOCUMENT RENDER: The method of reading the document is known as Magnetic Ink character Recognition (MICR). “Documents are passed through a strong magnetic field causing the iron-oxide” in the ink encoded characters to become magnetized. Document are then passed undone a read head when a current flow at a straight according to the size areas and document can be read up to 2,400 words pen minutes.

### **2.4.3 OPTICAL READER:**

The optical reader device uses a photoelectric cell to scan printed materials and decide which character is being presented. The character is then transferred to the computer store.

There are two basic methods of optical document reading:

- a. Optical character recognition (OCR)
- b. Optical mark recognition (OMR)

Features of an optical reader include:

- i. It has a document feed hopper and several stackers of rejecting documents.
- ii. Reading of document prepared in optical characters or marks is accomplished as follows:
  - a. Character: A scanning device recognizes each character by the amount of reflected light.
  - b. Marks: A mark in a particular position of the document will trigger of a response. It is the position of the mark that is converted to a value by the reader.



- iii. Document may be read up to 10,000 A4 document per hour

#### **2.4.4 THE PUNCHED CARD**

One of the oldest and most popular methods of transferring data into the computer store is by means of a punched card. This rectangular piece of cardboard is divided up into, normally, eight columns. Each column can be punched in up to 12 positions.

Normally, a column is punched once to code a numeric character and twice to code an alphabetic character. Thus, card may hold up to eight units of alphanumeric characters. The punched card in its present form has been in use for over half century and possesses the dual advantage of being both accessible to human interrogation and suitable for manipulation by a machine.

One disadvantage of punched card input is that the process of punching the card from the original document is both time consuming and expensive.

### **2.4.5 PAPER TAPE**

Another method of feeding data to the computer is to code the required input data as a set of punched holes in a paper tape. The tape can be five to eight channels. The latter being useful from a control of point of view since the eight channels check that no holes has been omitted during processing, this procedures is called parity checking.

Paper tape is a particularly properly form of inputs in those applications where the tape can be punched as a by-product tape copy of a punched order (PO) can be punched while the (PO) is itself being typed. Many book keeping machines, typewriter and adding machines are now fitted with this facility.

### **2.4.6 OUTPUT GRAPH PLOTTERS**

This is an output system in use. The group plotter machine must be capable of creating movement in two directions i.e. vertical and horizontal movement. Graph plotter may work in an on-line as well as off-line-mode.

In off-line mod graph plotters, signal from a program cause one of six things to take place.

(A& b) Horizontal movement, right or left

(C& d) Vertical movement, up or down

(E& f) The raising or lowering of the pen.

A diagonal line may be drawn when a horizontal movement is carried out in conjunction with a vertical movement.

#### **2.4.7 PRINTERS**

The most popular read out is the printer. The major characteristics of a business information processing system are that it provides large masses of human readable output. Printing devices normally provides this. The characteristics of such printers vary considerably from manufacture to manufacturer and even in the different computer systems, furnished by a given manufactures. In this medium the computer delivers on papers. Since the information output by the computer is binary to computer must convert this information to human readable form in a kind of electric typewriter. The coded information is charged into the electric current in the given solenoid connected to the output.

## 2.5 PARTS AND ELEMENTS OF A COMPUTER

Here we want to look at the electrification of computer into two parts:

→ The hardware

→ The software

### A. HARDWARE

This is the term used to describe the various mechanical and electrical parts that add up to make a computer. These parts include:

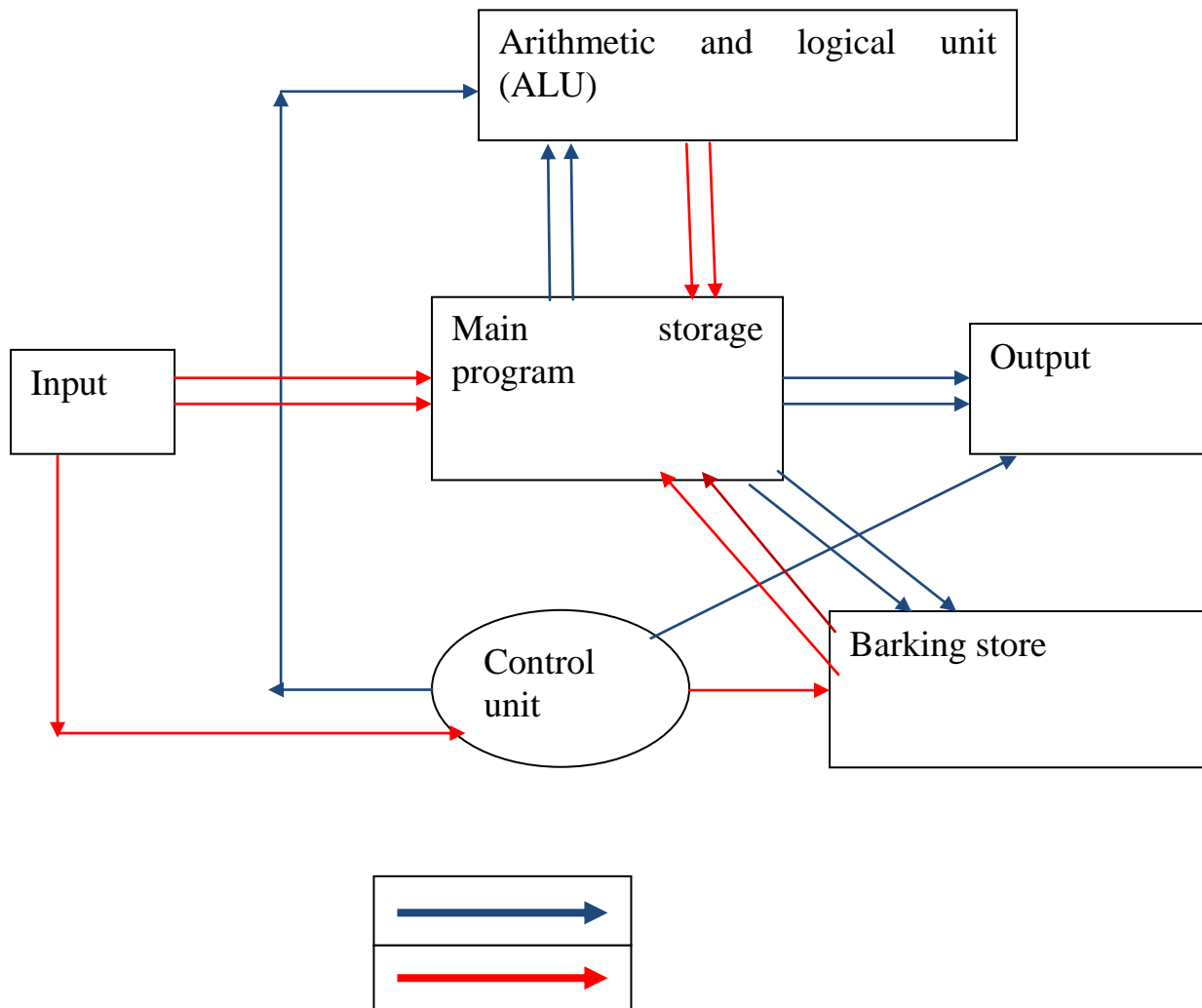
- I. INPUT DEVICE: After data have been fed into the computer they are automatically converted into electrically impulses and then routed to the main store where they are held until when needed. It is also called the memory or cache store, the main store serves as a link to other units.
- II. CONTROL UNIT: The instructions are assessed and interpreted by the control units, which send some signals or commands to other components of the computer.
- III. ARITHMETIC AND LOGICAL UNIT: In accordance with instructions, data is transferred from the main store to the ALU,

where arithmetic and logic operations are performed such as computation, decision, etc.

- IV. **OUTPUT DEVICE:** Processed data is routed from the main store where they are held for further processing, to the output devices after being recorded in an output medium such as the printer or VDU.
- V. **BANKING STORE:** Data that are not meant for immediate use are kept in the banking store. It is a kind of supplementary store of the main store.
- VI. **STORAGE:** The storage in the CPU is referred to as main storage, a term used to designate all internal storage of the CPU. It is the component of a computer into which all data processed by the computer are stored. The internal storage consist of magnetic cores arranged so that numeric and alphabetic characters and special characters such as comma, or a Naira sign (N) can be recorded in a storage and accessed When needed. Storage is divided into location normally consisting of a set of eight

magnetic cores each 8-bits set of cores has an address, and the address of the storage location must be known either to the programmer or to a control program to store data in and read data from a location.

### ELEMENT OF A COMPUTER



Know that the red line indicates the flow of instruction while the blue line indicates the flow of data.

## **B. SOFTWARE:**

Software is the election of program and routine associated with a computer, which facilitates the programming and the appreciation of the computer.

Software is program with documentation explaining the working of the program. It is the program that assigns functions to the computer keyboards.

We have two types of software:

→ System software

→ Application software.

- a. **SYSTEM SOFTWARE:** The user of a computer has at its disposal all large number of software provided by the manufacturers. Much of this software will be programs which contribute to the control and performance computer system (system software).
- b. **APPLICATION SOFTWARE:** Application program may be provided by the computer manufacturers or suppliers but in many cases the

users programs. This type of program could include stock program, Payroll programs.

The term software refers to the non-physical logic that makes the computers works and to the various instructions loaded into its memory even before it received your program.

## **2.6 OPERATING TECHNIQUES**

When an application is being designed for processing by computer, it is necessary to consider the processing technique or techniques, which will be most suitable for the data processing needs of the business. Indeed the voice of computer configuration will have been considered during the feasibility study, which automatically has a bearing on the technique which may be applied. Some of these operating techniques are:

- a. **BATCH PROCESSING:** The job is not processed until fully input. The job are entered and stored on disk in a batch queue and then, run one or more at a time under the control of the operating system. A job



may wait in a batch queue for minutes or hours depending on the work load. No amendments are possible during processing.

- b. **MULTI PROGRAMMING:** This is an operating system that interprets and switches rapidly back and forth between several programs while they are running, allowing several users to run different programs seemingly at the same time. This occurs when more than one program in main storage is being processed apparently at the same time. Programs taking turns at short bursts of processing time accomplish this.
- c. **MULTI PROCESSING:** This can effectively subdivide, the CPU in separate independent parts allowing several users to independently run programs at the same time.
- d. **ON-LINE PROCESSING:** This is operation of an input output done as a component of the computer, under program control.

The term on-line relates to data processing operations performed by device connected to, and controlled by the control-processing unit (CPU). On-line does not necessarily imply that the devices are at the

same location with the devices is at the same location with the CPU, but they were formally batch processing applications.

- e. **OFF-LINE-PROCESSING:** Operation of input-output and other devices not under direct computer control most used to designate the transfer of information between magnetic tapes and other input output media. Off-line processing is used to describe those operations which are performed by machine which are not directly connected to or controlled by the CPU. The purpose is to free the computer from controlling time consuming task performed by slow electromechanically devices used for input, output and data conversion operations are relatively slow compare to the fast internal speed of the CPU. The off-line processing operations enable the CPU to be fully utilized.
- f. **THE SHARING SYSTEM:** When a real time teleprocessing system allows several users to be in communication with the computer at the same time, then a time sharing system is used. Each user operates a terminal and each is connected to the computer over a data

transmission line. The CPU speed is so fast that it appears to each individual user that he is the only one using the computer.

- g. **REAL TIME PROCESSING:** A real time system is a computer system which is capable of processing data so quickly, that the results are available to influence the activities currently taken place. There is often a need for multi-processing and front end processor in these systems.

## **2.7 AREAS OF COMPUTER APPLICATION**

- I. Computer is continually being used in organizations and can enhance their level of performance since they have access to accurate, up to data and timely information.
- II. The application of computer is wide and varied for instance, in education, the computer is, and increasingly being used for teaching children how to speak pronounces words.
- III. It can be used for scientific application like nuclear research, weather forecast etc.

- IV. It can be used for staff record keeping in an office or keeping other information and even preparing a payroll for staff.
- V. Computer can also be used to computer taxation. Over the years, computer has been gradually accepted as a medium for covering people, events businesses, example, and organizations. The computer can pass 9,300 individual taxpayer tax request in n hours.
- VI. Computer is also used in areas of credit control and banking service. Stock control is another important area where the computer is being used. This is important knowing full well that it is not good to allow stock to go below the buffer stock level. Butter stock is the stock held for emergency, purposes. Since we are aware that usage decreases stock, before it get to the buffer level

### **2.7.1 OTHER AREAS OF COMPUTER APPLICATION**

Generally speaking these areas of application can be divided into two main parts.

- Routine administration/clerical application.
- Management control.

**a. ROUTINE ADMINISTRATION/CLERICAL APPLICATION**

- I. ORDER PROCESSING: This is one of the areas in which computer can be put to great use should an item not be available in one warehouse, the customer's order can be satisfied from an alternative warehouse, the customer's order as a central computer can link together widely separated warehouse.
2. PAYROLL: Computer can also be put into use in these areas it involves complex piece rate and bonus calculations.

**b. MANAGEMENT CONTROLS**

Management need information on which to base decision on the current operation and future plans. Example on the use of computer by management includes.

- I. PRODUCTION CONTROL: Production must respond quickly to changes in demand and other circumstance. To do this, it requires up to date and timely information, which can only be furnished by the computer.

- II. STOCK CONTROL: The computer is always able to process data quickly, making available information on stock levels, slow moving items or demand trend.
- III. LABOUR COST CONTROL: Labour control is also another area to which the computer can be used. This entails the analysis of labour hours into various categories such as idle time, sickness and absence and thus forecast future replenishment. The computer measures actual performance against budgeted so that the variance could be known and adequate corrective measure taken accordingly.
- IV. NETWORK ANALYSIS: Network analysis is an area to which the computer can also be very useful. For example in building a factory aircraft or ship the computer with the help of program is able to indicate the "critical path" i.e. the routes to follow which will take the largest time to follow which they take the largest time to complete. In building a factory the routes to follow may be up to three or four with the help of the computer, we are able to know the time of each route and indicate the critical path.

V. **LINEAR PROGRAMMING:** Linear programming enables us to find solutions to profit maximization problems. The computer has the capability and speed to compute every conceivable solution and this, find the optimal one. The management if dependent on human resources will spend a long time waiting for a solution that might not take the entire variable into consideration or might not even be optimal. The time to make the necessary calculations may not be there. Many of the procedures described above are possible done manually but it is the speed and accuracy with which the computer carries them out that makes all the difference.

## **2.8 LIMITATIONS TO THE USE OF COMPUTER**

- a. **Shortage of man power:** One of the major limitations to the use of computer in Nigeria and other developing nations of the world is the acute shortage of man power to manufacture the computer system and parts.

- b. Human resources: There is also the need to import human resources to repair and install sophisticated computer equipment. This is a drain on scarce foreign exchange.
- c. High cost of installation: Another limitation to the use of computer in Nigeria is the high cost of installation, taking into consideration the rate of depreciation in the value of the naira.
- d. Erratic Electricity supply: Erratic electricity supply in developing countries of the world also creates a major impediment to the use of computer.
- e. Unemployment: Computer is capable of replacing many semi-skilled and unskilled laborers, thus, leading to unemployment.
- f. Size of the firm: The organization may be too small to afford computers, as it is costly to buy and maintain.

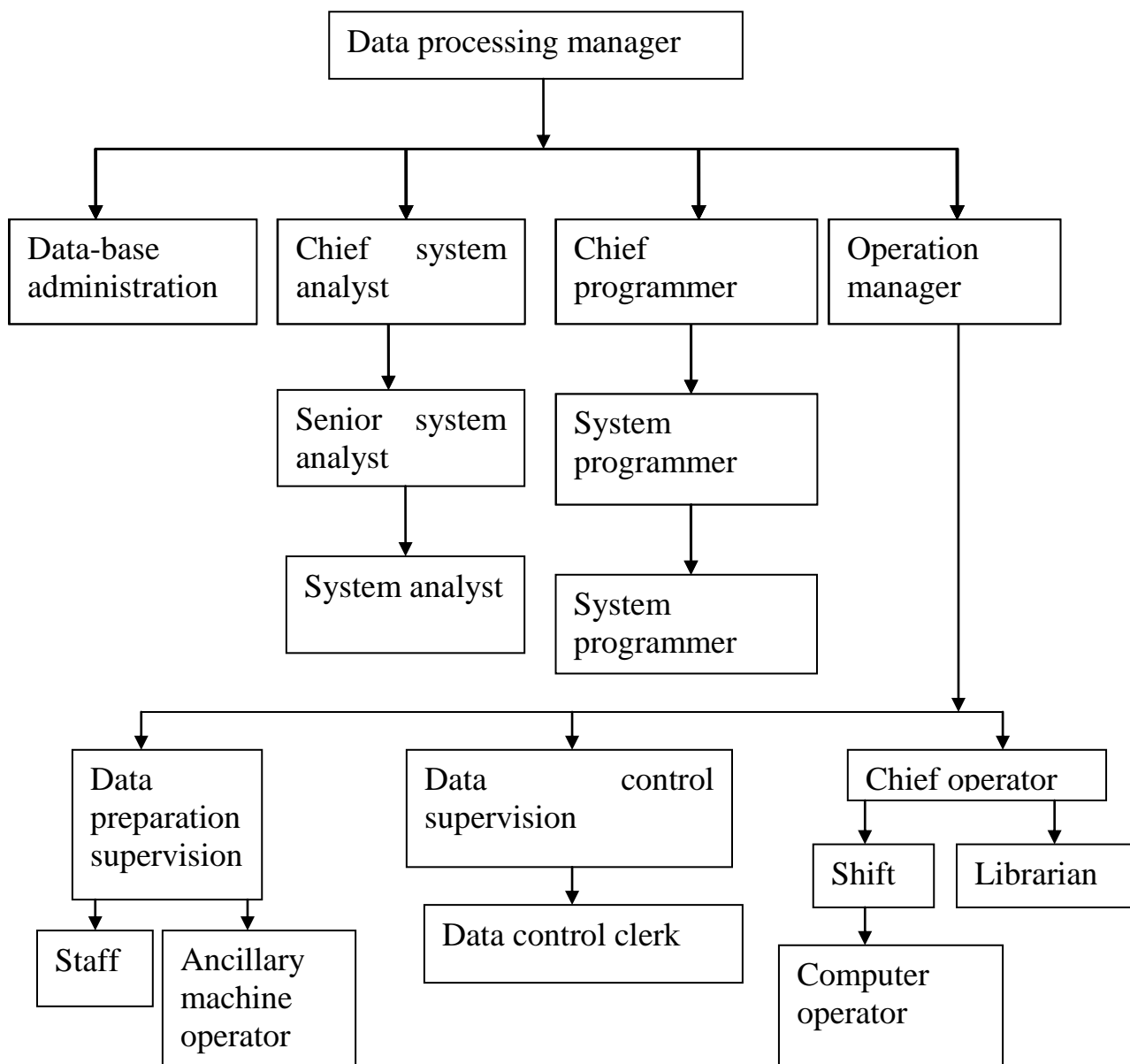


## **2.9 ORGANIZATIONAL STRUCTUR OF A DATA PROCESSING DEPARTMENT.**

In a data processing department three main division are recognized with major functions that are headed by each manager who reports to the data processing manager. These are:

- a. **SYSTEM ANALYST:** The system analyst is responsible for developing and testing computerized system and them for implementing and maintaining them:
- b. **THE CHIEF PROGRAMMER:** The programmer is responsible for writing and testing programs according to the specification laid down by the system analyst.
- c. **THE OPERATION MANAGER:** The operator is responsible for running the computer. They communicate with the machine via the console typewriter; they load card into the card reader and stationary into the line printer. They mount tapes and discs into their drives unit

## DIAGRAM OF DATA PROCESSING DEPARTMENT



With the conclusion of this chapter a systematic approach has been taken to bring out the various processes involved in running a computer department.

## **2.11 PURCHASING A COMPUTER**

Computer can be purchased from the manufacturers

### **2.11.1 ADVANTAGES**

There are many advantages to this method via:

- i. Where it is envisaged that a machine will be used for a long time, outright purchase may be cheaper than renting, or leasing.
- ii. As outright purchase gives the user ownership of the machine, there will be no extra charged levied as a result of the amount of work done by the machine as there often are when a machine is rented.
- iii. Once a machine has been bought, there are no regular outlays, unlike when it is rented.
- iv. There may be tax advantages.

- v. Manufacturers are ready to agree on maintenance contract for hardware purchased in this way.
- vi. As the computer is an asset of the organization that purchased it, it can dispose it off for cash at anytime it please.

### **2.11.2 DISADVANTAGES**

- i. A computer cost a lot of money and a once payment may well affect the organization cash allow. Where it does not, it is possible that the money would have been invested elsewhere for high returns.
- ii. When a company purchases a computer, it will have to be used for several years to recoups cost of investment. Where technology is developing fast, computer may become absolute this not justifying the money invested into it.
- iii. When a company purchases a computer, it will have to be used for several years to recoup its cost of investment. Where technology is developing fast, computer may become obsolete thus not justifying the money invested into it.

- iv. When a computer is purchased, the computer workload is taken into consideration, as the small for the task, which it is employed to carry out thus leading to, wasted investment.

## **2.12 RENTING A COMPUTER**

Potential computer user may acquire hardware for use at their own premises by renting it from computer manufacturers.

### **2.12.1 ADVANTAGES**

- i. No large once off cost is required.
- ii. The rental method allows an organization to plan its cash flows easier
- iii. A rental agreement will cover a fixed period of time. This gives the user the choice to dispose of unwanted machines at the end of agreed rental period.
- iv. As maintenance is normally included in rental period, agreement, there is protection against hardware failure.
- v. There may be tax advantage.

### **2.12.2 DISADVANTAGES**

- i. A fixed monthly outlay has to be met through a long period; this proves more expensive than purchase.
- ii. The computer never becomes property of the renting company no matter how long it is rented.
- iii. The monthly outlay increases when extra charges are levied for extra work done.
- iv. Rental charges do not reduce after a specified period as leasing charges often do.

### **2.13 LEASING A COMPUTER**

In a leasing system of financing, the computer leasing company (lessee) buys the hardware and after it has been installed in the user's premises (lessor), the user begins to pay monthly leasing charges to the lessor.

Leasing contracts are often longer than renting agreements and lower charges are usually made.

### **2.13.1 ADVANTAGES**

- I. The advantages of renting a computer discussed above, will apply to some extent to leasing.
- ii. Leasing charge is usually lower than rentals and no extra charges for extra work undertaken.
- iii. Leasing contracts can be taken made to sustain individual organization's requirement, even to the extent of matching the cash flow to the equipment.

### **2.13.2 DISADVANTAGES**

- I. Similar disadvantages to the first two noted above under rental apply. The period involved in leasing is longer than renting and so some of the flexibility given by renting is lost in leasing.

## **2.14 USING BUREAU**

A bureau is an organization, which provides its clients with a computer related services. Bureau is thus also human as service bureau or data processing service centers.

Before the introduction of micro computer, when the computer that was available than was very large and expensive the bureau directed their services to those small firms that could not have their own computers. However, in many bureaus, micro, microcomputers are now being used.

#### **2.14.1 ADVANTAGES**

- I. Cheaper than buying, renting or leasing.
- ii. Issue of hardware failure, is minimized as the bureau can always take care of this.
- iii. Hardware maintenance is not of the question because the bureau takes care of its hardware.

#### **2.14.2 DISADVANTAGES**

- i. Security of document cannot be guaranteed.
- ii. Bureau's staff not is two committed to clients work as the user staff is leading to lower standard.
- iii. Security of sensitive document when an outside body is carrying out an organization's data processing.



## **2.15 AUDIO RESPONSE UNIT**

An audio response unit allows a person to feed a coded enquiring into a computer as a series of dialed or keyed digits. These digits are then transferred to the main storage of the processor and assembled into a complete message. This unit selected from a magnetic drum, words or phrases of pre-recorded vocabulary.

The reply is restricted to a relatively small number of words and phrases. The enquiring and responses in some machine can also use of an ordinary telephone sets.

## **COMPARISON OF DATA AND INFORMATION**

A large percentage of data processing resources are expended to store data and to make it readily available. It is efficient processing of data, which provide management with valuable information.

Therefore, data can be defined as unstructured raw facts before being edited and made useable. While structured data that has been well

processed is regarded as information. Information is data, which have been understood and interpreted by the user of it.

Data element or fields are the most elementary levels of information. For example cheque is comprised of several data element such as the cheque numbers, dates, payee, amount and purpose of the cheque. Data elements are one or more characters. A character by itself such as alphabet “2” has no meaning.

However, the meaning is made possible to read when a series of other characters are put together. Such as the ‘alphabets “J, U, L, & Y”, which when put together mean “July”.

### **DATA COLLECTION**

Data collection comes in different ways. Data can originate in many forms, but the machine can only accept it in a maintain sensible form. That is, the language acceptable by computer. The process displayed on the screen which can be moved about the screen both vertically and horizontally by means of special key and the keyboard of getting the data from its points of

origin to the computer is a form suitable for processing against master files, is called data collection.

### **STAGES IN DATA COLLECTION**

- i. Data creation e.g. on electrically prepared sources documents.
- ii. Transmission of data.
- iii. Data preparation, that is, transcription and verification.
- iv. Input of data to computer for validation sorting.
- vi. Sorting.
- vii. Control: All the stages must be controlled. However, it should be noted that all the data will have to go through the stages specified above.

A high proportion of source documents have to be critically prepared and these go through all the stages.

Satellite communication has also helped a greater deal. The satellite provides wide banks of transmission path capable of being acceptable by various computer brands all over the universe. This has helped a great deal

in the advancement of radio and television communication. However, whatever medium is adopted will depend on factors such as cost, type of application.

### **DIRECT OR REAL TIME IMPUT.**

So far we have assumed that the happening of a vent in place “A” has been noted by an individual, recorded in some form of document and sent to place “B” where a record is updated with this information. However a more efficient system would be for the happening of an event at place. A to trigger

### **PROBLEMS ASSOCIATED WITH THE USE OF COMPUTER IN RECORDING ACCOUNTING INFORMATION**

- i. **COST:** the cost of installing a computer is so exorbitant that smaller firms find it different to install it because of their small capital outlay.

This cast includes:

- ii. **COST OF MAINTENANCE:** The maintain a computer machine is very expensive. It has to be installed in a good air-conditioned environment.
  - iii. **COST OF REPAIRS:** When a computer breaks down all starts mal-computer engineer is required and this cost a lot.
  - iv. **COST OF REPLACEMENT:** Depreciation has to set side quarterly monthly or annually. These enable the business to have cash ready for replacement of another new machine. Where by the there is no money to set this aside it becomes a big problem for such an organization to replace old one with new one.
2. **SERVICES OF A COMPUTER LITERATE:** To install a computer means to acquire the service of a good computer operator who has more knowledge of in computer operation. Whereby, the organization is not able to employ qualified personnel, the work will not be effect knowing full well that computer work is garbage in, garbage out.

3. UNEMPLOYMENT: Computer introduction into business has brought about unemployment and retrenchment. This occurs as a result that computer can handle 100 workers duty with speed and accuracy.
4. GABAGE IN GABAGE OUT: What you give computer is what it will process and give back. If wrong information is fed in the input wrong information will send out through the output device.
5. POWER FAILURE: Without electricity computer cannot work. Therefore, or erratic power supply brings about serious problems to computer used.
6. It becomes difficult to save confidential matter in the computer or computer disc since any literate computer operator can manipulate it and get the information.

## **SUMMARY**

### **DEFINITION:**

A computer is any machine or device which under the control of stored programmer, can accept data in a prescribed form, process data and supply the results as information in specified form.

### **TYPERS OF COMPUTER**

**DIGITAL COMPUTER:** The word digital means whole numbers e.g. IBM 360. 370

**ANALOGUE:** Example of analogue are thermometers, speedometers and petrol dispensers.

**HYBRID COMPUTER:** This is the combination of digital and analogue. E.g. a modern television set.

### **COMPUTER CLASSIFICATION**

**Super Computer:** The largest, fastest and most expensive computer.

**MANIFRAME:** It is a large computer in terms of price, size of internal memory and speed e.g. MCR V-8800.

MINI COMPUTERS: These were developed in 1970's for specialized tasks (that is, they are special purpose computers). They are smaller, less powerful and less expensive e.g. PDPII, Vax 730/6000.

MICRO COMPUTER: It is a computer whose central processing unit (CPU) is based on microprocessors, it is the most popular of computers e.g. IBM, Pc.

### **WHY COMPUTER IS NEEDED IN BOOK-KEEPING**

- i. To reduce error in data and information.
- ii. To increase accuracy of information
- iii. Reduction of tedious jobs
- iv. Provision of efficient storage.
- v. Giving first access to information.

### **AREAS WHERE COMPUTER IS NEEDED/USED**

SCHOOLS: For calculating and reporting, grades, students' record accounts keeping and inventory of school properties.

HOSPITALS: For keeping records about patients' bills.

BANKS: For keeping all the necessary account transactions.



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## **CHAPTER THREE**

### **3.0 RESEARCH METHODOLOGY**

#### **3.1 RESEARCH DESIGN**

In designing of the study, questionnaires and personal interviews were used to gather information as a source of my primary data collection instrument. The data collected was presented, analyzed, and interpreted by the use of tables, chi-square method, and coefficient of contingency while the secondary data were obtained from journals and annual accounts of Bendel feeds and flour mill, Ewu, Edo state.

#### **3.2 POPULATION OF THE STUDY**

The population for the study is the users of computer in recording accounting information which is the 133 staff of the computer and accounting departments of Bendel feeds and flour mill, Ewu, Edo state.

### 3.3 SAMPLE SIZE OF THE STUDY

The sample size of the study on the 133 staff of the computer and accounting department that would determine the number of questionnaires to be produced and distributed would be derive through the use of the YARO YAMANE method:

Formula:  $n = \frac{N}{1+N(e)^2}$  where n = number of sample size =?

N= total population size = 133

e = level of significance = 5% or 0.05

$$n = \frac{133}{1+133(0.05)^2} = \frac{133}{1+133(0.0025)} = \frac{133}{1+0.3325}$$

$$= \frac{133}{1.3325} = 99.8 \text{ or } 100$$

Therefore the number of questionnaires to be produced and distributed is 100 questionnaires.

### **3.4 SOURCES OF DATA OF THE STUDY**

The data and information of the study were gotten through the following sources.

#### **3.4.1 PRIMARY SOURCES**

This is a source of information used to get original, undiluted, raw, and reliable, first-hand information from the company of study and in the bid to get this information through this source, the researcher made use of questionnaires and personal interviews of management and staff in computer and accounting department.

#### **3.4.2 SECONDARY SOURCES**

This is a source of information which is gotten through magazines, libraries, journals, internet, etc. and the information might have been diluted through rephrasing etc. and mine was gotten through the company's journal and annual accounts.

### **3.5 INSTRUMENT OF DATA COLLECTION**

The instrument for data collection is questionnaire and personal interview.

#### **3.5.1 QUESTIONNAIRE**

The questionnaires were divided into two sections; section A is concerned with the individuals profile like age, sex, marital status, qualification, position held, years of experience since employment while section B questions were designed and well-structured to enable easy response of the respondents through ticking of columns [ YES, NO, I DON'T KNOW] and [AGREED, FAIRLY AGREED, DISAGREED] as given to the multiple choice questions.

A total number of 100 questionnaires were distributed out of which 90 were returned and 10 were unreturned, but out the 90 questionnaires 5 were wrongly marked leaving the researcher with 85 questionnaires to work with.

### **3.6 VALIDITY OF INSTRUMENT OF THE STUDY**

The instruments used for the research work, procedures, methods, and techniques have been tested to be correct because the research has been rejected, corrected and approved by my supervisor making the research work valid for users and other researchers with interest and intension to research more on the topic.

### **3.7 RELIABILITY OF INSTRUMENT OF THE STUDY**

This research work has been retested over and over again with the same results been obtained showing that the measurement procedures are of great quality providing repeatability, accuracy and reliability of the data.

### **3.8 METHOD OF DATA ANALYSIS**

Data collected were decoded, grouped into frequencies, computed and arranged in tables for easy references.

In the analysis of data obtained through questionnaire; chi-square test statistics  $(\chi)^2$  and cluster variable would be used in analyzing the responses.

The calculated table value, if less than the critical table the null hypothesis is accepted. But if the calculated table-value is greater than the critical table value, the null hypothesis is rejected and the alternative is accepted.

Chi-square is a measure of discrepancy existing between the observed and expected frequencies of one, two or more variables. Statistically, it is

defined as:  $x^2 = \sum \frac{(o-e)^2}{e}$       Where O = Observed value

E = Expected value

## CHAPTER FOUR

### 4.0 PRESENTATIONS AND ANALYSIS OF DATA

#### 4.1 PRESENTATION OF DATA

The relevant data for this research work having been collected, the researcher adopted a method to analyze the data vividly. The questionnaire was distributed to all staff in the computer and accounting department of Bendel feeds and flourmill, Ewu. At the time of distribution, 100 questionnaires were distributed, 10 were not returned while 90 were returned. Out of the 90 returned 5 were wrongly ticked. The percentage of questionnaire useable compare to that distributed is as follows:

QUESTIONNAIRES	RESPONDENTS	PERCENTAGE (%)
<b>NUMBER NOT RETURNED</b>	10	10%
<b>NUMBER WONGLY TICKED</b>	5	5%
<b>NUMBER USED</b>	85	85%
<b>TOTAL NUMBER DISTRIBUTED</b>	<b>100</b>	<b>100%</b>



## 4.2 ANALYSIS OF RESPONSE

- a. Has the use of computer had any effect on the old and new staff of the organization?

<b>OPTION</b>	<b>RESPONDENT</b>	<b>PERCENTAGE (%)</b>
<b>YES</b>	73	86%
<b>NO</b>	12	14%
<b>I DON'T KNOW</b>	-	-
<b>TOTAL</b>	<b>85</b>	<b>100%</b>

The above table shows that out of 85 respondents, 73 or 86% said yes that computer had an effect on both the old and new staff of the company, 12 or 14% said no to it saying it has had no effect on any of the staff.

- b. Has the use of computer reduced fraud drastically?

<b>OPTION</b>	<b>RESPONDENT</b>	<b>PERCENTAGE (%)</b>
<b>YES</b>	50	59%
<b>NO</b>	15	18%
<b>I DON'T KNOW</b>	20	23%
<b>TOTAL</b>	<b>85</b>	<b>100%</b>

The above table shows that out of 85 respondents, 50 or 59% said yes that computer has reduce fraud drastically, 15 or 18% said no to it, while 20 or 23% said they don't know if it had any effect on any of the staff.

- c. Do you consider electronic data processing better than the conventional manual method?

<b>OPTION</b>	<b>RESPONDENT</b>	<b>PERCENTAGE (%)</b>
<b>YES</b>	70	82%
<b>NO</b>	10	12%
<b>I DON'T KNOW</b>	5	6%
<b>TOTAL</b>	<b>85</b>	<b>100%</b>

The about table shows that out of 85 respondents, 70 or 82% said yes that the electronic data processing is better off than the conventional manual method, 10 or 12% said no that the conventional manual system is better off than the electronic data processing method, 5 Or 6% said they don't know with is better off between the electronic data processing and conventional manual system approaches.

d. Does the company employ specialist to operate the computer?

<b>OPTION</b>	<b>RESPONDENT</b>	<b>PERCENTAGE (%)</b>
<b>YES</b>	63	74%
<b>NO</b>	3	4%
<b>I DON'T KNOW</b>	19	22%
<b>TOTAL</b>	<b>85</b>	<b>100%</b>

The above table shows that out of 85 respondents, 63 or 74% said yes that the company employ specialist to operate the computer, 3 or 4% said no to it that the company do not employ specialist to operate the computer, while 19 or 22% said they do not know if the company employs specialist to operate the computer.

e. Does computer increase output [productivity] and brings profitability as well as cost effectiveness?

<b>OPTION</b>	<b>RESPONDENT</b>	<b>PERCENTAGE (%)</b>
<b>YES</b>	75	88%
<b>NO</b>	10	22%
<b>I DON'T KNOW</b>	-	-
<b>TOTAL</b>	<b>85</b>	<b>100%</b>

The above table shows that out of 85 respondents, 75 or 88% said yes that it has brought about increase in productivity and increase in profitability, 10 said no to it had it has not brought about increase in productivity or profitability.

- f. Do you agree that there is a relationship existing between electronic data processing?

<b>OPTION</b>	<b>RESPONDENT</b>	<b>PERCENTAGE (%)</b>
<b>AGREED</b>	57	67%
<b>FAIRLY AGREED</b>	17	20%
<b>DISAGREED</b>	11	13%
<b>TOTAL</b>	<b>85</b>	<b>100%</b>

The above table shows that out of 85 respondents, 57 or 67% agreed that a relationship exists between electronic data processing and the manual system approach, 17 or 20 fairly agreed to it while 11 or 13% disagreed that there was any existing relationship between the electronic data processing approach and the manual system approach.

- g. Do you agree that the use of computer has both positive and negative effect on company and staffs?

<b>OPTION</b>	<b>RESPONDENT</b>	<b>PERCENTAGE (%)</b>
<b>AGREED</b>	60	71%
<b>FAIRLY AGREED</b>	14	16%
<b>DISAGREED</b>	11	13%
<b>TOTAL</b>	<b>85</b>	<b>100%</b>

The above table shows that out of 85 respondents, 60 or 71% agreed that computer has both positive and negative effects on the company and staff, 14 or 16% fairly agreed to it while 11 or 13% disagreed saying that it had no effect both on the company or staff

- h. Do you agree that computer introduction brings about employment and unemployment?

<b>OPTION</b>	<b>RESPONDENT</b>	<b>PERCENTAGE (%)</b>
<b>AGREED</b>	61	72%
<b>FAIRLY AGREED</b>	14	16%
<b>DISAGREED</b>	10	12%
<b>TOTAL</b>	<b>85</b>	<b>100%</b>

The above table shows that out of 85 respondents, 61 or 72% agreed that the introduction of computer brings about employment and unemployment, 14 or 16% fairly agreed to it while 10 or 12% disagreed that the introduction of computer brought about employment and unemployment.

i. Do you agree that information gotten from computer is as correct as that gotten from the manual system approach?

<b>OPTION</b>	<b>RESPONDENT</b>	<b>PERCENTAGE (%)</b>
<b>AGREED</b>	55	65%
<b>FAIRLY AGREED</b>	16	19%
<b>DISAGREED</b>	14	16%
<b>TOTAL</b>	<b>85</b>	<b>100%</b>

The above table shows that out of 85 respondents, 55 or 65% agreed that both information from computer and manual system approach are correct, 16 or 19% fairly agreed that they are both correct, while 14 or 16% disagreed saying the information from computer is not as correct as that from a manual system approach.

j. Do you agree that there is equal relationship and accessibility of programmed data between the computerized system and manual system by staff?

<b>OPTION</b>	<b>RESPONDENT</b>	<b>PERCENTAGE (%)</b>
<b>AGREED</b>	59	70%
<b>FAIRLY AGREED</b>	14	16%
<b>DISAGREED</b>	12	14%
<b>TOTAL</b>	<b>85</b>	<b>100%</b>

The above table shows that out of 85 respondents, 59 or 70% agreed that there is equal access obtainable by staff both in the electronic data processing approach and the conventional manual system approach methods, 14 or 16% fairly agreed to it while the remaining 12 or 14% disagreed that equal access is obtainable in both methods.

### 4.3 TEST OF HYPOTHESIS AND PROOF

In testing the hypothesis for this study chi-square shall be used. Chi-square is used because it will enable the researcher to know the relationship between the variable tested in the study. It is in view of this, that the following hypothesis shall be tested in this study.

#### HYPOTHESIS I

- Ho: There is no significant relationship between the electronic data processing approach and the manual system approach.
- Hi: There is significant relationship between the electronic data processing approach and the manual system approach.

Table:

QUESTION 6: Do you agree that there is a relationship existing between electronic data processing?

<b>OPTION</b>	<b>RESPONDENT</b>	<b>PERCENTAGE (%)</b>
<b>AGREED</b>	57	67%
<b>FAIRLY AGREED</b>	17	20%
<b>DISAGREED</b>	11	13%
<b>TOTAL</b>	<b>85</b>	<b>100%</b>



$$\text{Using chi-square} = \chi^2 = \sum \frac{(o-e)^2}{e}$$

Expected = total sample size/number of columns

$$= \frac{35}{3} = 28.3$$

$$\text{Coefficient of continence} = C = \sqrt{\frac{\chi^2}{\chi^2 + N}}$$

Level of significance = 5% or 0.05

$$\text{Degree of freedom } d(f) = (c-1)(r-1) = (3-1)(2-1)$$

$$= (2)(1) = 2$$

$\chi^2$  Critical table value = 5.991

<b>ATTRIBUTES</b>	<b>OBSERVED</b>	<b>EXPECTED</b>	<b>A</b>	<b>B</b>	<b>CALCULATED VALUE</b>
<b>OPTION</b>	<b>(o)</b>	<b>(e)</b>	<b>(o-e)</b>	<b>(o - e)<sup>2</sup></b>	<b><math>\frac{(o - e)^2}{e}</math></b>
<b>AGREED</b>	57	28.3	28.7	823.69	29.106
<b>FAIRLY AGREED</b>	17	28.3	-11.3	127.69	4.512
<b>DISAGREED</b>	11	28.3	-17.3	299.29	10.576
<b>TOTAL</b>	<b>85</b>				<b>44.194</b>

Therefore the chi-square calculated value is 44.194.

$$\begin{aligned} \text{The coefficient of continence} = C &= \sqrt{\frac{x^2}{x^2+N}} = \sqrt{\frac{44.194}{44.194+85}} \\ &= C = \sqrt{\frac{44.194}{129.194}} = \sqrt{0.342} \\ &= 0.585 \text{ or } 0.60 \end{aligned}$$

### **DECISION:**

Since the chi-square calculated value of 44.194 is greater than the chi-square critical value of 5.991, therefore we would reject the null hypothesis (Ho) and accept the alternative hypothesis (Hi).

The coefficient of contingency of 0.60 indicated that a fair relationship exists between the electronic data processing and the manual approach.

### **HYPOTHESIS II**

- Ho: Computer has no positive and negative effect in recording accounting information.
- Hi: Computer has positive and negative effect in recording accounting information.

Table:

QUESTION 7: Do you agree that the use of computer has both positive and negative effect on company and staffs?

<b>OPTION</b>	<b>RESPONDENT</b>	<b>PERCENTAGE (%)</b>
<b>AGREED</b>	60	71%
<b>FAIRLY AGREED</b>	14	16%
<b>DISAGREED</b>	11	13%
<b>TOTAL</b>	<b>85</b>	<b>100%</b>

$$\text{Using chi-square} = \chi^2 = \sum \frac{(o-e)^2}{e}$$

Expected = total sample size/number of columns

$$= \frac{35}{3} = 28.3$$

$$\text{Coefficient of continence} = C = \sqrt{\frac{\chi^2}{\chi^2 + N}}$$

Level of significance = 5% or 0.05

$$\text{Degree of freedom } d(f) = (c-1)(r-1) = (3-1)(2-1)$$

$$= (2)(1) = 2$$

$\chi^2$  Critical table value = 5.991

ATTRIBUTES	OBSERVED	EXPECTED	A	B	CALCULATED VALUE
OPTION	(o)	(e)	(o-e)	(o - e) <sup>2</sup>	$\frac{(o - e)^2}{e}$
AGREED	60	28.3	31.7	1004.89	35.509
FAIRLY AGREED	14	28.3	-14.3	204.49	7.226
DISAGREED	11	28.3	-17.3	299.29	10.576
<b>TOTAL</b>	<b>85</b>				<b>53.311</b>

Therefore the chi-square calculated value is 53.311.

$$\text{The coefficient of continence} = C = \sqrt{\frac{x^2}{x^2+N}} = \sqrt{\frac{53.311}{53.311+85}}$$

$$= C = \sqrt{\frac{53.311}{138.311}} = \sqrt{0.385}$$

$$= 0.621 \text{ or } 0.62$$

**DECISION:**

Since the chi-square calculated value of 53.311 is greater than the chi-square critical table value of 5.991. Therefore, we would reject the null hypothesis (Ho), and accept the alternative hypothesis (Hi). The co-efficient of contingency of 0.62 indicated that a fairly agreed relationship exist between the positive and negative effect of recording accounting information with the use of computer.

**HYPOTHESIS III:**

- Ho: Information from the computer is not always correct.
- Hi: Information from the computer is always correct

Table:

QUESTION 9: Do you agree that information gotten from computer is as correct as that gotten from the manual system approach?

<b>OPTION</b>	<b>RESPONDENT</b>	<b>PERCENTAGE (%)</b>
<b>AGREED</b>	55	65%
<b>FAIRLY AGREED</b>	16	19%
<b>DISAGREED</b>	14	16%
<b>TOTAL</b>	<b>85</b>	<b>100%</b>

$$\text{Using chi-square} = \chi^2 = \sum \frac{(o-e)^2}{e}$$

Expected = total sample size/number of columns

$$= \frac{35}{3} = 28.3$$

$$\text{Coefficient of continence} = C = \sqrt{\frac{\chi^2}{\chi^2 + N}}$$

Level of significance = 5% or 0.05

Degree of freedom d(f) = (c-1)(r-1) = (3-1)(2-1)

$$= (2)(1) = 2$$

$\chi^2$  Critical table value = 5.991

<b>ATTRIBUTES</b>	<b>OBSERVED</b>	<b>EXPECTED</b>	<b>A</b>	<b>B</b>	<b>CALCULATED VALUE</b>
<b>OPTION</b>	<b>(o)</b>	<b>(e)</b>	<b>(o-e)</b>	<b>(o - e)<sup>2</sup></b>	<b><math>\frac{(o - e)^2}{e}</math></b>
<b>AGREED</b>	55	28.3	26.7	712.89	25.191
<b>FAIRLY AGREED</b>	16	28.3	-12.3	151.29	5.346
<b>DISAGREED</b>	14	28.3	-14.3	204.49	7.226
<b>TOTAL</b>	<b>85</b>				<b>37.763</b>

Therefore the chi-square calculated value is 37.763.

$$\begin{aligned} \text{The coefficient of continece} = C &= \sqrt{\frac{x^2}{x^2+N}} = \sqrt{\frac{37.763}{37.763+85}} \\ &= C = \sqrt{\frac{37.763}{122.763}} = \sqrt{0.308} \\ &= 0.555 \text{ or } 0.60 \end{aligned}$$

### **DECISION**

Since the chi-square calculated value of 37.763 is greater than the chi-square critical table value of 5.991, we would reject null hypothesis (Ho) and accept the alternative hypothesis (Hi). The co-efficient of contingency of 0.60 shows that there is a fairly strong from the computer and the manually operated method in the company.

### **HYPOTHESIS IV**

→ Ho: Not all employees have access to the programmed data.

→ Hi: All employees have access to the programmed data.

Table:

QUESTION 10: Do you agree that there is equal relationship and accessibility of programmed data between the computerized system and manual system by staff?

<b>OPTION</b>	<b>RESPONDENT</b>	<b>PERCENTAGE (%)</b>
<b>AGREED</b>	59	70%
<b>FAIRLY AGREED</b>	14	16%
<b>DISAGREED</b>	12	14%
<b>TOTAL</b>	<b>85</b>	<b>100%</b>

$$\text{Using chi-square} = \chi^2 = \sum \frac{(o-e)^2}{e}$$

Expected = total sample size/number of columns

$$= \frac{85}{3} = 28.3$$

$$\text{Coefficient of continence} = C = \sqrt{\frac{\chi^2}{\chi^2 + N}}$$

Level of significance = 5% or 0.05

$$\text{Degree of freedom d (f)} = (c-1)(r-1) = (3-1)(2-1)$$

$$= (2)(1) = 2$$

$\chi^2$  Critical table value = 5.991



ATTRIBUTES	OBSERVED	EXPECTED	A	B	CALCULATED VALUE
OPTION	(o)	(e)	(o-e)	(o - e) <sup>2</sup>	$\frac{(o - e)^2}{e}$
AGREED	59	28.3	30.7	942.49	33.304
FAIRLY AGREED	14	28.3	-14.3	204.49	7.226
DISAGREED	12	28.3	-16.3	265.69	9.388
<b>TOTAL</b>	<b>85</b>				<b>49.918</b>

Therefore the chi-square calculated value is 49.918.

$$\begin{aligned}
 \text{The coefficient of continence} = C &= \sqrt{\frac{x^2}{x^2+N}} = \sqrt{\frac{49.918}{49.918+85}} \\
 &= C = \sqrt{\frac{49.918}{134.918}} = \sqrt{0.340} \\
 &= 0.583 \text{ or } 0.60
 \end{aligned}$$

#### DECISION:

Since the chi-square calculated value of 49.918 is greater than the chi-square critical table value of 5.991, we would reject the null hypothesis (Ho)

and accept the alternative hypothesis ( $H_i$ ). The coefficient of contingency of 0.60 shows that there is a fair relationship between the accessibility of programmed data of the staff and the old manual system used in the company.

### **HYPOTHESIS V**

→  $H_0$ : The use of computer has not unemployment.

→  $H_i$ : The use of computer has unemployment.

Table:

QUESTION 8: Do you agree that computer introduction brings about employment and unemployment?

<b>OPTION</b>	<b>RESPONDENT</b>	<b>PERCENTAGE (%)</b>
<b>AGREED</b>	61	72%
<b>FAIRLY AGREED</b>	14	16%
<b>DISAGREED</b>	10	12%
<b>TOTAL</b>	<b>85</b>	<b>100%</b>

$$\text{Using chi-square} = X^2 = \sum \frac{(o-e)^2}{e}$$

Expected = total sample size/number of columns

$$= \frac{35}{3} = 28.3$$

$$\text{Coefficient of continence} = C = \sqrt{\frac{x^2}{x^2 + N}}$$

Level of significance = 5% or 0.05

Degree of freedom d(f) = (c-1)(r-1) = (3-1)(2-1)

$$= (2)(1) = 2$$

$x^2$  Critical table value = 5.991

<b>ATTRIBUTES</b>	<b>OBSERVED</b>	<b>EXPECTED</b>	<b>A</b>	<b>B</b>	<b>CALCULATED VALUE</b>
<b>OPTION</b>	<b>(o)</b>	<b>(e)</b>	<b>(o-e)</b>	<b>(o - e)<sup>2</sup></b>	<b><math>\frac{(o - e)^2}{e}</math></b>
<b>AGREED</b>	61	28.3	32.7	1069.29	37.784
<b>FAIRLY AGREED</b>	14	28.3	-14.3	204.49	7.226
<b>DISAGREED</b>	10	28.3	-18.3	334.89	11.834
<b>TOTAL</b>	<b>85</b>				<b>56.844</b>

Therefore the chi-square calculated value is 56.844.

$$\begin{aligned} \text{The coefficient of continence} = C &= \sqrt{\frac{x^2}{x^2+N}} = \sqrt{\frac{56.844}{56.844+85}} \\ &= C = \sqrt{\frac{56.844}{141.844}} = \sqrt{0.401} \\ &= 0.633 \text{ or } 0.63 \end{aligned}$$

**DECISION:**

Since the chi-square calculated value of 56.844 is greater than the chi-square critical table value of 5.991, therefore we would reject the null hypothesis (Ho) and accept the alternatives hypothesis (Hi). The coefficient of contingency of 0.63 shows that there is fair relationship between the relationship of computer bringing unemployment and computer bringing employment in the company.

## **CHAPTER FIVE**

### **5.0 FINDINGS/CONCLUSIONS AND RECOMMENDATIONS**

This study was mainly carried out in order to evaluate the cost saving effect in computer usage. Also highlighted were the various problems inherent in computer usage. In this wise, the major task was to investigate the operations of the computer with regards to the accounting system of Bendel feeds and flour Mill, Ewu.

#### **5.1 FINDINGS**

During the course of this study, some basic facts were identified.

The research revealed that the companies that have computerized accounting system are very few. Presently, banks can be identified as the main users of computer.

It has also come to our notice that the introduction of computer brings about low staff moral and a general redeployment amongst the lower cadre of staff in the finance department.

Also discovered is the fact that in the initial stage of computer installation, cost is abnormally high as a result of having to combine both manual and computer methods of data processing.

Computer breakdown can be reduced to the nearest minimum if a service agreement is entered into either with the manufacturers or with any other services company.

Finally, we have been able to discover that the major bottleneck in the use of computer is fraud. However, Nigeria being a developing country computer fraud is not of major concern to us yet. We must however, be aware that if adequate internal control procedures are taken, computer fraud can be checked.

## **5.2 CONCLUSION**

Computer technology is a form of technology which though has been existing over a long time in the developed world, is just gaining recognition faster in Nigeria today.

In carrying out this research work, problems such as:

- i. Why should a company change its accounting system from the manual to computer?
- ii. What method is most appropriate in financing a computer have been addressed.
- iii. What are the effects of computer in the day to day running of the business?
- iv. Suggested solution and recommendation such as:
  - a. The menace of computer fraud stars and possible checks.
  - b. Outright purchases, leasing, renting, whichever method suits the company most.
  - c. Advantages of speed, large volume processing accuracy (if input is correct) reliability,

Weighing the benefit derivable from the use of computer and the disadvantages thee from, the introduction of computer into an accounting system must be viewed with reservation. This is because a lot of risk is being taken. However, with special reference to the service of questions analyzed and the solutions there from in chapter four, the fact must be

acknowledged that computer usage in data processing is much more efficient than the manual approach.

Finally, with more and more companies going computerized, a better and more reliable flow of information within our industrial sector can be guaranteed in not distance time.

### **5.3 RECOMMENDATIONS**

The purpose of carrying out this research work is not only to highlights the problems inherent in the use of computer in recording information, but also to give solution to these problems. In the context of this statement, the following recommendations are made to enable companies just contemplating computerizing their accounting section and already computerized companies' benefit from the advantages therefore.

- i. The requisition of a computer involves a lot of capital outlay for outright purchased their machine out rightly. It must not be forgotten that different companies have different sources of capital. Therefore,



leasing or renting is recommended, depending on the financial capacity of the company.

- ii. The introduction of computer may also affect the moral of workers and will most likely result in endlessness of workers would refuse redeployment to the pen feeds milling section management should make provision for these.
- iii. The accuracy of results produced by a computer depends largely on the programmer and analyst who design and implements the software. Errors build into program will result in wrong information output ie garbage in garbage out (GIGO) therefore, the analyst should spend considerable time in source document analysis and programs should be designed when a company thinks of computerizing its accounts section.
- iv. Companies using computer should ensure that they employ specialist to handle all part of the company's computer operations ranging from system analyst programmer or operator, etc.
- v. The organization should also make provision for training programs and refresher course.

- vi. Finally, once an organization is computerized, it implies that its data processing job is dependent on the computer if a system is faulty, it will not be able to revert back to its discontinued manual system. Therefore, there should be a blend of agreement whereby organization in related field will complement each other in case of such breakdown or the services of a computer bureau should be enlisted.

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**APPENDIX**

Department Of Accountancy,

CARITAS UNIVERSITY,

Amorji – Nike,

P.M.B 01784,

Enugu state.

21<sup>st</sup> August, 2012.

Dear Respondent,

I am a final year student of Caritas University and currently undertaking a research on the ***Topic: “The Use Of Computer In Recording Accounting Information, Problems And Prospects”. (A Case Study Of Bendel Feeds And Flour Mill, Ewu, Edo State).***

Enclosed is a questionnaire designed to ascertain your view on the said topic. The project is in partial fulfillment of the requirements for the award of degree in Accountancy. All information being sought for is exclusively for academic purpose and such information would be treated with utmost confidentiality.

Thanks

Yours Faithfully,

Promise Njoku

(Researcher)

## RESEARCH QUESTIONNAIRE

This section comprises of two section A which deals with personal data and section B which carries other information requested of:

### INSTRUCTION:

Please tick [√] against your chosen options for multiple choice questions

### SECTION A

#### INDIVIDUAL PROFILE

1. Sex :                                      Male     [   ]    Female                     [   ]
2. Age:             20-30 [   ]                    31-40    [   ]    41 and Above [   ]
3. Marital status                            Married    [   ]    Single                    [   ]
4. Qualification: WAEC/GCE [   ]    HND/BSC [   ]    MSC/PhD                [   ]
- 5Position:             Manager [   ]    Accountant [   ]    Auditor                 [   ]  
                  Computer operator [   ]    others [specify.....]
6. When were you employed in the company  
    Below 5 year        [   ]  
    5 – 10                [   ]  
    11 – 15               [   ]  
    16 – 20               [   ]  
    20 – Above           [   ]

## SECTION B

1. Has the use of computer had any effect on the old and new staff of the organization?  
 Yes [ ]      No [ ]      I don't know [ ]
2. Has the use of computer reduced fraud drastically?  
 Yes [ ]      No [ ]      I don't know [ ]
3. Do you consider electronic data processing better than the conventional manual method?  
 Yes [ ]      No [ ]      I don't know [ ]
4. Does the company employ specialist to operate the computer?  
 Yes [ ]      No [ ]      I don't know [ ]
5. Does computer increase output [productivity] and brings profitability as well as cost effectiveness?  
 Yes [ ]      No [ ]      I don't know [ ]
6. Do you agree that there is a relationship existing between electronic data processing?  
 Agreed [ ]      Fairly Agreed [ ]      Disagreed [ ]
7. Do you agree that the use of computer has both positive and negative effect on company and staffs?  
 Agreed [ ]      Fairly Agreed [ ]      Disagreed [ ]
8. Do you agree that computer introduction brings about employment and unemployment?  
 Agreed [ ]      Fairly Agreed [ ]      Disagreed [ ]

9. Do you agree that information gotten from computer are as correct as that gotten from the manual system approach?

Agreed [ ] Fairly Agreed [ ] Disagreed [ ]

10. Do you agree that there is equal relationship and accessibility of programmed data between the computerized system and manual system by staffs?

Agreed [ ] Fairly Agreed [ ] Disagreed [ ]