

**COMPUTER APPLICATION: A RELEVANT TOOL
FOR EFFECTIVE ACCOUNTING SYSTEM IN THE
NIGERIAN RAILWAY DISTRICTS**

A CASE STUDY OF NORTH WESTERN DISTRICT MINNA

BY

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CERTIFICATION

This project has been read and approved as having met the standard required for the award of Postgraduate Diploma (P.G.D.) in the Department of Mathematics/Computer Science of the Federal University of Technology, Minna, Nigeria.

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DEDICATION

I dedicate this project work to the almighty God for making this project a successful completion.

ACKNOWLEDGEMENT

I give profuse thanks to the Almighty God for making it possible for me to complete this project work.

My sincere gratitude to the project supervisor and course coordinator Mr. ~~E~~.N Ezeako whose assistance bears testimony to the successful completion of this project work.

I also wish to acknowledge my appreciation to the Head of department Dr. S. Reju and the rest of the lecturers in the department for their support during the course.

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The efforts of many others deserve mention here, I am sincerely indebted for their assistance during the write up and typing of this project.

ABSTRACT

The use of manual accounting system in the Nigerian Railway Districts does not allow for easy and quick gathering of information. Errors and omissions etc occur. The problems are reflected in both operational and financial inefficiencies.

The project therefore, present an analysis and the use of computer applied accounting system. And also, the implementation of modern data processing system to achieve quick access to information and decision making in a most cost effective manner, for the accounting system in the Nigerian Railway districts with special reference to North Western District. These result are achieved using a visual Foxpro program.

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CHAPTER ONE

1.0 GENERAL INTRODUCTION

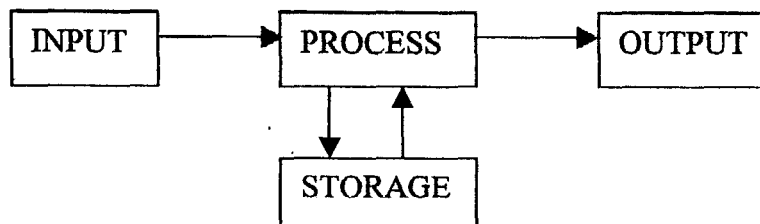
The Economic growth since the 20th century and the limitations of electro mechanical and manual office equipment resulted in a mass production approach to office work, dividing it into many small sections each responsible for a narrow highly specialized function. The introduction of computers with their immense capacity for handling information gives a far broader view and now large and complex enterprises can have the same comprehensive view of their operations as small business.

Computers are also used extensively in conjunction with mathematical techniques to solve a great number of diverse problems.

1.1 DEFINITION OF COMPUTER

A computer is an electronic device or machine that has the capabilities to accept data as input, process the data and emits the processed data or information as output. It has an added capability for storage.

The following is a simple illustration of the working processes of a computer.



1.2 CLASSES OF COMPUTERS

Computers come in wide variety of sizes, ranging from tiny handheld devices to some that are several feet in height and diameter. Computers can be classified by the way they process data and by their size. That is, they can be classified by their size, type of logic they use and by purpose.

In terms of size, computers can be divided into four categories:

SUPERCOMPUTERS

Super computers are the most powerful machines available in the mid-1980s. They are the fastest and the most expensive computers. For a machine to be considered a supercomputer, it must be capable of performing at least 10 million arithmetic operations per second. Auto manufacturers, meteorologists and physics use supercomputers.

MAINFRAMES

A mainframe is a large computer commonly used in business and industry. Mainframes are very expensive and are used to solve highly sophisticated problems. They have large memory capacity and are the most powerful. They operate at very high speeds and can support multiple users and multiple functions. They are mostly used by Banks, large commercial companies and government agencies.

MICROCOMPUTERS

The microcomputer is the lowest and least expensive computer currently available. They are often found in small business, home and classrooms. The primary storage unit is

usually smaller than that of other types of computers. They execute programs at slower speed. The flexibility of available software packages for performing specific tasks has raised its popularity tremendously. It is now also used in medicine.

MINICOMPUTERS

This is a computer with many of the capabilities of a mainframe but generally lower-priced and with a smaller primary storage unit and process data more slowly. They can support a networks of user terminals but not as many as mainframes. They are often used in business, which do not require the capabilities of a mainframe.

In terms of logic, computers are classified into main types depending on the way they represent and process information and another which is a combination of the two as the third type.

ANALOGOUS COMPUTER

This kind of computer performs its operations by measuring and comparing or relating physical phenomena, changes or variables in the form of mathematical equation in some notable quantities. It processes data that vary continuously such as variation in temperature, speed etc and are used for a wide variety of industrial and scientific applications. It does not contain memory since it measures or compares data/ value.

DIGITAL COMPUTER

A digital computer is one, which performs arithmetic operations, and access logical decisions according to instructions coded to it in advance in the digital computer, numbers and letters are presented as digits. Personal computers and mainframes are digital computers.

HYBRID COMPUTER

This is simply a combination of those two types of computers stated above. This combines the capabilities of analogue and digital systems in one. They are mostly used to solve sophisticated problems such as those from the studies of process control and optimization, any physical process described by a set of physical simultaneous ordinary or positive differentiation.

In terms of purpose, computers are classified into two classes: Special purpose and General purpose.

A special purpose computer is designed for only one purpose or to carry out specific tasks. Example is the computer used for guiding NASA's space shuttles.

A general-purpose computer can be used for many purposes. They are designed not specifically for specific jobs. For example, it may be for playing games, for handling payroll computations, to use graphics to design buildings and represent information or to solve complex mathematical problems.

1.3 BASIC COMPONENTS AND PARTS OF COMPUTER

A computer system consists of a number of components each performing a specific function. The three basic components include:

- **INPUT DEVICE:** used to send information to the computer. For a computer to perform any operation, data must be stored within the central memory. Before the data can be transferred to the central memory it must be prepared in a form suitable for process by one of the input devices on the computer. These include keyboard, mouse, punched cards, Disk Drives, Tapes (magnetic) etc.

- **CENTRAL PROCESSING UNIT (CPU):** The most complex and powerful part of a computer system is the CPU: The CPU can store data temporarily and perform operations on the data. It is thought of as the “Brain” of the computer. The CPU comprises three major units: The control unit, the arithmetic/Logic unit and the primary storage unit.

The control Unit: determines which instruction is to be executed. It is in charge of the activities of the CPU. It also directs the entire operation of the computer and its input/output devices. It interprets the instructions gives to the computer buy the user and then signals out signals to circuits within the CPU to execute these instructions.

The Arithmetic/Logic Unit: This is the section of the computer that performs the arithmetic operations that are directed by the control unit. For example, instructions to add, subtract, Divide or multiply numbers are directed to this unit, after performance of the operation, the result is retuned to the memory unit.

Primary Storage Unit: This is also called the central memory; program instructions and data are stored as binary numbers in the central memory unit. The memory consists of a lot of memory storage locations, each of which has a numerical designation called its address. Each location contains a binary number that represent either an instruction or data. When data come into a computer through an input unit, such as keyboard, it is converted to binary then stored; the data remains there until called for by the computers control units.

The central memory comprises Random Access Memory (RAM) and Read Only Memory (ROM). The RAM as the name implies can be written into and read from at random. This means that its contents can be used and replaced with new

programs as may be required for performing a new set of operation. It is in essence a read write memory and is relatively large. The ROM is the section of memory that is placed in the computer during the manufacturing process and remains there after the computer is turned off. That is, the contents of ROM cannot be changed and are not lost when the power is turned off i.e. it is not volatile.

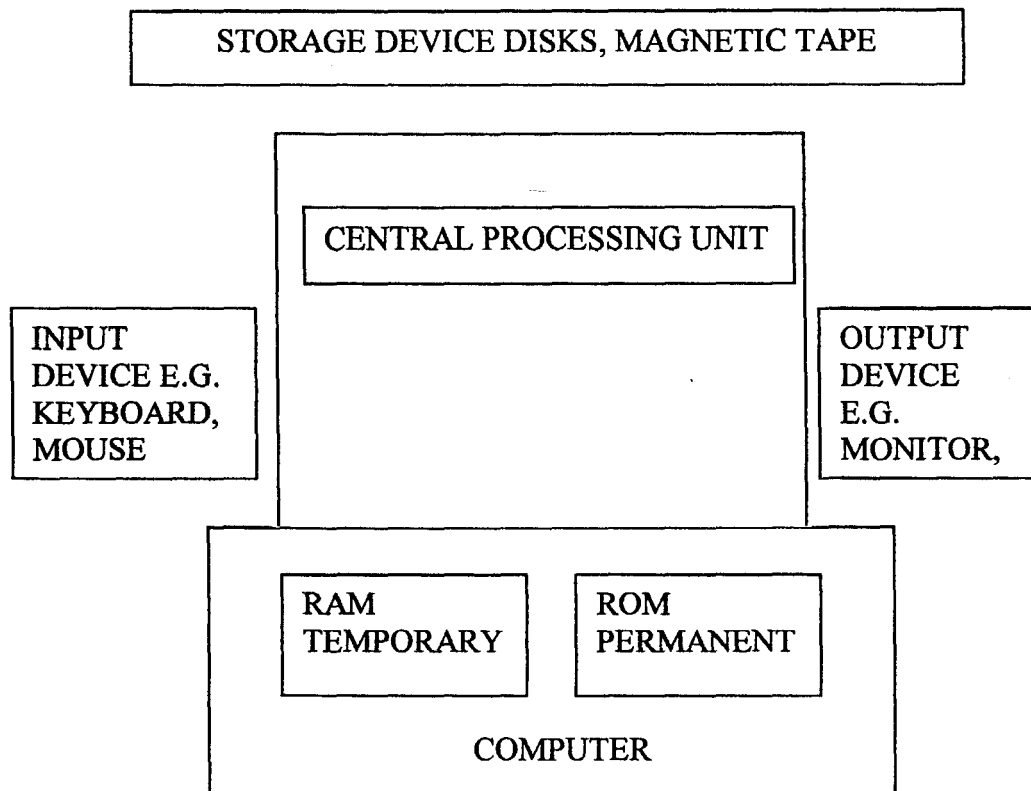
OUTPUT DEVICE

This is the unit, which yields up information. Output devices such as disk and tape drives are used to transfer data, results and programs from the primary storage unit to secondary (auxiliary) storage media such as floppy disks, hard disks and magnetic tape. Common output devices are visual Display Unit (VDU) and printer. The computer must communicate the results of its computations to humans.

These physical components of the computer system are called **HARDWARE**. Computer **HARDWARE** is inexorably linked to computer **SOFTWARE**. Software is the essential complement to computer hardware. The term **SOFTWARE** describes the computer programs that are executed by the Hardware. Defined narrowly, software indicates an operating system, a program designed to control the execution of other programs and to achieve efficient use of the computer hardware. The term can be broadly defined as the group of programs (including the operating system) that provides the mean to utilise the computer hardware efficiently. Without software, the Hardware is merely a complex set of electronic gear with no problem solving capability of its own and will not function. Software is the fundamental ingredient that makes the innate power of the Hardware available to the user.

Software consists of the operating system and application program, which reside in RAM. Application programmes are instructions written to achieve specific tasks. The OS is permanently stored in RAM but the different application programs can be loaded which allow the computer to be used as a general purpose machine to solve a variety of problems.

BASIC COMPONENTS OF A MICRO COMPUTER SYSTEM



1.4 ACCOUNTING SOFTWARE

One reason for the natural application of the computer to the accounting work is the long-established routine character of conventional (i.e. manual) accounting. The record keeping required by accountants must be standardized and detailed a sequence of entry and crosschecking. Computers perform such tasks very well and with unlimited patience.

Automated record keeping and transaction processing is faster and more accurate than any manual system

For a business of any significantly, size, another reason for considering the use of an accounting program is the difference it makes to the job of the accountant in the firm. With much of the record keeping and balancing being taken care of by the accounting software, accountants now have more time available to devote the monitoring, analyzing and advancing of the larger financial picture of the enterprise.

Accounting type programs include:

- General Ledger
- Accounts receivable
- Accounts payable
- Inventory control
- Payroll

Other application software include Database management software, Graphic software, Communication software, productivity software and integrated software which enable the user to combine information generated by one software with that generated by another.

1.5 DATABASE MANAGEMENT SYSTEM (DBMS)

A Database management system is software packages that constructs, expands and maintains the data contained in the database. It also provides the interface between the user and the data in such a way that it enables the user to record, organise, select, summarise, extract, report on and otherwise manage data contained in a database.

DBMS programs keep information in files and within each file is a collection of related information. The data in a file are organized into rows and columns with each row

making up a record. A column of data is known as a field and the column heading is a field name. The content of a field determines the field type e.g. numeric, character, memo, date etc.

The DBMS manage large and complex files structures. Users of databases do not access the database directly instead they access the DBMS which interprets the data requirements into accesses to the database, makes the accesses required and return the results to the user in the form that the user requires. The use of DBMS help to:

- Reduce data duplication and inconsistency
- Increase speed in implementing speed
- Increase data integrity
- Provide management view of the organisation

1.6 SECURITY

System security restricts access to system functions so that only those who require this access have it. Security is an internal control mechanism that is part of the automated systems functionality. Look for security to provide the following restrictions based on an individual users identity.

1. On line system access restricted to users with a valid user ID and password.
2. Restricted access to menu items
3. Restricted access to certain functions such as the ability to update master file information.
4. Restricted access to particular cross sections of accounting data such as restrictions to working only within a designated company in the chart of accounts.

The last three restrictions are functions (security) controls, which are usually part of the accounting software itself.

CHAPTER TWO

2.0 INTRODUCTION

It is pertinent to note that Nigeria railway corporation is not an industry that manufactures goods or process raw materials for finished goods to be used by the consumer but it is a non-profit making government institution meant to carry passengers and freight using locomotives, wagons and coaches from one destination to another.

This should be done in a manner that will offer full money, meet cost of operations and maximum efficiency, meet social responsibility in a manner that will meet the requirement of rail users, trade, commerce, industry and the general public.

The Nigeria Railway Corporation (here is referred to as 'N.R.C' is one of the major means of transportation and the cheapest in the country. Due to gross in efficiencies and mal administration, NRC is far from achieving its objectives.

2.1 HISTORICAL BACKGROUND OF NRC

The NRC is one of the oldest public institutions in the country and outside of government, the largest single employer of labour. Background history shows that Railway Construction in Nigeria actually started in 1898 after about fourteen years of conflicting interests of various pressure groups calling for immediate construction of a railway.

Nigeria has a total of 3508 route km of 1067mm (3'6') gauge single-track railway network. The NRC was formerly known as Nigeria government railway when it was an integrated part of ministry of transport.

To ensure proper management as the system grew, government established the Nigerian Railway Corporation as an autonomous body to run the railway. Nigeria is the 6th

country with the largest rail line in Africa. Essentially, NRC has narrow gauge of 1067mm, 2792km of main route, 713km of branch lines and 280 stations and was prominent in the 60's.

The NRC became a corporate body like any legal body to sue and to be sued and came into existence by an Act of parliament known as the NRC Act of 1955 otherwise known as the principal Act.

In order to make the NRC more relevant, two notable attempts have been made to rejuvenate the corporation in the last two decades. In 1979, the rail India technical and economical services (RITES) were contracted by Nigerian government for three years to overhand and manage the services of the NRC in addition to providing training for the Nigerian personnel. Also, in November 1995, a sino Nigerian bilateral part was made in order to turn the fortunes of Nigeria railway. This contractual agreement worth about us \$528,697,000 was entered into with the China Civil Engineering and Construction Corporation (CCECC) and it was planned to cover a period of 36 months. It was also expected to engage a tract survey eliminating sharp curves, ease steep track gradients and renew existing sleepers with additional ballast. It was also expected to rehabilitate and refurbish existing signaling and telecommunication system as well as rehabilitate old and supply new locomotives and rolling stock. That is, 50 locomotives; 150 coaches, 400 wagons and 100 guard vans among other things.

The Federal Government also has hopes of installing the standard gauge of the railway to enhance its performance.

2.2 FUNCTIONS AND OBJECTS OF NRC

The act of 1955, which established the NRC, assigned certain functions, which include:

1. To manage and operate the Railway and Provide needed facilities for carriage of persons and goods.
2. To control corporations expenditures
3. To set up workable machinery for realizing annual revenue sufficient to offset all expenditure properly chargeable to revenue.
4. To direct and control expansion and extension of Railway system.

Also section 15 of the NRC act 1955 (as amended) defines the general duties of the NRC thus:

“It shall be the duty of the corporation to mane and operate in accordance with the provisions of this act, the Railway undertakings transferred to the corporation by virtue of the provisions of the act and any expansion or extension thereof and any new Railway, and to provide all reasonable facilities for carriage by the corporation of passengers and goods”.

2.3 ORGANISATIONAL STRUCTURE

The NRC act assigned the central of the corporation with the board of Director consisting of a chairman and 8 members as stated by the amendment of the 1995 act and also vests the power to appoint the managing director in the ministry of transport.

The corporation with its headquarters at Lagos has seven districts (divisions) each of which is headed by a Railway District Manager (RDM). These districts are:

Lagos District ----- Ebute Metta junction

Western District ----- Ibadan

Northern District ----- Zaria
North Western District----- Minna
North Eastern District ----- Bauchi
North central district ----- Kafanchan
Eastern District ----- Enugu

Again, the NRC is divided into seven major departments each headed by executive Director. These are director Administration, Director operations, Director medical, Director New lines, Director Finance, Director Civil and Director Mechanical Electrical.

The NRC districts for management convenience has various departments involved with the day-to-day running of the corporation. They are:

- Accounts Department
- Operating and commercial Department
- Mechanical Department
- Stores Department
- Medical Department
- Civil Engineering Department
- Personnel Department
- Internal Audit Department
- Public relations department

Each department is headed by a head of department thus, some department have sub-sections like the accounts department, which is sub-divided into

- General accounts section
- Revenue section
- Checking section

- Pay office

However, I will be limiting my discussion to accounts department. And since all the districts are engaged in similar activities using the same forms, I will limit my discussion to the Northwestern district as my proposed case study.

The Northwestern district is headed by the RDM (Railway District Manager). It consists of eight departments like every other NRC district and each headed by a head of department. Minna has thirty stations and it operates intercity mass Transit services from Minna to Kaduna 160km every day at 7.00 a.m. Another mass transit from Minna to Jebba down to Ilorin.

SOURCES OF FUNDS/REVENUE

- Federal Government subvention
- Freight/goods
- Passengers
- Investment income
- Estates
- Miscellaneous activities

All revenue collected is usually put in various revenue bank accounts designated in the districts.

2.4 THE ACCOUNTS DEPARTMENT

This department is headed by the District Accountant (DA).

FUNCTIONS

- This department is the custodian of and recurrent expenditure and budget monitoring to the Federal government.
- It checks financial activities of other departments and raise queries where possible.
- It also produces final accounts for the corporation.
- It plans, coordinates and controls the revenue earnings such as the money accruing from carriage of goods, passengers, miscellaneous receipts etc.
- It also plan, coordinates and control the expenditures in respect of salaries, wages, allowances of staff and making payment to the contractors.

2.5 EXISTING ACCOUNTING PROCEDURES

Accounting practices incorporate both cash and accrual basis and do not lend themselves to the generation of accurate up to date data for decision-making. This is because, the procedures followed by NRC are essentially manual which involves delivery of manual reports to the district accounting offices generally staffed with 20-30 employees (who are not always professional or well educated). Thus, the data is manually collated and totaled, both as to revenues and expenses in large bound volumes. Copies are made by hand and forwarded to Lagos Headquarters after long delays to check data. Lagos Headquarters then reviews and revises this data, and then delivers it to the computer center to be entered. Draft print outs of all data are then run and returned to the districts for checking. When all corrections are received and gaps filled, the corrected points out are then returned to Lagos for revised computer entry.

Parallel to the accounting effort, internal audit receives a separate copy of all revenue documents and is supposed to check each transaction for correctness of calculation and rate applied.

BUDGETARY CONTROL

There seems to be no planning at all. The accounting practice shows that there is nothing like estimates for both revenue and expenditure. The accounting staffs are first concerned with collating and totaling revenue and expenses. Thus, the organization has no specific target, which can be used to measure performance.

All these, results in both financial and operational inefficiencies due to poor control and general services as well as staggering corruption, large scale fraud and other forms of financial mismanagement.

2.6 ANALYSIS OF THE SYSTEM

In the present system, there are no effective facilities for processing data, so the management continues to depend on the alertness and vigilance of the accounts staff for monitoring the accounting system.

The automated accounting system by use of computer application is not utilized by the NRC in the districts. Crucial minute-by-minute decisions on active work continue to be dependent on laborious collection of data from files (manually) by the accounting staff.

These decisions hence, continue to be frequently behind time and inaccurate for purposes of frequency and control.

The facilities at the districts like typewriters are also manual and forms, used in the system have been in use since the inception and some have become obsolete.

Maintenance of books of accounts by the staff like journals or subsidiary books. Ledgers have deteriorated as well as control checks. Where there are no reliable and effective control checks, there can be no efficient system operations.

The status of the accounting system is good. In fact, the railway accounting system is considered to be one of the best in the country but for the problems encountered in the manual preparation and processing of data, a new system with computer application should be installed.

2.7 INTERNAL CONTROL SYSTEM

The system of internal control in NRC is based in such a way that every item of transaction has to pass through the internal Auditor for approval. All funds collected must be accounted for. These could be as revenue allocation from government or locally generated revenue from freight charges and passengers sale of tickets. Even though, accounts department check for the correctness of tickets sold as declared by operating and commercial department.

The payroll is also under accounts section and is supervised by audit department. All vouchers for payment prepared by accounts section are audited before payment.

The internal controls are designed to prevent and detect errors and irregularities. This responsibility rests with the chief accounting officer. The responsibilities are being carried out by instituting and maintaining a strong system of internal control.

2.8 PROBLEMS ASSOCIATED WITH THE OLD SYSTEM

The problems encountered in the existing manual accounting system are those of errors, poor maintenance of records, fraud and irregularities, waste of time in retrieval of data as well as feedback.

Errors are described as unintentional mistakes, which are, occur at any stage in transactions. Error can be of any magnitude and kind.

Fraud or irregularities is defined as intentional distortions of financial statements for whatever purpose and also as misappropriation of assets whether or not accompanied by distortions of financial statement. Fraud involves irregularity with use of criminal deception to obtain an illegal advantage.

Irregularities may mean that proper accounting records have not been kept. It also indicates that some control measures are not effective and reliance cannot be placed on the measures.

The kinds of frauds or irregularities normally found in most cases are:

- Non-issuance of receipt to customers
- Removal of a few receipt sheets/Tickets
- Issuing out fake receipts to customers
- Alteration of receipts
- Falsified duplicate copies of receipt
- Figures on bank slips less than actual amount collected and entered in cashbook.
- Inclusion of non-existing (Ghost) workers on the payroll.
- Unauthorised or alteration of salaries and allowances of employees.
- Repetition of employee names
- Collection of salaries on behalf of employee by other staff.
- Outright misappropriation of funds.

2.9 SCOPE AND SIGNIFICANCE

The project work is designed to identify the problems being faced in the accounting system of the NRC in the districts, with a view to suggesting options for improved accounting system.

This improved accounting system will in turn enhance operational efficiency.

CHAPTER THREE

3.0 SYSTEM ANALYSES AND DESIGN

3.1 SYSTEM ANALYSIS

System analysis involves investigation and understanding of the work method and procedures used in the organization and improving on the current situation by bringing new and better methods. Due to the various disadvantages experienced in using manual method, computer application in the accounting system of the NRC in the districts is relevant for effectiveness and efficiency.

The principles of the accounting system will not change but the method will change from manual to electronic data processing environment and storage of information.

Contrary to manual processes being supported by paper documents like approval, vouchers, invoices and records of accountability such as payroll, Journals, Ledgers, inventory records etc, documents in computer system exist only in machine sensible form that is, standard format. The use of paper is very minimal and data in standard format cannot be read or modified without the use of computer.

In the Revenue section of Accounts departments, the checking of tickets can also be taken care of by use of computer. All information should be complete and easily accessible. It will be very necessary hence, to have staffs that are knowledgeable in the use of computer.

3.2 PROPOSED SYSTEM OF DATA PROCESSING, PAYROLL AND LEDGERS

No organization can do without an accounting system. It is as much a part of an organization as its people. Modern business automate their accounting systems enabling

precise record keeping and a wealth of features and capability not available in a manual accounting system.

Besides processing the routine financial transactions that support the day-to-day operations, automated accounting system play a key role in the overall financial and management reporting that ties the company together. The two primary objectives of an accounting system are: -

- To carry out the routine transaction of processing and record keeping required of the accounting organization.
- To measure and report the performance of the organization in financial and other terms.

Through the use of automation, well-implemented accounting systems can achieve these objectives in a most cost effective manner.

Modern automated systems have certain features that cross boundaries and characteristically appear in all automated accounting systems.

1. Searching and selecting
2. Standard report format
3. The user interface
4. Journals and transaction reporting
5. Master files and tables

The user interface is a set of automated system features that is visible to operators and accountants using the system. It includes all modes of interaction with the system, screen layout; on line system use reported messages, error conditions and printed documentation.

Many systems provide a capability far searching and selecting transactions, table entries and master file records. The enables an accountant to remise the chart of accounts.

JOURNALS AND TRANSACTION REPORTING

Journals report and create important audit trails that record and report all transaction entering the accounting system. Also called, Journal report lists its transaction by sequence in which they were entered usually sorting them by batch and line number. This provides accountants with enough information about posted transactions so that they need not refer back to source documents when performing their work.

Master files are large, data intensive files that form the cornerstone of particular accounting applications. Tables are smaller files (usually under 100 records) that further support specific system features and capabilities. Accounting systems have specific features pertaining to master file and tables that generally appear to wherever these structures exist.

1. A listing feature that reports the important information of cash master file or lists of file out in its entirety
2. Record searching and selection as described earlier
3. The ability to search a table of valid values from a data entry screen and selects one table entry via cursor movement and without keying that item into the screen.

NB

A modern accounting system will rarely compromise these features.

The flexibility and popularity of the computers provide unparalleled capabilities for manipulating and analyzing extracted general ledger information. The ability to use this tool effectively not only enhances the organizations custom reporting and financial report preparation but also allows for presentation of quantitative information graphically.

Applications like executive information, decision support and financial modeling. Graphics and output presentation and personal computer applications in financial reporting are well established and the Railway should employ these tools. The accountants often use

the general ledger system as the central repository of financial reporting and analysis on this data. Spreadsheet features can be used to enhance this.

Routine and repetitive processes like preparation of payrolls should be placed on the computer to reduce the problems. Normally encountered in manual preparation.

3.3 ACCOUNTING APPLICATION OF COMPUTER

The use of electronic data processing equipment is possible for virtually every phase of accounting operations. The most common application of the computer is to process large masses of accounting data relating to routine repetitive operations such as recording sales, maintaining perpetual inventory records, preparing payrolls and posting to ledger accounts.

TICKETING

For the Railway districts where tickets are sold to passengers, some tickets are not accounted for by station masters may be due to errors or fraud. It takes a long time for the accountants to trace the irregularities and mete out correction measures.

The problem of accounting for sales of tickets will be greatly reduced with the use of electronic device. From the ticket number, the computer will be able to identify the ticket and record the amount of the sale and transfer the cost of the item from the inventory account to the cost of tickets sold.

PAYROLL

In a manual accounting system, the preparation of payroll checks is usually separate from the maintenance of records showing pay rates, payroll reduction and other personnel

data. A computer however has the capability of maintaining all records relating to payroll as well as turning out the required pay cheques.

The company's record must be designed to facilitate filing, regulate reports showing the amount withheld for income taxes, etc. The time and the expense required to prepare payrolls have risen in proportion to the need for more information.

A computerized payroll system will not only maintain the necessary records, prepare the checks and print the required reports but also keep management informed of the cost of various functions within the organization.

JOURNALS AND LEDGERS

Computer may be used to maintain the journals and ledger and to prepare financial statements transactions and end of period adjustments, which must be analysed by a person possessing a knowledge of accounting principles. However, after the transaction have been analysed and prepared in computer input form, the computer can be used to print the journals, post to the ledger accounts and print the financial statement and other financial reports.

The advantage of maintaining accounting records by computer is that the possibility of mathematical errors are great reduced and the speed of the computer permits the record to be kept continuously up to date.

Other accounting application of the computer include forecasting the profit possibilities inherent in alternative courses of action, analyzing gross profit margins by department and determining future cash requirement long in advance. Development of accounting applications of the computer provide much more information about business operations than is available to management in manual.

3.4 INTERNAL CONTROL AND SECURITY

Computer hardware itself is highly reliable and the possibility of errors caused by computer malfunctioning is very small. However, the use of reliable equipment does not entirely eliminate the possibility of errors in account of record. Human beings create the information, which is entered into the computer, and human beings make mistakes. In addition, the computer program may contain errors and therefore, may process certain transactions improperly or incorrectly. Thus, internal control is just as important in a computer-based system as in a manual accounting system. The under mentioned are important internal control concepts for computer based accounting systems.

ORGANISATIONAL CONTROL

Separation of duties is necessary among an organizations computer department. The purpose of such separation is to ensure that no one person is in position to make unauthorized changes in programs or computer based records. Thus, all programs should be tested by someone other than the programmer who wrote the program.

In addition, the responsibility for programming and actual operations of the computer should be assigned to different employees. Several computer-based frauds have occurred when programmers were also responsible for daily computer operations.

As an additional precaution, the computer should create a log of all instructions given to the machine by the computer operation. This record should be received daily by a computer department control group to determine that the operator has not made any unauthorized changes in programmes or files. For example, if a new payroll program is carefully tested by other employees or audited, there will not be a possibility for fraud.

INPUT CONTROL

Input controls are precaution taken to ensure that the data being entered into the computer is correct. Input controls vary depending upon whether transactions are being entered into the system as they occur (on line real time) or whether they are processed periodically in large groups or batches. These controls include such concepts as identity numbers and passwords to identify authorized users.

PROGRAM CONTROL

Program controls are errors detecting measures built into the computer program. Examples of program control test are a limit test which compares every items of data processed by a computer to a specified Naira limit and prints out an error report without processing that item if the amount exceeds the limit. The total number of data items to be processed by the computer is predetermined and that total is entered as part of the input to the computer. The computer counts the number of items it processed, if this number exceeds or differs from the predetermined total, an error report is printed, this is item count.

Another example of control is the use of account numbers or keywords. If two names posses the same account number, the computer emits an error report and does not process. These controls are useful especially in payroll.

SECURITY CONTROL

The purpose security control is to safeguard computer based records, computer programs and computer equipment against damage, theft, corruption or unauthorized use. It is essential that only authorized personnel have access to computer programs and accounting

records. When programs or records can be accessed from a computer terminal, the user of the terminal should be required to enter secret passwords to gain access to the system.

The computer should issue a warning to the computer department control group if repeated attempts are made to gain access to the system. Programs and records should be safety locked after working hours.

3.5 FEASIBILITY STUDY

The alternative proffered as the solution to the corporations problems encountered in its accounting system is further evaluated to find out its feasibility in terms of the following:

TECHNICAL FEASIBILITY: Whether the type of technology needed is available for the Railway to employ. From the foregoing, it is apparent that this is very much feasible.

OPERATIONAL FEASIBILITY: This determines whether the existing operations of the Railway fit in with the proposed solution. And whether the right information at the right time is provided to the users in the Railway. This is also confirmed feasible.

ECONOMIC FEASIBILITY: This ascertains whether finances are available for implementing the proposed solution and whether the satisfaction derived will justify the cost incurred. The economic feasibility is determined using the cost and benefit analysis of the system.

COST ANALYSIS: Since Railway is already established and functioning, most of the costs may not be incurred except for the purchase of computers and software and their installation, training of personnel as well as maintenance.

COST ANALYSIS

<u>DEVELOPMENT COST</u>	<u>₦</u>	<u>₦</u>
Equipment cost	400,000	
Software cost	250,000	
Installation cost	<u>200,000</u>	850,000
 <u>PERSONNEL COST</u>		
Staff training		50,000
 <u>OPERATIONAL COST</u>		
Maintenance cost	200,000	
Consumable materials	200,000	
Standard arrangement	<u>250,000</u>	<u>650,000</u>
		<u>1,550,000</u>

The total analysis cost = Developmental cost + Operational cost + Personnel cost =
₦1,550,000

BENEFITS

The following are the prospective benefits to be derived by Railway with the use of computers:

1. The primary advantage of the computer is its incredible speed. The time needed for a computer to post a transaction or retrieve data or determine an account balance is but a few millionths of second.
2. Large amounts of data can be processed quickly and effectively. This includes recording of transaction, posting to the ledger accounts and preparing of accounting records, schedules and reports. It is done with utmost accuracy.

3. Account balances will be kept up to date.
4. Additional information may be developed at virtually no cost.
5. Instant feedback is available as transactions are taking place.
6. It provides for updating, deletion and corrections (editing) with minimum waste.
7. It provides for data security
8. It will save cost in terms of paper consumption and energy.

In short, an automated accounting system eliminates most of the problems inhibiting an effective accounting system. With the expansion of routes and introduction of the standard gauge of Nigerian Railway, as it is being discussed by the Federal Government., an automated accounting system will be vital help.

3.6 INPUT AND OUTPUT SPECIFICATION

In the manual system, the forms used include ledgers, journals, summary reports, vouchers, waybills and other documents. These will serve as models for the input and output forms. The use of keyboard, mouse, dist drives, monitor and printers will achieve this.

3.7 HARDWARE

The Railway should purchase a 32-bit personal computer that is highly equipped with:

- Pentium 233MMX
- Co-processor
- 4MB standard RAM
- 3½ 1.44MB floppy disk drive
- Qwerty keyboard
- Mouse

- 60MB magnetic tape streamer and
- A semi-graphic VDU (also called monitor)
- A high quality printer

These are necessary due to the largeness of the Nigerian railway corporation and its operations.

3.8 SOFTWARE

The NRC is one of the largest employers in the country. Each district has a lot of staff for the various departments and many stations. The accounts department prepares monthly reports and the final accounts at the end of the year. They are always called upon to provide information needed for management decision at any time. They keep records of all transactions both expenses and revenue that take place in the district.

The software that will manage the data and serve as interface between the user and the database in such a way that it enables the user to record, organize, select, summarise, extract, report on the data is the database management system (DBMS) which consists of various programming languages like dbase III, dbase IV, clipper, visual FoxPro, oracle etc.

3.9 SYSTEM DESIGN

System design involves putting together the analysed problem and formulating a new design in order to improve on the objective. The design involves consideration of:

1. Input
2. Output
3. Files
4. Procedures

The purpose of the design stage is to work from the requirement specification to produce a system specification. The system specification is a detailed set of input documents, forms, report layouts which provide details of all features of the system.

Design stages of a computer application

THIS SYSTEM IS DEVELOPED TO TAKE INTO CONSIDERATION

This system is developed to take into consideration

1. The type of output needed
2. The frequency of need
3. The media to use
4. Who needs the output and in what form?
5. The need to recall information from time to time
6. Data validity
7. Data management and maintenance
8. Data security

These form the modules on which the programs of this system are written. The most needed information both at low and high levels should be achieved by this system.

CHAPTER FOUR

4.0 PROGRAM DEVELOPMENT AND IMPLEMENTATION

In developing a program, one is concerned with all the activities that contribute to the initiation of the program.

4.1 PROGRAMMING CONCEPT

The realization of the importance of data has meant there is a need for proper management and efficient organization of the data. It is also important that data can be easily accessible to the user through the software used. The programming language used in visual FoxPro.

VISUAL FOXPRO

Visual FoxPro is a new version of FoxPro. It can be regarded as FoxPro: the next generation. It is an improvement on dbase IV. Although visual FoxPro retains the basic flavour of the dbase interactive environment and programming language, it also incorporates significant enhancements that will have a major impact on the structure of a typical application: some data dictionary features, object oriented programming language commands and a brand new and greatly improved form designer.

Visual FoxPro runs only under windows (windows six, windows 95, windows browsing and windows NT). Visual FoxPro has three distinct operational modes:

- You can work with the program interactively using menu options and dialog boxes to give commands.
- You can accomplished the same tasks at a time in the command window

- You can write programs and add programs code to menus and forms to build an application that can be use by users who know nothing about visual; FoxPro.

To build visual FoxPro applications, you will need to master all three of these modes of operation. Visual FoxPro provides a powerful set of interactive design tools which allow one to define menus, forms, reports, labels, queries and object classes.

Visual FoxPro gives one a comprehensive tool kit that lets one accomplish more with less programming. The use of keyboard and mouse commands to manipulate program and document windows, switch from one program to another, cut and paste material using clipboard and execute menu commands that are common to all applications such as opening files, searching for text and printing.

In visual FoxPro, the command or programming language is fundamental, and menus and dialog boxes you can use to open and manipulate tables are nothing more than alternate interfaces that enable you to tap into the command language without manually typing the commands.

The system is divided into

- a) Recording and reporting of operations
- b) Deletion of unwanted records
- c) Retrieve (Edits of data inputs)
- d) Processing and reports.

PROGRAM STRUCTURE

The input modules are made up of separate sub-modules of visual FoxPro.

PROGRAMS

- a. Data entry for: FREIGHT REVENUE

Showing Freight Daily

Revenue generation through tickets sold and goods carried.

b. Data entry for: GENERAL ACCOUNT FORM

Which shows the expenditure and deposits for each month and the balance.

c. Data entry for: PAYROLL which will accept and calculate employees salaries.

All those with features to manipulate the data entry as required by the user.

PROGRAM CALLS

- a) Access to the system is through identification by password.
- b) To produce any report or do any processing of update or creation of files, the required file is highlighted or the first letter entered which will take you to the required program.

After the necessary adjustments or entries are made, to click close on the manual will end the session. The menu can be used to Add new, modify, delete the records as required.

The programs are written with comments for easy reference of the program for modification.

SECURITY AND INTEGRITY OF THE SYSTEM

The security and integrity of the system is designed to take ample account of

- a) Data preparation
- b) Data Handling
- c) Storage and manipulation
- d) Programming standards

ACCESS AND SECURITY

Access to the system is restricted by password to restrict initial and subsequent access for unauthorized changes to information on files or records inside these files.

DATA VALIDATION

There are checks built into the system which checks data entered and validates, if not, the data are rejected. Incorrect data and their associated report are returned to the user for investigation and correction.

Visual FoxPro lets you open more than one database at a time, and up to 65,536 tables (subject to available memory and system resource).

4.2 IMPLEMENTATION CONSIDERATION

Program implementation involves making the developed program operational. This objectives of introducing that system in the organization concerned. It is therefore, important that a great deal of caution or care should be observed to install the new computer system otherwise, there are bound to be serious problems which could render the system development a total failure. This involves the following areas.

4.2.1 TRAINING OF PERSONNEL

The users of the system should be given the right orientation and proper training to ensure that they live up to expectation in handling the new system. Mishandling and unskillful operation of nay computer system can adversely affect the overall activities of an organization.

4.2.2 SYSTEM TESTING

Program testing is vital so that errors detected are debugged before the system is put into use. To this end, the necessary test data for program and procedure testing are provided. This will ensure that the whole system fit together as planned.

4.3 SYSTEM CONVERSION METHODS

There are several approaches for installing a new system. The conversion process from manual to computer for a particular system can be any of the following alternatives:

- i) Direct changeover
- ii) Parallel conversion
- iii) Pilot changeover
- iv) Staged changeover or conversion

The direct approach of conversion is a drastic measure, which involves the complete and immediate replacement of the old system with the new one.

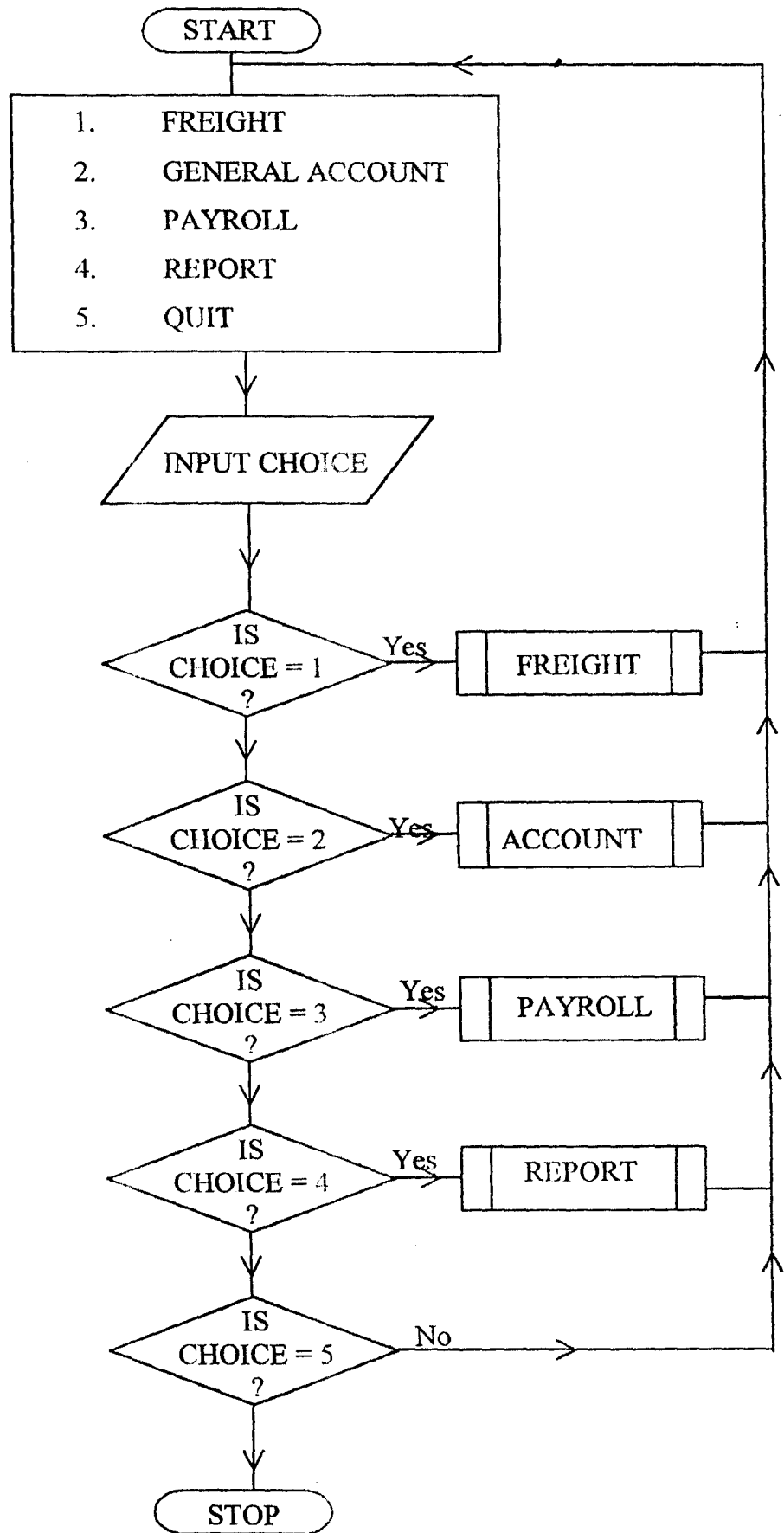
The parallel method of conversion involves running both the old and new system concurrently so as to assess the performance of the two systems simultaneously.

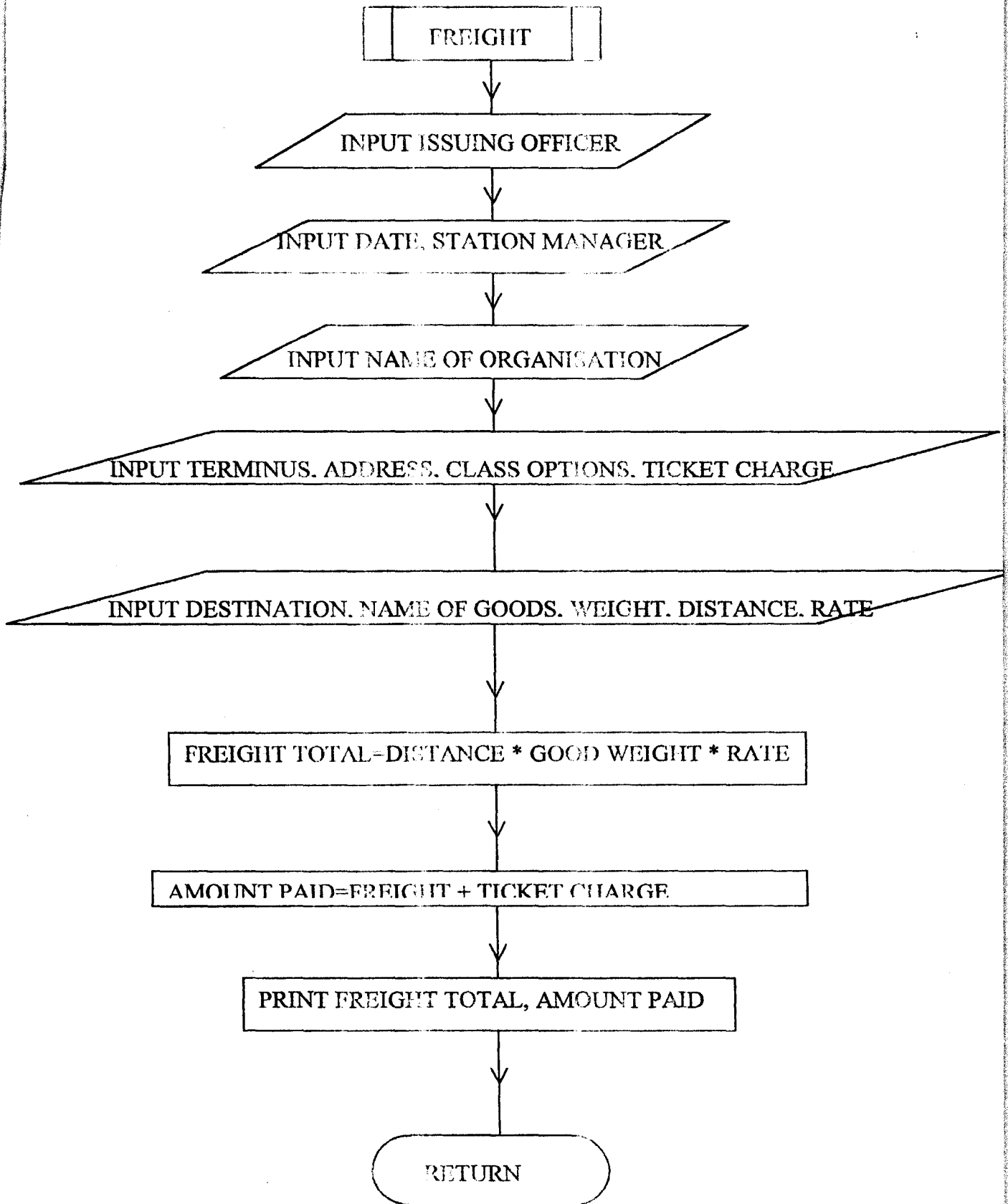
The pilot approach involves converting only some units or departments of the organization into the new system.

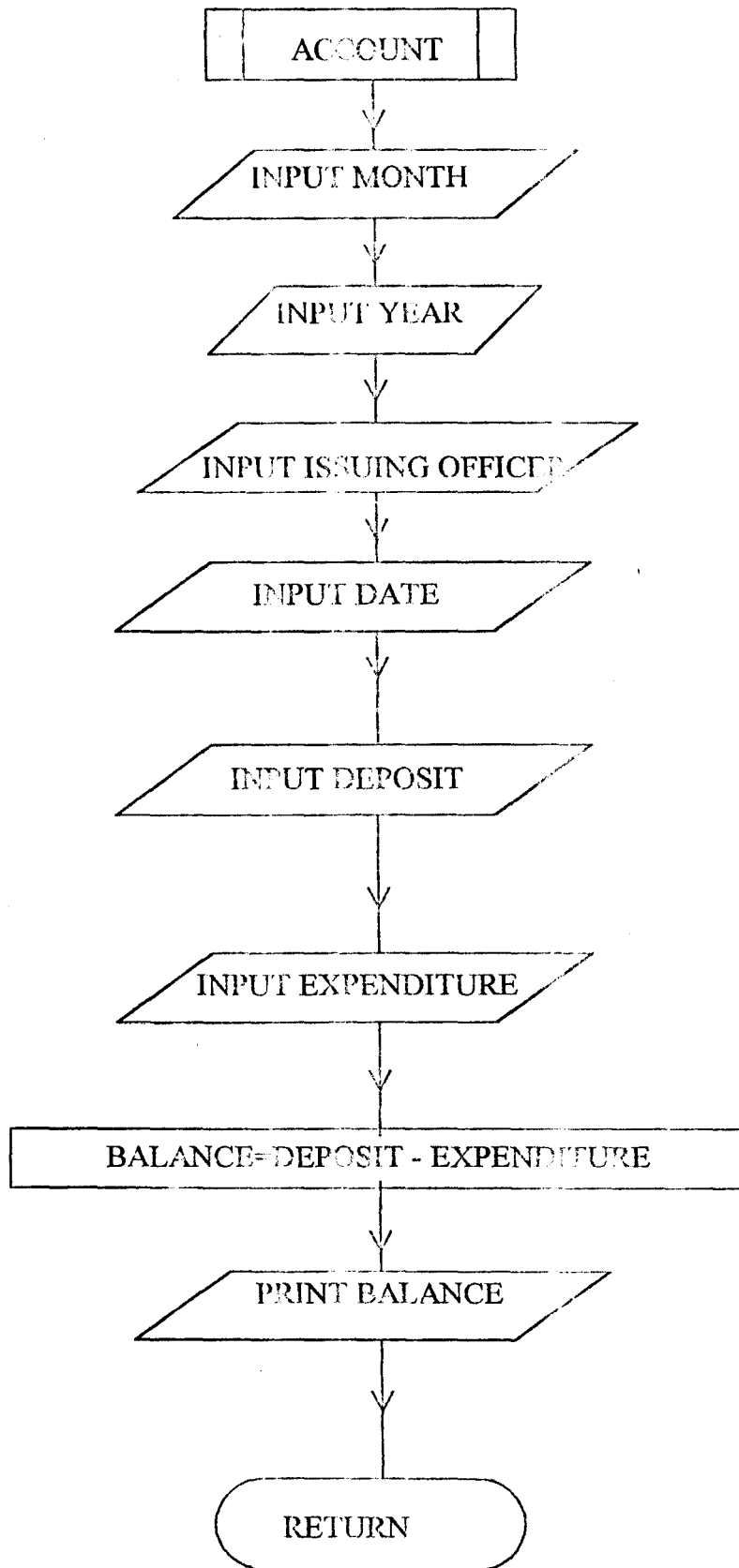
The staged conversion involves the selecting a part of the system and implementing it to make sure its running well before selecting another part.

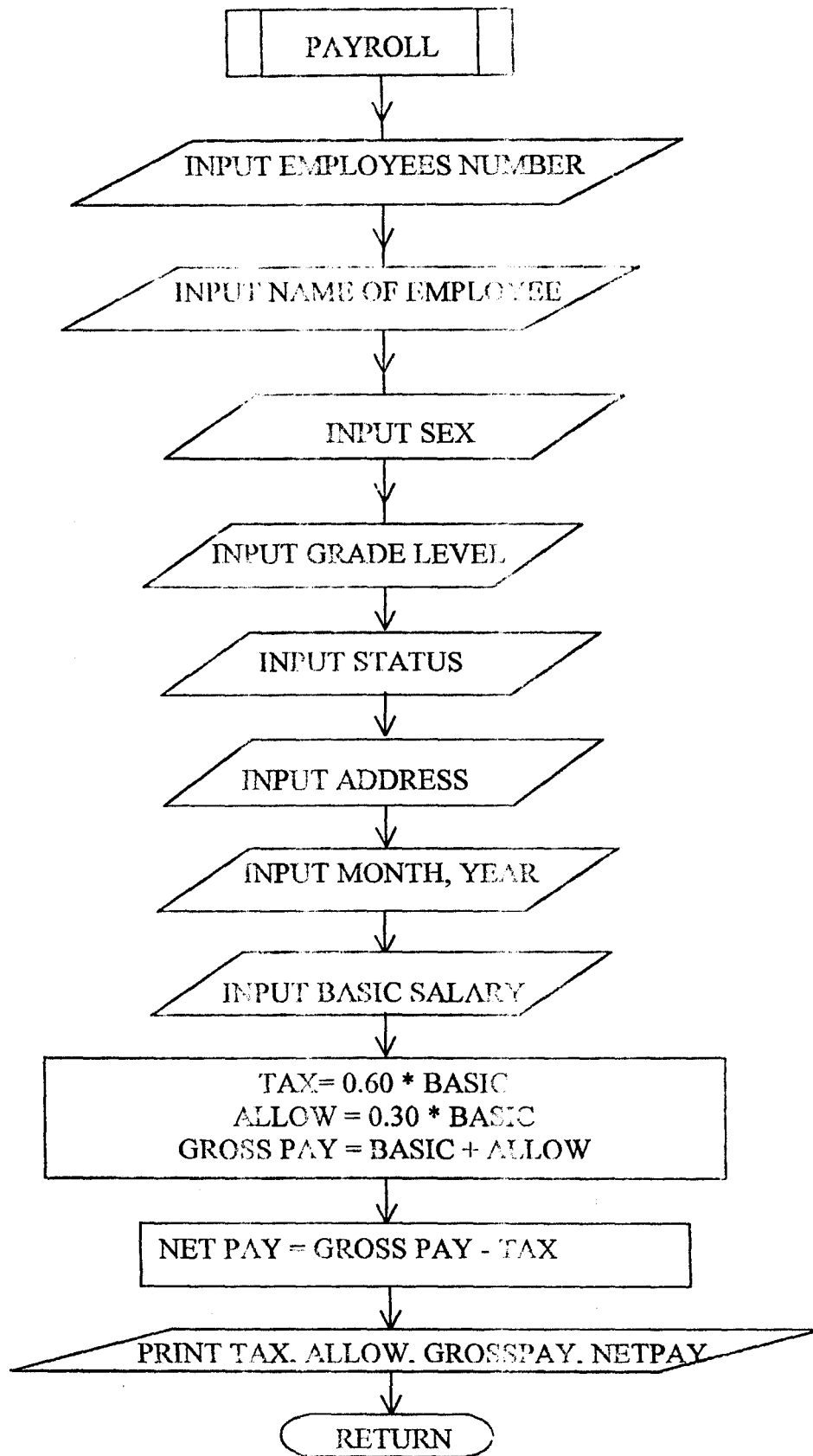
From the nature of the problems inherent in the alternative approaches, and for this particular project, the staged conversion is the most appropriate.

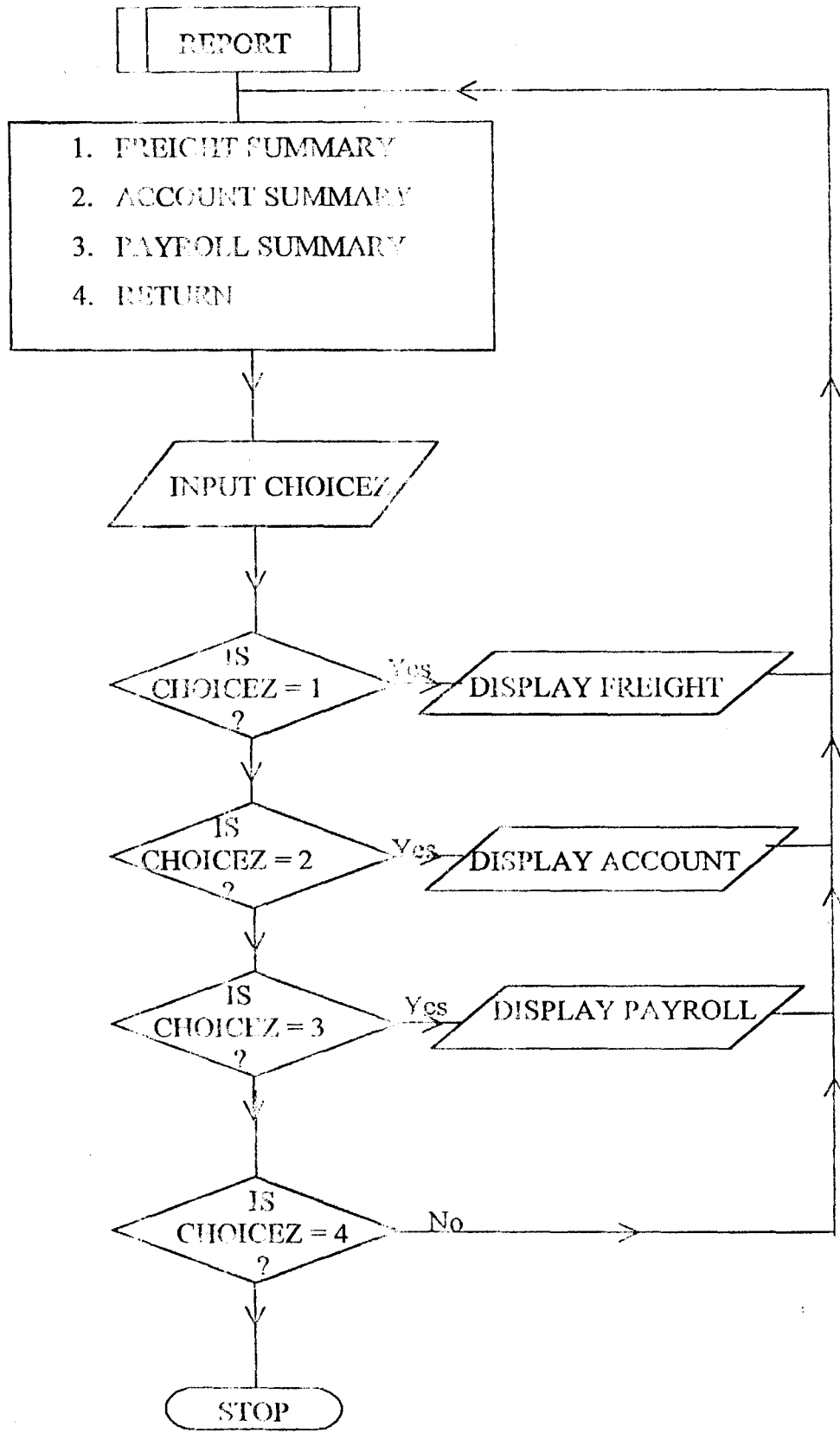
FLOWCHART OF THE PROGRAM











4.4 USER DOCUMENTATION

This involves the logical description of the method of using a program on a computer.

The user can operate the program developed in this study as follows:

- using the menu and dialog boxes

The programming language used is users friendly.

DOCUMENTATION OR COMMENTS

There are three standard comment markers

- The asterisk
- &&(Two ampersands)
- Note

Adding a very brief comment to marker the end of the program is a good way to determining when a file has been damaged or truncated – if the final comment is missing, the program file is incomplete.

The implementation consideration also involves data security, back-up and recovery and system controls

4.5 SYSTEM MAINTENANCE

For a system to be kept functional, it has to be properly maintained. This can take the form of servicing the equipment and offering additional training to the users to keep them current in information technology. Modern software will give good and efficient output from the system than outdated ones.

Furthermore, back up copies of programs and documents stored should be made to safeguard against corruption of the originals. Virus preventive measures are also essential to protect the files.

System maintenance also includes whatever changes and enhancements need to be made after the system is up and running.

CHAPTER FIVE

5.0 SUMMARY AND CONCLUSION

5.1 SUMMARY

The Accounting system of the Nigerian Railway Corporation (NRC) is considered to be one of the best in the country but there are some inhibiting factors to good performance.

The inhibiting factors of:

- Delays in gathering of information
- Inability to ensure confidentiality of the accounting records
- Errors and omission which lead to imbalance in the final accounts
- Inconsistency of data
- Delays in retrieval of data and feedback among others are identified to be due to its manual method of accounting system in the districts, which result in operational and financial inefficiencies.

Options suggested for its effective and improved accounting system is computer application, which offers the following advantages:

1. Quick access to information needed hence quick implementation of programmes.
2. Quick decision-making. The most needed technical information on any item in the accounting is readily accessed. This is made possible by the data management facility the system offers.
3. Conservation of space. A single unit of micro-computer with a large storage capacity is capable of holding information for thousands of items unlike manual method which demands a large storage space to accommodate a reasonable volume.

4. The system provides the facility of data capturing, facility listing, data modification, updating of data, data deletion, data display and report generation.
5. It is easier and quicker with the system to compare financial information
6. The system provides information for a variety of both managerial and accounting applications.
7. It provides the facility for sorting all the items in the most desired manner.
8. Ledgers are far easier to maintain in competence in writing journals and posting to general ledger.
9. It provides for accurate and consistent generation of data as well as data validation.

All these will ensure operational efficiency.

5.2 RECOMMENDATION

The Economic, operational and technical feasibility of a system is vital to its success. Support of users and top management should be involved at all stages. Good training programme for those involved should be provided.

The review of the system should be carried out to meet the organizational needs of the corporation. The dynamics needs and operations of an organization call for a timely adjustments to it to remain in an ever-changing and complete business world.

5.3 CONCLUSION

One major factor identified among others which would enhance the success of the automated accounting system in the Nigerian Railway Districts is adequate and timely information. The availability of information at the time most needed is an important tool towards effective decision making which in turn enhances the implementation of any project.

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GLOSSARY OF TERMS

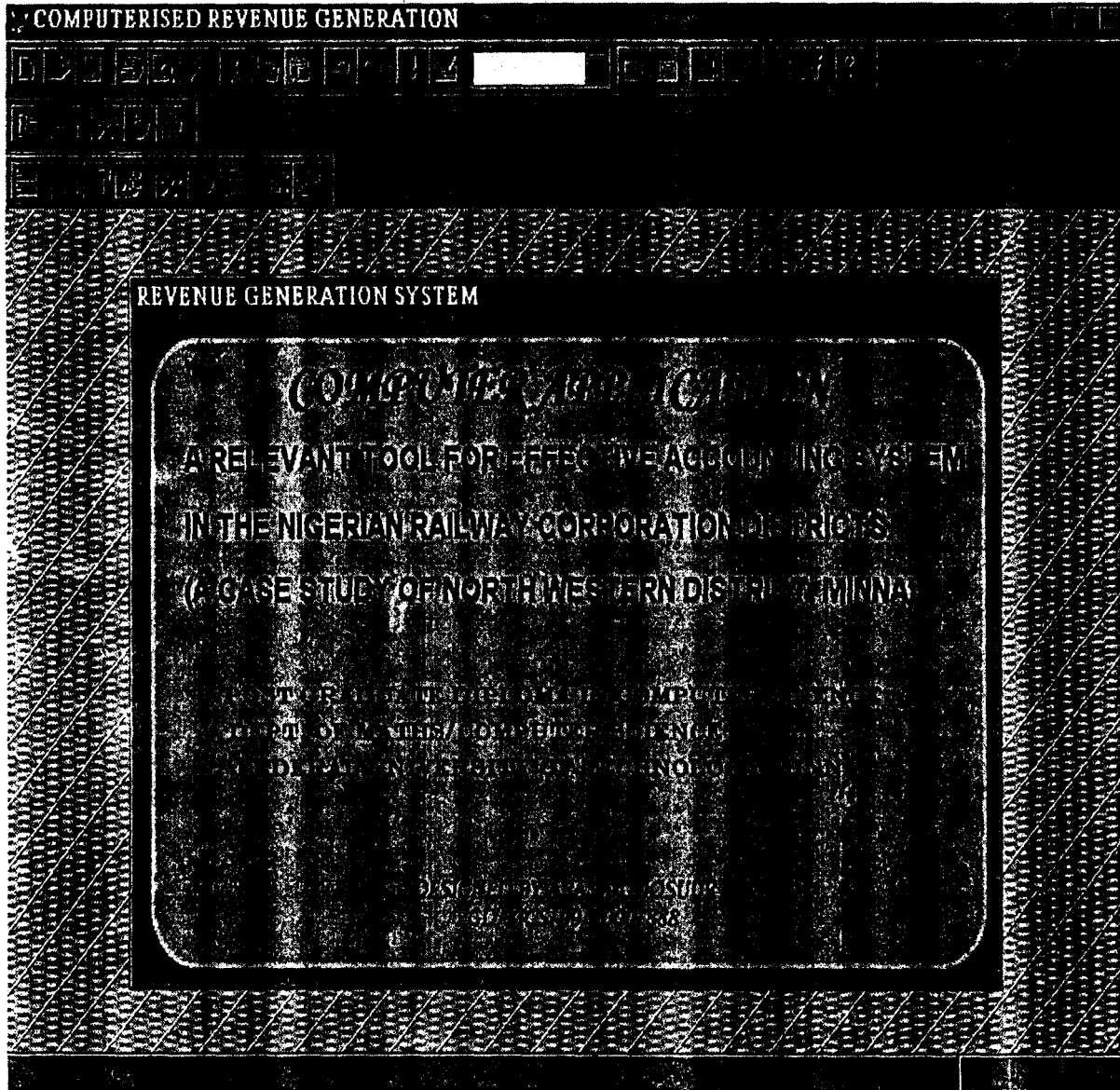
JOURNALS: - is the day-by-day book in which the two aspects of a transaction are recorded in chronological order.

CASHBOOK: - is a daily record of receipts and payments of money. When money is received it is recorded on the debt side of the cashbook and when paid, it is recorded on the credit side of the cashbook.

LEDGER: - is a book containing a number of accounts, which has debit and credit columns.

SUBVENTION: - Financial grants from members or owners or organisation corporations to aid the continue existence of such an organisation or corporation.

PROGRAM SAMPLE OUTPUTS



COMPUTERISED REVENUE GENERATION

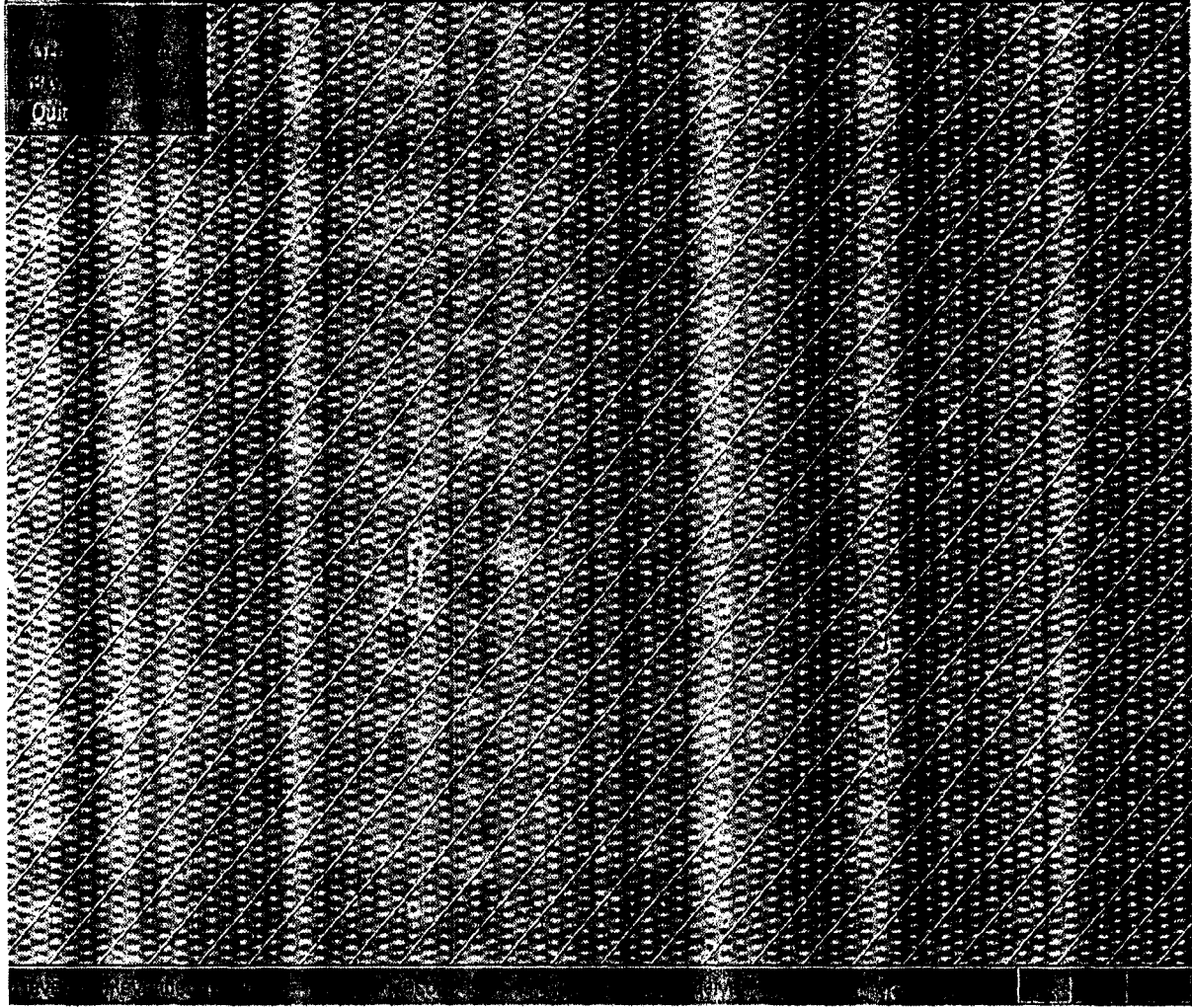
LOGIN FORM

Username

Password

Reset Password

COMPUTERISED REVENUE GENERATION



COMPUTERISED REVENUE GENERATION

PAYROLL FORM

--	--	--	--	--	--	--	--

PROGRAM CODE

```
IF THIS.CAPTION = "\<Add New"
    THISFORM.SETALL("ReadOnly",.F.,"Textbox")
    THISFORM.SETALL("ReadOnly",.F.,"ComboBox")
    THISFORM.SETALL("ReadOnly",.F.,"EDITbox")
    IF USED("TGEN")
        SELE TGEN
    ELSE
        SELE 0
        USE TGEN
    ENDIF
    SCATTER MEMVAR MEMO BLANK
    THISFORM.txtmt.SETFOCUS
    THISFORM.SETALL("enabled",.F.,"commandbutton")
    THIS.ENABLED = .T.
    THISFORM.cmdclose.ENABLED = .T.
    THISFORM.REFRESH
    THIS.CAPTION = "\<Save"
ELSE
    THISFORM.SETALL("ReadOnly",.T.,"Textbox")
    THISFORM.SETALL("ReadOnly",.T.,"combobox")
    THISFORM.SETALL("ReadOnly",.T.,"editbox")
    THISFORM.SETALL("enabled",.T.,"commandbutton")
    IF USED("TGEN")
        SELE TGEN
    ELSE
        SELE 0
        USE TGEN
    ENDIF
```

```
GO TOP
LOCATE ALL FOR MT = m.MT AND YR = M.YR
IF FOUND()
*   LOCATE ALL FOR YR = M.YR
*   IF FOUND()
        MESSAGEBOX("This Record Already Exists!", "Warning.")
        THISFORM.REFRESH
    ELSE
        INSERT INTO TGEN FROM MEMVAR
        THISFORM.REFRESH
    ENDIF
*   ENDIF
    THIS.CAPTION = "<Add New"
ENDIF
IF USED("TGEN")
    SELE TGEN
ELSE
    SELE 1
    USE TGEN EXCLUSIVE
ENDIF
ans = MESSAGEBOX("This record will be deleted, Proceed?", 4 + 32, "Warning")
IF ans = 6
    DELETE
    PACK
    IF !EOF()
        SKIP
    ELSE
        SKIP -1
    ENDIF
ENDIF
THISFORM.REFRESH
```



```
IF USED("TGEN")
    SELE TGEN
ELSE
    SELE 1
    USE TGEN EXCLUSIVE
ENDIF
ans = MESSAGEBOX("This record will be deleted, Proceed?", 4 + 32, "Warning")
IF ans = 6
    DELETE
    PACK
    IF !EOF()
        SKIP
    ELSE
        SKIP -1
    ENDIF
ENDIF
THISFORM.REFRESH
thisform.txtbal.value=thisform.txtdep.value-thisform.txtexp.value
IF USED("TGEN")
    SELE TGEN
ELSE
    SELE 0
    USE TGEN
ENDIF
IF !BOF()
    GO TOP
    SCATTER MEMVAR MEMO
    THIS.ENABLED = .F.
ELSE
    MESSAGEBOX("This is the First Record", "Warning")
ENDIF
```

```
THISFORM.REFRESH
THISFORM.cmdlast.ENABLED = .T.
IF USED("TGEN")
    SELE TGEN
ELSE
    SELE 0
    USE TGEN
ENDIF
IF NOT BOF()
    SKIP -1
    SCATTER MEMVAR MEMO
    THISFORM.REFRESH
    ThisForm.cmdlast.ENABLED = .T.
ELSE
    ThisForm.cmdfirst.ENABLED = .F.
    MESSAGEBOX("This is the First Record",0 + 64, "Warning")
    THIS.ENABLED = .F.
ENDIF
THISFORM.cmdnext.ENABLED = .T.
IF USED("TGEN")
    SELE TGEN
ELSE
    SELE 0
    USE TGEN
ENDIF
IF !EOF()
    GO BOTTOM
    SCATTER MEMVAR MEMO
    THISFORM.REFRESH
ELSE
    MESSAGEBOX("This is the Last Record", 0 + 64, "Warning")
```

```
ENDIF
THIS.ENABLED = .F.
THISFORM.cmdfirst.ENABLED = .T.
IF USED("TGEN")
    SELE TGEN
ELSE
    SELE 0
    USE TGEN
ENDIF
IF NOT EOF()
    SKIP 1
    THISFORM.cmdfirst.ENABLED = .T.
    SCATTER MEMVAR MEMO
    THISFORM.REFRESH
ELSE
    THISFORM.cmdlast.ENABLED = .F.
    MESSAGEBOX("This is the Last Record", 0 + 64, "Warning")
    THIS.ENABLED = .F.
ENDIF
THISFORM.cmdprevious.ENABLED = .T.
*****
*Menu Section
*****
set device to screen
SET SYSMENU OFF
CLOSE ALL
CLEAR
*do form frmtest
set safety off
*set color to w/r
set exclusive on
```

```
set date to brit
set century on
set status off
set talk off
clear
set path to \revenue
PUBLIC MY, myear
store space(9) to myear
_screen.caption = "COMPUTERISED REVENUE GENERATION"
_screen.picture = "wizflax.bmp"
*do form frmwelcome
sele 1
use trevenue again exclusive
sele 2
use tpay exclusive again
sele 3
use tgen exclusive again
m = 0
sele 1
do form frmwelcome
read events
*loop
return
* *****
* *
* * 03/10/01      MAINMENU.MPR      04:40:19
* *
* *****
* *
* * Author's Name
* *
```

* * Copyright (C) 2001 Company Name

* * Address

* * City, Zip

* *

* * Description:

* * This PROGRAM was automatically generated BY GENMENU.

* *

* *****

* *****

* * Menu Definition

* *

* *****

SET SYSMENU TO

SET SYSMENU AUTOMATIC

DEFINE PAD _0c40a0hvo OF _MSYSMENU PROMPT "\<File" COLOR SCHEME 3 ;

KEY ALT+F, ""

DEFINE PAD _0c40a0hvq OF _MSYSMENU PROMPT "\<Report" COLOR SCHEME

3 ;

KEY ALT+R, ""

DEFINE PAD _0c40a0hvs OF _MSYSMENU PROMPT "\mr" COLOR SCHEME 3 ;

KEY ALT+\, ""

ON PAD _0c40a0hvo OF _MSYSMENU ACTIVATE POPUP file

ON PAD _0c40a0hvq OF _MSYSMENU ACTIVATE POPUP report

DEFINE POPUP file MARGIN RELATIVE SHADOW COLOR SCHEME 4

DEFINE BAR 1 OF file PROMPT "\<Freight"

DEFINE BAR 2 OF file PROMPT "\<General Account"

DEFINE BAR 3 OF file PROMPT "Pa\<yroll"

DEFINE BAR 4 OF file PROMPT "\<Quit"

ON SELECTION BAR 1 OF file ;

DO _0c40a0hwg ;

```
IN LOCFILE("..\\..\\REVENUE\\MAINMENU" ,"MPX;MPR|FXP;PRG"
,"WHERE is MAINMENU?")
ON SELECTION BAR 2 OF file ;
DO _0c40a0hx4 ;
IN LOCFILE("..\\..\\REVENUE\\MAINMENU" ,"MPX;MPR|FXP;PRG"
,"WHERE is MAINMENU?")
ON SELECTION BAR 3 OF file ;
DO _0c40a0hx8 ;
IN LOCFILE("..\\..\\REVENUE\\MAINMENU" ,"MPX;MPR|FXP;PRG"
,"WHERE is MAINMENU?")
ON SELECTION BAR 4 OF file ;
DO _0c40a0hxc ;
IN LOCFILE("..\\..\\REVENUE\\MAINMENU" ,"MPX;MPR|FXP;PRG"
,"WHERE is MAINMENU?")
DEFINE POPUP report MARGIN RELATIVE SHADOW COLOR SCHEME 4
DEFINE BAR 1 OF report PROMPT "F\\<reight Summary"
DEFINE BAR 2 OF report PROMPT "\\<Account Summary"
DEFINE BAR 3 OF report PROMPT "\\<Payroll Summary"
ON SELECTION BAR 1 OF report ;
DO _0c40a0hxj ;
IN LOCFILE("..\\..\\REVENUE\\MAINMENU" ,"MPX;MPR|FXP;PRG"
,"WHERE is MAINMENU?")
ON SELECTION BAR 2 OF report ;
DO _0c40a0hxm ;
IN LOCFILE("..\\..\\REVENUE\\MAINMENU" ,"MPX;MPR|FXP;PRG"
,"WHERE is MAINMENU?")
ON SELECTION BAR 3 OF report ;
DO _0c40a0hxq ;
IN LOCFILE("..\\..\\REVENUE\\MAINMENU" ,"MPX;MPR|FXP;PRG"
,"WHERE is MAINMENU?")
```

```
* *****
```

```
* *
* * _0C40A0HWG ON SELECTION BAR 1 OF POPUP file
* *
* * Procedure Origin:
* *
* * From Menu: MAINMENU.MPR,      Record: 5
* * Called By: ON SELECTION BAR 1 OF POPUP file
* * Prompt:  Freight
* * Snippet: 1
* *
* *****
*
```

PROCEDURE _0c40a0hwg

do form frevenue

```
* *****
* *
* * _0C40A0HX4 ON SELECTION BAR 2 OF POPUP file
* *
* * Procedure Origin:
* *
* * From Menu: MAINMENU.MPR,      Record: 6
* * Called By: ON SELECTION BAR 2 OF POPUP file
* * Prompt:  General Account
* * Snippet: 2
* *
* *****
*
```

PROCEDURE _0c40a0hx4

do form fgen

```
* *****
* *
```

```
* * _0C40A0HX8 ON SELECTION BAR 3 OF POPUP file
* *
* * Procedure Origin:
* *
* * From Menu: MAINMENU.MPR,      Record: 7
* * Called By: ON SELECTION BAR 3 OF POPUP file
* * Prompt:  Payroll
* * Snippet: 3
* *
* *****
*
```

PROCEDURE _0c40a0hx8

do form fpay

```
* *****
* *
* * _0C40A0HXC ON SELECTION BAR 4 OF POPUP file
* *
* * Procedure Origin:
* *
* * From Menu: MAINMENU.MPR,      Record: 8
* * Called By: ON SELECTION BAR 4 OF POPUP file
* * Prompt:  Quit
* * Snippet: 4
* *
* *****
```

PROCEDURE _0c40a0hxc

```
ans = MESSAGEBOX("Are you sure you want to quit?", 4 + 32, "Please Confirm")
IF ans = 6
    SET SYSMENU TO DEFA
    _SCREEN.CAPTION = "Microsoft Visual Foxpro"
    _SCREEN.PICTURE = " "
```


CANC &&quit &&thisform.release

ENDIF

```
* *****  
* *  
* *_0C40A0HXJ ON SELECTION BAR 1 OF POPUP report  
* *  
* * Procedure Origin:  
* *  
* * From Menu: MAINMENU.MPR,            Record: 11  
* * Called By: ON SELECTION BAR 1 OF POPUP report  
* * Prompt:    Freight Summary  
* * Snippet:  5  
* *  
* *****  
*
```

PROCEDURE _0c40a0hxj

REPORT FORM rreport PREVIEW

```
* *****  
* *  
* *_0C40A0HXM ON SELECTION BAR 2 OF POPUP report  
* *  
* * Procedure Origin:  
* *  
* * From Menu: MAINMENU.MPR,            Record: 12  
* * Called By: ON SELECTION BAR 2 OF POPUP report  
* * Prompt:    Account Summary  
* * Snippet:  6  
* *  
* *****  
*
```

PROCEDURE _0c40a0hxm

REPORT FORM greport PREVIEW

```
* *****
*
* * _0C40A0HXQ ON SELECTION BAR 3 OF POPUP report
*
* * Procedure Origin:
*
* * From Menu: MAINMENU.MPR,      Record: 13
* * Called By: ON SELECTION BAR 3 OF POPUP report
* * Prompt:   Payroll Summary
* * Snippet:  7
*
* *****
*
```

PROCEDURE _0c40a0hxq

REPORT FORM preport PREVIEW

IF THIS.CAPTION = "\<Add New."

```
THISFORM.SETALL("ReadOnly",.F.,"Textbox")
THISFORM.SETALL("ReadOnly",.F.,"ComboBox")
THISFORM.SETALL("ReadOnly",.F.,"EDITbox")
IF USED("TPAY")
    SELE TPAY
ELSE
    SELE 0
    USE TPAY
ENDIF
SCATTER MEMVAR MEMO BLANK
THISFORM.txttempno.SETFOCUS
THISFORM.SETALL("enabled",.F.,"commandbutton")
THIS.ENABLED = .T.
THISFORM.cmdclose.ENABLED = .T.
```

```

THISFORM.REFRESH
THIS.CAPTION = "\<Save"

ELSE

THISFORM.SETALL("ReadOnly",.T.,"Textbox")
THISFORM.SETALL("ReadOnly",.T.,"combobox")
THISFORM.SETALL("ReadOnly",.T.,"editbox")
THISFORM.SETALL("enabled",.T.,"commandbutton")
IF USED("TPAY")
    SELE TPAY
ELSE
    SELE 0
    USE TPAY
ENDIF
GO TOP
LOCATE ALL FOR empno = m.empno
IF FOUND()
*   LOCATE ALL FOR YR = M.YR
*   IF FOUND()
        MESSAGEBOX("This Record Already Exists!", "Warning.")
        THISFORM.REFRESH
ELSE
        INSERT INTO TPAY FROM MEMVAR
        THISFORM.REFRESH
ENDIF
*   ENDIF
    THIS.CAPTION = "\<Add New"
ENDIF
IF THIS.CAPTION = "\<Add New"
    THISFORM.SETALL("ReadOnly",.F.,"Textbox")
    THISFORM.SETALL("ReadOnly",.F.,"ComboBox")
    THISFORM.SETALL("ReadOnly",.F.,"EDITbox")

```

```

IF USED("TPAY")
    SELE TPAY
ELSE
    SELE 0
    USE TPAY
ENDIF
SCATTER MEMVAR MEMO BLANK
THISFORM.txttempno.SETFOCUS
THISFORM.SETALL("enabled",.F.,"commandbutton")
THIS.ENABLED = .T.
THISFORM.cmdclose.ENABLED = .T.
THISFORM.REFRESH
THIS.CAPTION = "\<Save"
ELSE
THISFORM.SETALL("ReadOnly",.T.,"Textbox")
THISFORM.SETALL("ReadOnly",.T.,"combobox")
THISFORM.SETALL("ReadOnly",.T.,"editbox")
THISFORM.SETALL("enabled",.T.,"commandbutton")
IF USED("TPAY")
    SELE TPAY
ELSE
    SELE 0
    USE TPAY
ENDIF
GO TOP
LOCATE ALL FOR empno = m.empno
IF FOUND()
*   LOCATE ALL FOR YR = M.YR
*   IF FOUND()
        MESSAGEBOX("This Record Already Exists!", "Warning.")
        THISFORM.REFRESH

```

```

ELSE
    INSERT INTO TPAY FROM MEMVAR
    THISFORM.REFRESH
ENDIF
*
ENDIF
THIS.CAPTION = "<Add New"
ENDIF
IF !(m.user_name = " " OR m.user_password = " " OR m.access_lev = " ")
    IF m.user_password = "REVENUE"
        DO mainmenu.mpr
        *return
        THISFORM.RELEASE
    ELSE
        MESSAGEBOX("Invalid User Codes. Please Try Again", 0 + 48,
"Warning")
        THISFORM.txtuser_name.SETFOCUS
    ENDIF
ELSE
    MESSAGEBOX("You are expected to give the required User Codes!, Please Try
Again", 0 + 48, "Warning")
    THISFORM.txtuser_name.SETFOCUS
ENDIF
***VERY IMPORTANT
*IF USED("sys_users")
*
*   SELECT sys_users
*ELSE
*
*   SELECT 0
*
*   USE sys_users
*ENDIF
*IF m.access_lev = "SYSTEM ADMINISTRATION"
*
*   xadmin = .T.

```

```

*ELSE
*   xadmin = .F.
*ENDIF
*GO TOP
*IF !(m.user_name = " " OR m.user_password = " " OR m.access_lev = " ")
*   LOCATE FOR user_name = m.user_name AND user_password =
m.user_password
*   IF FOUND()
*       m.login_date = DATE()
*       m.login_time = TIME()
*       IF USED("login")
*           SELE login
*       ELSE
*           USE login IN 0
*       ENDIF
*       INSERT INTO login FROM MEMVAR
*       DO mainmenu.mpr
*       *return
*       THISFORM.RELEASE
*   ELSE
*       MESSAGEBOX("Invalid User Codes. Please Try Again", 0 + 48,
"Warning")
*       THISFORM.txtuser_name.SETFOCUS
*   ENDIF
*ELSE
*   MESSAGEBOX("You are expected to give the required User Codes!, Please Try
Again", 0 + 48, "Warning")
*   THISFORM.txtuser_name.SETFOCUS
*ENDIF

```