

COMPUTERIZATION OF ACCOUNTING SYSTEM OF AN INVESTMENT COMPUTER

(A case study of Niger state Development Company Limited / Minna)

BY

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CERTIFICATION

I hereby certify that this project is the original work of MR. WILLIAMS TOYIN. Submitted for the award of POST – GRADUATE DIPLOMA IN COMPUTER SCIENCE, OF THE FEDERAL UNIVERSITY OF TECHNOLOGY/ MINNA

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DEDICATION

This project work is dedicated to the one who reigns forever, The Almighty God, The King Of Kings and the Lord of Lords, Jehovah is His name. Also to my wonderful parents for their encouragement and constant prayer for success of the programme. I Love You.

ACKNOWLEDGEMENT

Learning is a treasure which accompanies its owner everywhere, just as dreams are the touchstones of our characters and remains an illusion until they become a reality.

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ABSTRACT

Human activities have continued to grow as the years go by, bringing to focus, the need for the use of enormous information in order to achieve organizational needs and objectives of various enterprises and even those of nation – states.

Our generation lives in an age beset by uncertainties. This scenario has made the use of computers in various organizations to become very important. The application of modern technology in the production of goods and services by almost all the sectors of the world economics has propelled Nigeria to embrace the use of computer for our daily office and private activities.

It is also my belief that computerization of the Accounting System of Niger State development Company Limited up to Trial Balance is one of the important procedures that the management must employ to control its operation more effectively.

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CHAPTER ONE

1.0 INTRODUCTION

The history of mankind shows that as a result of difficulties of life human beings have been able to pass through so many stages and obstacles. It is also a fact that decisions are taken on identified problems and to a large extent, man has developed the ability to gather information which enables him to solve these problems. These data are processed to obtain useful information.

Our generation lives in an age which is beset by uncertainties. It is the setting of this nature that computer is of paramount importance to the management of any organization. A quantitative machine like computer serves as one of the tools for planning and control in an organization. Computers are having good effects and are creating new opportunities. They are extending people's capabilities, taking over monotonous jobs and increasing efficiency.

In view of the rapid societal developments, our need for processed data or information has increased quite tremendously. The volume of information generation, collection and processing that we are witnessing today is unprecedented in history and as such, is becoming impossible to collate manually. All organizations, public or private tend to be

overwhelmed by paper work, for example, a clerk working in a stock control section of an enterprise may have to go through the following:

Requisitions are passed to a material store. The requisition contains the following:

- i. Description and part number of articles.
- ii. Quantity needed
- iii. Number of jobs on which the articles are used.
- iv. Date of description, serial number and signature.

On receipt of the requisition, the clerk is required to enter in the relevant columns, the unit prices of the articles, which are obtained by reference to a price list. He then multiplies the unit prices of the articles by the quantities and enters the products in the columns. To complete this task, the clerk will have to perform a sequence of operations like:

- i. Read the information appearing on the requisition,
- ii. Refer to a price list to obtain the unit price of the articles,
- iii. Multiply the unit price by the quantity;
- iv. Enter the answer to it and total, if necessary. All these consume time and paper.

Furthermore, in a development company, the financial department would have to content with the following transactions: operating

expenditures, income accounts assets and liability accounts and other related costs which must be posted to the appropriate accounts in the general ledgers. These records reflects the overall worth and profitability of the company.

Regardless of the kind of equipments used, all data processing systems involve at least four basic elements. A look at our example on material requisition, the following operations are identified.

- a. Input of the procedure or source data
- b. This is a reference to store or filed information which we call storage.
- c. Arithmetic operation of the procedure or orderly, planned processing within the system and
- d. This is the output or end product.

The procedures can be denoted in computer terms as four distinct elements, which are:

1. Input
2. Storage
3. Arithmetic (processing) and
4. Output

The correct operation of this procedure (a) to (d) depends on the observation of a sequence of instructions, called a PROGRAM. A program is not part of the information to be processed but a list of instructions passed to a computer in order to carry out the former manual operations.

A large majority of people is affected by the benefit of a computerized data storage management and processing technology. It also has been accepted worldwide that a vast quantity of our data will be stored more economically on computer files and data banks than on papers. It is believed that computerizing of Accounting System to Trial Balance is one of the important procedures that management employ to control its operations.

1.1 COMPUTER SYSTEM

A computer is an electromechanical device which accepts data as input, process it to give useful information as output which can either be printed out as a hard copy by a printing device or displayed as a soft copy on the VDU or stored on secondary storage media for future use.

It could further be defined as a system (or set of machines) which accepts data from an input device, performs operations on the data by means of the processor and transfers the result to an output device.

The computer consists of the digital, analogue and hybrid types. While the analogue serve as an essential measuring device, since it operates on data in the form of continuously varying physical quantities such as voltage, speed, etc, the digital computer have the ability to calculate and manipulate discrete values which makes it adaptable to business operations. This means that the digital computers interprets information which is of broken or discontinuous nature. The hybrid computer on the other hand combines both the analogue and digital characteristics into one computer system and is designed to overcome the present problem of analogue and digital computers for industrial and manufacturing process.

The computer is divided into two main components namely; the hardware and software. The hardware is the physical parts of the computer which we can touch or feel. For example, the casing, the circuitry, the motherboard, etc. The software is the programs that makes the hardware function.

The main hardware components of the computer include:

- Input units: such as keyboard and mouse
- Memory of the computer: RAM and ROM

- Processing unit: consisting of the Control Unit and Arithmetic Logic unit.
- Output Unit: printers and monitors (VDU)

All these components functions to ensure the successful operation of the computer system, so as to meet the desire of the user.

The software (programs) are broadly classified into:

- System software: manages the general operations of the computer system. e.g MS DOS, Windows.
- Application software: designed for solving a particular problem as required by the user. e.g word processors, electronic spreadsheet and desktop publishers, etc.

The application packages therefore forms the basis for the computerization of accounting activities in the investment companies.

1.2 ACCOUNTING SYSTEM

Many people think of accounting as a highly technical field practiced only by professional accountants. Actually, nearly everyone practice 'accounting' on a daily basis.

Accounting is simply the means by which we measure and describe economic activities. This includes both information about recent activities and forecasts of what may happen in the future. All types of decision

makers – managers, investors, lenders, and consumers – use accounting information as a basis for making economic decisions.

Accounting often is called the ‘language of business’, because it is so widely used to describe all types of business activities. Costs, process, sales, volume, profits and returns on investment all are accounting measurements. Every investor, creditor (lender) and business manager needs a clear understanding of accounting terms and concepts if he or she is to effectively communicate and participate in the business community. But the use of accounting is not limited to the business world. Administrators of government agencies and non-profit organizations use accounting information in the same manner, as do business managers. Individuals use accounting information to manage their personal financial affairs. That is to say that a complete set of accounting information include four related accounting reports.

1. A balance sheet which shows the financial position of the business at a specific date by describing its financial resources and obligations.
2. An income statement which reports the company’s profitability over a recent period of time.
3. A statement of retained earnings (or statement of stockholder’s equity), which explains changes in the amount of the owner’s equity

(investment in the business) over the period of time covered by the income statement.

Users of Accounting Information

<u>Users</u>	<u>Needs</u>
Management	evaluating past results, formulating new plan and strategy.
Current and Potential Investors	identifying and evaluating investment Opportunities; monitoring the performance of existing investments.
Creditors	deciding whether to extend credit and how much to lend.
Investment advisors & economist	forecasting future performance of Companies, industries and the Economy.
Major customers	evaluating the financial ability of a business to complete long-term projects and /or to service its products.
Employer & organized labour	evaluating the employer's ability to pay wages and salaries.
Tax authorities and government	formulating regulatory policies.

The News media, students and General Public reporting on the business and the economy, learning about business and to exercising its right to know about organization that affects the economy.

1.3 THE INVESTMENT COMPANY

An investment is the current commitment of money or other resources in the expectation of reaping future benefits. For example, an individual might purchase shares of stock anticipating that the future proceeds from the shares will justify both the time that her money is tied up as well as the risk of the investment. The time you spend studying a project (not to mention its cost also is an investment. Foregoing either current leisure or the income you could be earning at a job in the expectation that your future career will be sufficiently enhanced to justify this commitment of time and effort. While these two investments differs in many ways, they share one key attribute that is central to all investments: you sacrifice something of value now, expecting to benefit from that sacrifice later. Investment companies which pool and manage the money of many investors also arise out of economies of scale. Here, the problem is that most household portfolios are not large enough to be spread among wide variety of securities. It is very expensive in terms of brokage fees and

research cost to purchase one or two shares of many different firms. Mutual funds have the advantages of large-scale trading and portfolio management, while participating investors are assigned a prorated share of the total funds according to the size of their investment. This system gives small investors advantages they are willing to pay via a management fee to the mutual fund operators.

Investment companies also can design portfolios specifically for large investors with particular goals. In contrast, mutual funds are sold in the retail market and their investment philosophies are differentiated mainly by strategies that are likely to attract a large number of clients.

1.4 AIMS AND OBJECTIVES

The aims and objectives of the research work is to:

- Introduce computerization of accounting system in place of the manual accounting system used in Niger State Development Company.
- To provide resource material for training personnel for the new system design.
- To reduce the laborious work in accounting entries such as cashbook, journals entries, ledgers, central accounts, etc.

CHAPTER TWO

2.0 REVIEW OF THE EXISTING SYSTEM

2.1 GENERAL AND HISTORICAL BACKGROUND OF NIGER STATE DEVELOPMENT COMPANY (NSDC)

The Niger State Development Company Limited (NSDC) is a Development Finance Company, wholly owned by the Niger State Government. The company was incorporated in December, 1980 and commenced business operations in July, 1981, with a share capital of ₦2 million and presently as at 2004 the share capital has increased to ₦20 million from various investments.

2.1.1 GOAL AND OBJECTIVES OF NIGER STATE DEVELOPMENT COMPANY LIMITED

The following are paramount among the goals and objectives of the company.

- a. To play the role of a catalyst in the economic development of the State in the following three main sectors, name; Industrial, Commercial and Agricultural.
- b. To assist Government in removing such constraints hampering Government implementation of development plan especially in areas of feasible and visible projects.

- c. To remove the bureaucracy associated with Government decision making on project implementation especially where Government and private sectors are involved.
- d. To co-ordinate activities between Government and specialist agencies such as World Bank and African Development Bank which do not require direct government involvement, thus enabling fund from such agencies to be channeled through Niger State Development Company Limited for effective utilization and monitoring.
- e. Profit oriented and employment generation.

2.1.2 ORGANIZATIONAL SET-UP, RANGES OF SERVICES, INVESTMENT PRINCIPLES, TERMS AND INVESTMENT STRATEGIES

1. Organizational Set-up:

Niger State Development Company Limited is headed by a Managing Director (CEO) who is also a member of the Board of Directors of the company. The company has three main departments namely;

- Project promotion and investment supervision.
- Finance and Accounts and
- Administration and Legal matters.

These three departments are headed by seasoned professionals.

II. Range of Services

Niger State Development Company Limited provides a wide range of service which include the following:

- a. Creating industrial awareness amongst the people.
- b. Revenue generation.
- c. Employment opportunities.
- d. Investment counseling services;
- e. Technical and financial appraisal of project feasibility report for both the State Government and the private investors.
- f. Negotiating on behalf of government and private individuals/ corporate bodies for loans and project implementation.
- g. Project planning and management services.
- h. Project financing and implementation.
- i. Advise on the participation in joint ventures and
- j. Secretarial services.

III Investment Principles

Niger State Development Company Limited principles are in two categories;

- a. Investment in quoted company such as First Bank PLC, Union Bank, Ashaka Cement Company, Natural Oil and Chemical Company, UAC, etc.
- b. Unquoted investment include, investment in Intercity Bank PLC, Niger Detergent Industry Bida, Capital Insurance, Badegi Rice Mill etc.

Niger State Development Company Limited will normally consider investing in projects which satisfy the following conditions:

- a. Employment
- b. Import substitution
- c. Profitability
- d. Foreign exchange conservation
- e. Managerial ability
- f. Use of local resources
- g. National priority
- h. Sponsor's participation
- i. Legal competence
- j. Project size
- k. Any other conditions that are found appropriate and applicable during negotiation.

IV. Investment Terms

- a. Niger State Development Company Limited equity participation ranges from 10% to 20%. In the event that Niger State Development Company Limited is promoting a project as its subsidiary, it will take up to 51% of the equity.
- b. Where a foreign firm comes up with a viable project that satisfies Niger State Development Company's investment principles, the company could allow such a firm to take the maximum equity allowed by the indigenization decree while the Niger State Development Company could take the balance of equity especially where the indigenous private sector is not forthcoming.
- c. Niger State Development Company will also assist in processing applications or certificate of occupancy (C of O).
- d. Niger State Development Company loan engagement in any business ranges from a minimum of ₦100,000 to a maximum of 50% of the total capital needed. The peculiarity of each project will determine the amount of financial assistance to be given.
- e. Loan repayment is spread over ten years. A minimum of one year grace is allowed before the repayment of the principal and interest commences.

- f. Repayment of principal and interest are to be made bi-annually.
- g. All loans are secured on first charge on fixed assets. Floating charge on assets may be considered on its merits.
- h. Interest chargeable on loan will be at a competitive rate subject to what is prevailing in institutions of similar nature.

V. Niger State Development Company's New Investment Strategies

Based on past experience, Niger State Development Company

Limited new investment strategies include the following:

- a. To encourage the formation of joint ventures.
- b. Emphasis on small and medium scale industrial establishments.
- c. Concentration on projects with between 80% and 90% local raw material sourcing.
- d. Creating immediate employment with relatively small investments.
- e. Seek for funding from World Bank agencies for on-lending to identified viable industrial projects.

2.1.3 SOURCE OF FUNDS OF NIGER STATE DEVELOPMENT COMPANY LIMITED

The following are sources of funds for the company:

- a. Government subventions (State Government)
- b. Loans from relevant institutions both local and international.

- c. Donations from public, private individuals and corporate bodies.
- d. Profit/ revenue from investments

2.2 THE EXISTING ACCOUNTING SYSTEM

In development companies, there are so many types of data processing systems. The data processing systems could either be manual, computer based or hybrid.

The existing data processing system of Niger State Development Company Limited is manual system. The manual operation in this context is a means of keeping the records of the organization in its entirety using only human labour.

Accounting Records: Accounting is a business language used to establish, summarize, present and interpret both economic and financial values as in aid to make informed decisions. Records are needed for the purposes of measuring usually in monetary terms, the performance of the business entity and determine the state of affairs as at the date of reporting. The information produced are used by so many people such as External auditors, Management and External statutory bodies and individuals for various purposes. There is therefore need to keep proper books and records in an organization and this need cannot be over-emphasized. Discussion on this system is centered on the following headings:

- i. Accounting entries
- ii. Summary and Journals
- iii. Posting to the subsidiary and general ledger
- iv. Trial Balance
- v. Profit and Loss Account
- vi. Balance sheets.

2.2.1 ACCOUNTING ENTRIES

Accounting entries are made into the books of accounts through the use of vouchers. Before vouchers are raised, approval must be sought and obtained from the relevant authority(ies) in the organization. Vouchers are revised for both payments and receipts of cash in the organization. Relevant separation of duties is observed here as an internal control measure.

2.2.2 SUMMARY JOURNALS

When the procedures in 2.2.1 are completed, a summary journal is raised. A summary journal is a summary of all entries raised during the end of a particular period, which could be end of the day, month or year. It sums up the total figures for each account head. For example, if during the end of a particular month, 1000 people were paid for services or supplies to the company, the accounting officer insert the figure in the columns in

the cashbook provided for payments. In this case, the debit column. All receipts are credited to the cashbook as required. This procedure is applicable to all accounts. At the end of the month, the summary of the debits and credits must agree. The sum of each account head is meant for posting to the general ledger accounts and is done with a summary journal.

2.2.3 POSTING TO THE SUBSIDIARY BOOKS AND GENERAL LEDGER

The posting to both the subsidiary books and general are carried out with the summary journals. The debits and credits in the summary journals are posted to the debits and credit columns of the ledger accounts accordingly. Both sides must agree otherwise a mistake had been somewhere, which must be corrected immediately.

2.2.4 TRIAL BALANCE

At the end of the posting to the general ledger, a test is done to find out whether the General ledger is balanced. This testing procedure involves extracting a Trial Balance with a view to:

- a. Providing the arithmetical accuracy of the posting and;
- b. Providing in one statement, a concise summary of items to be included in the Trading, Profit and Loss Accounts and Balance Sheet.

The debit balances shown in the Trial Balance represents either:

- i. Assets or Losses and expenses, assets being shown on the right hand side of the Balance sheet while losses and expenses are debited to the Trading, Profit and Loss accounts.

Similarly, the credit balances represent:

1. Liabilities, provisions and reserves and;
2. Income and gains, the former being entered on the left hand side or deductions from items on the right hand side – assets or Balance sheet while income or gains are credited to either the Profit and Loss accounts.

2.2.5 DETECTION OF ERRORS DISCLOSED BY THE BALANCE

When the total of the Trial Balance disagree, it is obvious that the error or errors have occurred in:

- a. The posting to the ledger accounts.
- b. The additions in the subsidiary books or ledgers.
- c. The additions in the subsidiary books or ledgers.

- d. The extraction of the balances; or
- e. The addition of the Trial Balance.

The Trial Balance must agree before the profit and loss and the Balance sheet could be produced.

2.2.6 PROBLEMS ASSOCIATION WITH THE EXISTING SYSTEM

The existing system is beset with a lot of problems, which make the whole system cumbersome involving high rate of man-hour to complete a process. For example vouchers are raised, signed by the authorized officer and passed to the posting clerk who vets the voucher, posts to the cashbook. Thereafter, the cashbook balances are summarized and used for posting to the various accounts in the subsidiary and general ledgers.

When the posting are completed, comparisons are made as a form of check and balances because the balancing figures in the subsidiary ledger must agree with General ledger control account.

Thereafter, Trial Balance, which is a list of all the balances standing on the ledger accounts as at a given period, is drawn. It is obvious that when a debit and credit have been made for every transaction, in the absence of clerical error, the total of the debits should equal the total of the

credits and if the accounts are balance off, and balance down, the total debit balances should equal the total credit balances.

We should note that although the agreement of the two sides of a Trial Balance provides prima facie evidence of the accuracy of the bookkeeping, is not conclusive proof of the absence of error, since the following classes of mistakes would not cause a disagreement in the Trial Balance. They are:

- A complete omission of transaction, neither a debt nor credit being posted.
- Posting to the correct side of the ledger compensated by error e.g. Error on the side of the ledger etc.

When the trial balance did not balance, it is always difficult to proceed with the preparation of the profit and loss account and the balance sheet.

From the above, it could be seen that if the ledger is not balanced, it would amount to checking the whole postings all over again. This, obviously make it more cumbersome and difficult in balancing books of account manually. It is equally not cost effectively and error prone.

2.2.7 THE NEW SYSTEM

The proposed account processing system up to trial Balance of Niger State Development company Limited is a sophisticated, integrated and parameterized general ledger system. The system will be interacted on-line and user friendly system which would address purely impersonal accounts. It would be made up of suit of programs which are designed to accepts inputs, process the inputs and produce results in user5 understandable form.

This new system shall be easy to work with, simple to operate and provide opportunity for later development like budgeting. The system would be menu driven privilege controlled. Only users with the appropriate password can access it. It is possible to install it in a single-user micro-computer and will also work in a multi-user or environment. It would also be user oriented system rather than computer staff oriented system.

2.2.8 BENEFIT ANALYSIS OF THE NEW SYSTEM

Manual processing of data for accounting purposes up to trial Balance obviously is cumbersome, time consuming, error prone and above all not cost effective.

The benefit warranted in course of running the proposed system are summarized as follows:

- Reduction in time spent in data processing
- Reduction of fraud
- A well monitored and organized system.
- Better use of resources available
- Greater job satisfaction
- Reduction of paper work and physical storage area, thereby increasing the convenience of data processing.

2.2.9 PRINCIPLE UNDERLYING COMPUTERIZATION OF ACCOUNTS SYSTEM UP TO TRIAL BALANCE

To achieve its mission, philosophy, goals and objectives, the company requires efficient income generation avenues, effective management base, sound financial policies and the computerization of all its accounting records.

The trial balance is prepared monthly to ensure the accuracy of all debits and credits by the use of vouchers posted to the subsidiary and general ledger accounts.

Balance determined by adding the debit and credits amount for each account are listed out on trial Balance according to accounts heads.

Processing the trial balance monthly enables the company to know how much each department has expended or amount it is owing outsiders, amount owed it, or the amount of income generated by it. These are important for management decision-making process.

2.2.10 SCOPE AND LIMITATION

The computerization of the accounting system of Niger State Development Company Limited up to trial Balance is meant to solve the general inefficiency associated with the manual system in operation.

The project objects include the following:

- i. To implement a faster system of data processing of accounts.
- ii. To establish an efficient and flexible computerized system which will be controlled, monitored and fully enhanced by installation of the networks.
- iii. To design a cost effective system which will effectively utilized.

SCOPE OF STUDY

The scope of this study covers the following:

- Feasibility study
- System analysis
- System Design
- System Development and

- System implementation and evaluation.

LIMITATIONS

This study would have all over embracing one, which would have involved the study of the computerized accounting systems of similar organization. Therefore, the concentrations of this study ToNiger State Development Company Limited to this study.

Furthermore, financial constraints did not allow for visits to similar organizations in certain states of the federation for the purposes of comparison and possible improvement.

Dearth of certain literature necessary for reference purposes in carrying out this work constituted a set back to the timely production of this work.

Mostly, time was a major constraint to the production of this work.

CHAPTER THREE

3.0 THE NEW SYSTEM DESIGN

3.1 PROPOSED SYSTEM OF GENERAL LEDGER

The proposed system of general ledger is a sophisticated, integrated and parameterized general ledger system. It would be interactive, on-line user friendly and purely to address impersonal accounts.

3.2 OPERATIONS OF THE PROPOSED SYSTEM OF GENERAL LEDGER

The system cannot be accessed by users without the appropriate password. The system sets up the necessary tables when the operator has keyed-in the appropriate password to access the software.

These tables are found under the system administration. It is worthy to note the order in which the table would be set up. The following is the order.

- Indexing file rebuild
- The password maintenance
- Exchange rate maintenance
- Currency code maintenance
- Accounts type maintenance
- Basic control parameter

- Transaction type maintenance
- System control

The moment these are put in place, the system is ready for use.

Privilege 1 is very sensitive privilege as it controls the running of the system although it does not allow for transaction entry. It is only those with the privilege to post daily transactions that are allowed to make postings, using the appropriate password.

3.3 SYSTEM ANALYSIS

The general ledger (GL) system administrator option for table maintenance produces – Begin of today, End of Reports, Month-end closing, Year – to – date closing. The general ledger menu is displayed in fig 1 below:

NSDC LEDGER SYSTEM ADMINISTRATION DD/MM/YY	
1.	Table Maintenance
2.	Begin Of Day
3.	End Of Day
4.	Report
5.	Month-end Closing
6.	Year-end Closing

Fig 1

A = menu

B = menu option

The Menu Bar

This contains information about the general ledger system. The information would include, Niger State Development Company ledger indicating the name of the system. The current date is displayed at the upper right corner of the menu bar. The system administration indicates that we have the System Administration Menu on the screen.

It is possible to find in some other menu, functions which are displayed. These functions are used to perform different operations.

The Option Menu

Privilege allows the user into System Administration Menu. This menu contains:

- The table maintenance
- Begin of Day
- End of Day
- Reports
- Month-end closing
- Year-end closing
- Exit

With the option, all we need do is to type the corresponding number to that option. For example, to select option table maintenance, we

type its corresponding number, which is 1. To choose End of Day we type 3 and so on.

Table Maintenance

The option would permit the user to set up and maintain files that are related to the system. These include: Account Files, Currency code, Exchange rate, Basic parameters, Public holiday, Password, Indexing, Report table, Transaction type, System control and Account type.

The Table Maintenance Submenu is Displayed in fig 2 below:

NSDC LEDGER SYSTEM MAINTENANCE DD/MM/YY
01 Accounts file
02 Currency Code
03 Exchange rate
04 Basic Parameter
05 Public Holiday
06 Password
07 Indexing
08 Report table
09 Transaction type
10 System control
11 Account type
99

Fig 2

Account File

On the Menu Bar of this menu are the following functions: Add, Chg, Del, Prt, Exit. Operations to be performed include:

1. Add: add new General Ledger Account
2. Chg: Change/modify an existing Account
3. Del: Delete an existing account
4. Prt: Print and exit the account file maintenance menu.

To choose a function, we type the first letter of that function. For example, to add a new account, we type 'A' then press the ENTER key, to delete an existing account type, we type 'D' and the ENTER key etc.

- To Add A New General Ledger Account

1. Type 'A' and press ENTER
2. Enter accounts, number may not be accepted if it is an invalid account number. This is being shown by an error message.
3. Enter the entry code and press enter. This is a single character code. It could either be a computer generated code, it could be 'A' indicating Debit or Credit transaction or it would be 'C' for credit only or 'D' for Debit transaction only.
4. Enter the warning code and press ENTER. This is a single character code. It could be 'A' indicating Debit or Credit

transaction or it could be 'C' for credit only or 'D' for debit transaction only.

5. Enter the base currency and press enter. This must be valid currency code. For Nigeria Naira the code is 'NGN'.

6. Enter the description of the general ledger and press ENTER.

This is a 30 character code.

7. Confirm data entered.

- **To change/ Modify an Existing Account**

To change or modify an existing account requires that we type 'C' and press ENTER. Then all the fields will be displayed, changed or modified except the account number. In addition to the above, the following operations are applicable.

- i. Perform the modification/change and press ENTER when done
- ii. Press the ENTER key to change to another function or type a new account number to be modified/changed.

- **To Delete an Existing Account**

When an account is to be deleted the following steps should be followed:

1. Type 'D' and press ENTER.
2. Enter the account number to be deleted and press ENTER
3. Confirm deletion by pressing ENTER

4. Press the ENTER key to choose another function or type a new account number to be deleted.

CURRENCY EXCHANGE RATE MAINTENANCE

The currency exchange rate maintenance option is to indicate the exchange rate in which the day's transaction is to be operated on.

Operations that could be performed in this option include the following:

- 1 Adding of a new currency
2. Changing/ modifying existing rate
3. Deleting existing currency rate.
4. Printing the list of currency rates.

- Adding a New currency

To add anew currency, we only type in 'A' and press the ENTER key.

- I type a new function number and press ENTER
- ii type the effective date and press enter. This should not exceed
The current rate.
- iii. Type the exchange rate.
- Iv Confirm the date entered
- v. Press ENTER key to choose another function or repeat step1 to 6.

-Changing / modify existing Currency rate

While still in this environment, we may decide to change or modify the existing currency rate. The following are to be done:

- i. Type in 'C' and ENTER
- ii. Enter currency code to be modified and ENTER.
- iii. Type the auction number and press ENTER
- iv. Type in the effective rate and ENTER. This should not exceed the currency rate.
- vi. Type the exchange rate and press ENTER key.
- vii. Confirm rate changed.
- viii. Press ENTER key to choose another function or repeat step 2-6.

The same procedure as shown above is used when an existing currency rate is to be deleted. This time, we type in 'D' and press the ENTER key. The system will display the operation menu required. When this is done, we carry out step 2 to 5 as above.

BASIC PARAMETER CONTROL

Just as the name suggests, it controls other modules of the general ledger system. It displays the name of the company, Department, Address, Current period, Current year, Accounting period, Check digits, last

processing date, next processing date. Basic parameter menu is displayed as follows:

NSDC LEDGER	
NDOSYSTS. MO4	BASIC PARAMETER CONTROL
Company name	Niger State development Company Ltd Minna
Department	
Address	
Current period	6
Current year	2003/2004
Accounting period	6
Check Digits	6/10/2003
Last processing date	7/10/2003
Current processing date	7/10/2003
Next processing Date	8/10/2003

For example, public Holidays, this option will specify the type of public holidays available in a particular year or period. Operations that can be performed in this option include the following:

1. Add new public holiday.
2. Change or modify public holiday
3. Delete existing public holiday
4. Print list of public holidays

In a case where we want to add public holiday, the following operation should be performed.

- i. Type 'A' and ENTER
- ii Specify the date of the holiday and ENTER
- iii. Confirm the date entered.
- v. Press ENTER to choose another function or repeat steps 2to 5.

PASSWORD MAINTENANCE

This ion allows for allocation of password to a used. This is usually carried out by the supervisor or the man charged to do so. Operations that can be out in this option include:

- I. Allocate password to user.
- ii. Delete existing password
- iii. Print a list of users having password. The users' names are printed without the password.

When additional password is to allocated to new user, the following operations are carried out-:

- i. Type 'A' and enter
- ii. Enter user login name and. This will be done by the user.
- iii. Enter password. This will be done by the user.
- iv. Enter user's full name and press ENTER.

- v. Enter user's post and press ENTER.
- vi. Enter user's category and press ENTER.
- vii. Enter user's department and press ENTER.
- ix. User privilege allocation should be defined.
- x. Confirm that data has been properly entered.
- xi. Press the enter key to choose another function or repeat step 2 to 10

to delete a password, we only need to perform the operations:

- 1. Type 'D' and press enter
- 2. Enter user login name and ENTER
- 3. Confirm deletion
- 4. Enter to choose another function or repeat 2 to 4.

SYSTEM CONTROL MAINTENANCE

This function controls the operation of the system. Operations that can be performed include:

- 1. Add system control
 - 2. Delete system control
 - 3. Change or modify system control
 - 4. Print.
- 1. To add to system control, we have to perform the following operations.

- a. Type 'A' and ENTER
- b. Enter system code
- c. Enter privilege code
- d. Confirm data entry and ENTER
- e. Press the ENTER by choosing another function or repeat
2 to 5

2. To change or modify and existing data we go as follows:

- a. Type 'C' and press ENTER
- b. Enter system code to be modified and press ENTER key.
- c. Change privilege and ENTER key.

3. To delete system control

- a. Type 'C' and press ENTER key
- b. Enter system code to be deleted and press ENTER key.
- c. Confirm deletion
- d. Press ENTER key to choose another function or repeat 2
to 4

Begin of Day

This option prepares the user for the day's operation. It is expected to run at the beginning of every day's operation, which is usually carried out, by the supervisor or the system analyst charged to do so.

End of Day

This option signifies the end of the day's operation. Thus, it updates all other files and prepares user for the next day's operation.

3.4 INPUT AND OUTPUT SPECIFICATION (REPORTS)

3.4.1 REPORT

The report menu provides the following reports:

- i. Daily 846X general ledger statement .
- ii. Daily Trial Balance
- iii. Monthly general ledger statement of accounts
- iv. Monthly Trial Balance
- v. Profit and Loss
- vi. Balance Sheet
- vii. Chart of Accounts

1. Daily and Monthly General Ledger Statement of Accounts: this option produces the printed copy of a specified range of all the daily/monthly general ledger statement of accounts. This statement is normally used to capture in details, all the days/months transactions on a particular account. To print out this account, to specify the range to print and press ENTER key twice to print the statement required.

2. **Daily/Monthly Trial Balance:** this option produces the printed copy of the Trial Balance.
3. **Profit and Loss Account:** this option produces the printed copy of the Profit and LOSS Account of the company on daily and monthly basis.
4. **Balance Sheet:** this option produces the printed copy of Balance Sheet of the company on daily basis.
5. **Chart of Accounts:** this option produces the copy of chart of accounts of the company.
6. **Year-end Closing:** this option closes the financial year operation and prepares the master file for the new year by clearing the files.
7. **Auction Number:** this is a 5-digit field which holds a valid exchange rate number for the batch currency code.
 - **Currency Code:** this is a 3-digit field indicating the batch currency code.
 - **Batch Number:** this is a 1-digit field which accepts values from 2 to 50. This field holds number of vouchers in a batch.
8. **Entry count:** this indicates the number of entries posted.

- a. **Modify Accepted Transaction:** this option is used to enter the batch number and record count. The transaction record might not be found if it does not exist.
- b. **Modify Rejected Batch:** to modify rejected batch, we enter the batch number of the rejected batch to be modified.

Transaction Process

The transaction process option provides option for:

- Adding new transaction
- Modify accepted transaction
- Modify rejected batch
- Cancel rejected batch
- Accepted transaction listing
- Rejected transaction listing and
- Exit.

Only users with privilege can have access to the transaction processing module of the General Ledger System. Operations can be performed using any of the options highlighted above.

- i. **Adding New Transaction:** this option allows for the addition of new transaction

ii. Period: this is a 2-digit field which holds the period number in the batch header. This must not be greater than the current processing period number. The voucher that needs to be changed or modified can be added to make the batch balance but the total batch entries must not be more than 50.

iii. Cancel Rejected Batch: in canceling rejected batch, we number the batch to be canceled. We note that the batch must be rejected first and no accepted batch can be canceled.

iv. Accepted Transaction Listing: this option produces the list of all accepted transactions yet to be used for updating the master file.

v. Rejected Transaction Listing: this option causes a list of all rejected batch to be sent to the printer.

3.4.2 INPUT AND OUTPUT SPECIFICATION

INPUTS

The inputs to the program are impersonal account numbers, which are mainly system generated.

CLASSIFICATION OF THE IMPERSONAL ACCOUNTS

- | | |
|-----------------------|-------------------------|
| 1. Asset accounts | 101001 to may be 110010 |
| 2. Liability accounts | 201001 to may be 211100 |

3. Contingent liabilities 301001 to may be 311000

4. Income accounts 401001 to may be 411000

5. Expenditures 501001 to may be 511000

a. **Posting to the Accounts:** posting to the Assets or other accounts can only be made with the use of appropriate code for each of the accounts concerned. For example, when making postings to the Asset Accounts which consist of various accounts, these accounts would only be debited or credited provided the appropriate code is used. The layout of the screen of an empty form for creating an account for posting is as follows:

Account Number

Key in the account's number and screen layout will be:

Account Number

Description

Amount

Transaction Date

Transaction type JD/JC

Are these entries ok (Y/N)

Exit

OUTPUT

The output is the display of the result on the screen or print out. The

end result include:

- The daily accepted transaction.
- The daily trial balance
- The monthly general ledger
- The monthly trial balance
- The monthly profit and Loss account and the monthly balance sheet.

3.5 GENERAL DESCRIPTION OF PROGRAM AND HARDWARE REQUIREMENT

The program for this accounting system is written in clipper 5.0 tailored towards dbase IV program is meant to replace the manual accounting system of operation of the company under study.

The entries program is menu driven. At the re- running of the program, a test displayed on the screen welcoming the user by flashing NSDC ledger. We logic the general user Logic Name and password.

The main program menu is made up of the following: system Administration with features as highlighted in page 27 of this chapter.

TO RUN THE PROGRAM

At the DOS (Disk Operation System) prompt charge directory Cd/ NSDC.
Prg. Ta DOS prompt change to A drive TYPE NSDC HQM enter NSDC
enter, wait for few seconds, the program will be loaded and present you
with the DOS prompt.

HARDWARE REQUIEMENTS

i Pentium IIMMX 266MHZ and above

ii minimum of 64MB Main Memory

iii. 10GB Hard Disk Drive

iv. 3¹/₂ Floppy Disk Drive

v.14'' SVGA Colour monitor

vi. Keyboard (1101) enhanced

1. Printers

i. Desk jet printers or laser where necessary

ii. UPS 650V

iii. Super Master Stabilizers-

CHAPTER FOUR

SYSTEM INSTALLATION

1 OVERVIEW

System implementation involves the coordination of all the activities connected with the installation of a particular computer system. This is meant to achieve the operational goals or objectives of introduction that system to the organization concerned. Computerization of an accounting system involves a great deal of capital investment. It is therefore important that a great deal of caution should be observed after careful decision had been taken to install the new computer system, otherwise, there are bound to be serious problems which could render the system development a total failure. Therefore, careful planning should begin early and the areas to be considered are described in the following sections of this chapter.

4. 2 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 any computer system can adversely affect the overall activities of an organization. The amount of training required for various categories of personnel will depend upon the complexity of the system. It is the responsibility of the systems analyst to ensure that all the staff charged with the operation of the new system are capable of making it a success.

3 SYSTEM TESTING

Program testing is vital so that errors detected are debugged before the system is put into use. To this end the system analyst must provide the necessary test data for program and procedure testing. The test data must meet the specifications made by the programmer. Expected results of the test must be worked out before hand for comparison purposes. System fits together as planned.

4.4 SYSTEM CONVERSION METHODS

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

- i) Director change over
- ii) Parallel conversion
- iii) Pilot changeover
- iv) Phased 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. From the nature of the

problems addressed in this study, the most appropriate conversion method is the phased changeover approach.

4.5 POST IMPLEMENTATION

The cardinal objective of post implementation is to determine whether the set objectives for which a system has been designed are achieved. For example, one may wish to know the level of productivity of the system. The systems analyst may wish to know the relevance, by the system as well as how timely the result are. This can assist the systems analyst to ascertain the success of the system and what necessary steps to be taken in case of lapses. The acceptability of a system by the users is important for its success. This motivates the operators and enable them to do their best in their operational activities.

4.6 SYSTEM REVIEW

The operational, economic and technical feasibility of a system is vital to the success of a particular business or organization. The review of the system is carried out to meet the organizational needs of a company. The dynamic needs and operations of an organization call for a timely adjustment to it to remain in an ever changing and competitive

4.7 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, and the operators of the system will be kept confident in their daily operations. Furthermore, backup copies of software's and documents stored should be made to safeguard against accidental corruption of the originals. Virus preventive measures are also essential to protect the software's and files against virus attack.

4. 8 USER DOCUMENT

The user documentation for a particular system is logical description of the method of using it on a computer. The user can operate the system developed in this study as follows:

- a) Change directly to that of Dbase IV using the change directory command i.e a Dos prompt, type CD/Base IV and press the return key (Enter).

Note that it is important to check the name of the directory into which the program (Dbase IV) is installed before typing the command stated above as the directory name may read Dbase, Dbase4 etc as specified by the installator.

- b) Type Dbase and press the return key. The computer displays the program welcome screen before displaying either the control center or do prompt. If the control center is displayed, press the escape key (ESC) and press Y to Switch over to dot prompt.

- c) Type modi comm. NSDC and press the return key. On DBase IV editor screen displayed, type the program after which you press ctrl + save the program and return to the dot prompt.
- d) At the dot prompt, Do NSDC and press the return key.
- e) Follow the instruction on the screen and select any option of your choice depending on the operations you intend carrying out.

4.9. PROGRAM LISTENING

Program documentation is essential as it makes a program understandable to the users of a system as well as to another programmer . The programming language used in developing the system for this study is Dbase IV. This is due to its versatility in handling records and large volume of information. All variable names used in the program are clearly declared using the "PUBLIC" command and the "STORE" command The program is stored in NSDC directory in drive c of the computer but it can be stored in any other directory or disk and the set DEFAULT and SET PATH commands modified in the program to reflect the change of environment. Please see appendix on pages 47 to 68 for the Author's listing.

CHAPTER FIVE

5.0 CONCLUSION.

5.1 CONCLUSION.

This study was based on a system Analysis and Design for the proper computerization of the accounting system of an investment company up to trial Balance with Niger state Development company Limited as a case study.

With the basic knowledge of the problems and objectives of accounting system activities. This study can even be modified to suit the requirement of similar organization as Niger state Development company Limited using resources at their disposal.

The system under study has advantages which include facilitating speed of operation, reliability and increased efficiency in the processing activities.

The awareness of the potentials of the computer, therefore cannot be overemphasized as a whole rely on information which is a vital tool for their day-to- day operations. It helps management to attain specific objects for organization maintenance and growth. This project is also designed to provide user with up-to-date information, meet the precise needs of the organization and to ease information retrieval.

The accounting system of Niger state Development company(case study) up to trial balance was designed to take proper accountability of the receipts and payments of the company and most importantly, to account for the assets and liabilities of the company as required by the Government of Niger state.

2 RECOMMENDATIONS

The accounting system under study is all encompassing as it is meant to cover the general ledger accounting system up to trial Balance.

Therefore, it is recommended that competent staff be employed to maintain the system. This would enable the company to produce profit and loss accounts and the Balance sheet which would be reliable.

It is further recommended that for the proper functioning of any computer-based information system, joint effort of its human procedural and physical components are required as they help to generate and feed desired information for better output.

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APPENDIX
PROGRAM LISTENING

Program **NSDC**
*** Author** **WILLIAMS TOYIN**
Description ***This is the main program of the general ledger and the
trial balance system.***
*** Date:** **28/09/2004**

SET DEFAULT TO C:/NSDC
SET CONFIRM ON
SET CONSOLE ON
SET DEVICE TO SCREEN
SET PRINT OFF
SET DELETE ON
SET EXCLUSIVE OFF
SET DATE BRITISH
DO NSDC LOGO
DO NSDC CHECK
PUBLIC
MDATE, MPRIVD, MPRIS, MSECOD, DCOY, DHQMX, MIBKPERID NDATE, LDATE, CCY,
CNY, TST
STORE O TO MORIV
STORE 'F' TO MPRIVS, MSEC
STORE SPACE (12) TO MPRIVCD, MSECOD
USE GLPARAM
STORE NSDCDATE TO MSEDAT
STORE NSDCNAME TO DCOY, MIBKNAME
STORE NSDCHQMX TO DHQMX
STORE NSDCNPDATE TO NDATE
STORE NSDC PERIOD TO MIBKPERIOD
STORE NSDCCLPDATE TO LDATE
USE
DONSDC SEC
STORE MSEC TO MPRIVS
STORE PRIV TO MPRIV

```

STORE MSECOD TO MPRVCD
IF MPRIV = 'F'
    QUIT
ENDIF
IF MPRIV = 1
    CLEAR
    @10,15, SAY 'ENTER DATE OF OPERATION.'

    @10,40 Get MDATE
    READ
    IF MDATE = CTOD('//')
        @22,0 SAY 'INVALID DATE'
    WAIT
    RETURN
ENDIF
DO WHILE .T.
    USE GLPARAM
    IF FLOCK ( )
        REPLSCE MNSDCDATE WITH MDATE
    EXIT
ENDIF
ENDDO
STORE NSDCNAME TO DCOY
STORE NSDCHQMX TO DHQMX
CLOSE DATA
DO WHILE .T.
    CLEAR
    DO BACKGRD
    @ 2,23 SAY DCOY
    @ 4 1 SAY NSDC
    @ 4,30 SAY 'SYSTEM ADMINISTRATION'
    @ 9,23 SAY '01 .TABLE MIANTENANCE'
    @ 10,23 SAY '02.BEGIN OF DAY'
    @ 11,23 SAY '03 END OF DAY'
    @ 12,23 SAY '04.END OF MONTH'
    @ 13,23 SAY '05.END OF YEAR'
    @ 14,23 SAY '09. EXIT'

```

```

@ 18,45 SAY 'OPTION' GET SAOPT
PICTURE '9'
READ
IF SAOPT = '1'
DO WHILE .T.
    DO BACKGRD
    @ 2, 30 SAY 'SYSTEM ADMINISTRATION'
    @ 4, 1 SAY NSDC
    @ 4, 31 SAY TABLE MAINTENANCE
    @ 7, 24 SAY '01. Account File'
    @ 8, 24 SAY '02 Currency Code'
    @ 9, 24 SAY '03 Exchange Rate'
    @ 10, 24 SAY '04 Basic Parameters'
    @ 11, 24 SAY '05 Public Holiday'
    @ 12, 24 SAY '06 Password'
    @ 13, 24 SAY '07 Indenxing'
    @ 14, 24 SAY '08 Accounting Numbers Generation'
    @ 14, 24 SAY '09 Transportation Type'
    @ 15, 24 SAY '10 System Control'
    @ 16, 24 SAY '11 Account Type'
    @ 19, 24 SAY '99 Exit'
    ISYOPT = ' '
    @ 20, 45 SAY 'Option' GET ISYOPT PICTURE '99'
READ
IF ISYOPT = '01'
    DO ISYTM01
    LOOP
ENDIF
IF ISYTM02 '03'
    DO ISYTM03
    LOOP
ENDIF
IF ISYTM '04'
    DO ISYTM 04
    LOOP
ENDIF
IF ISYOPT = '05'

```



```
        DO 1SYTM 05
        LOOP
ENDIF
IF 1SYOPT = '06'
        DO 1SYTM 06
        LOOP
ENDIF
IF 1SYOPT = '07'
        DO 1SYTM 07
        LOOP
ENDIF
IF 1SYOPT = '08'
        DO 1SYTM 08
        LOOP
ENDIF
IF 1SYOPT = '08'
        DO 1SYTM 09
        LOOP
ENDIF
IF 1SYOPT = '09'
        DO 1SYTM 10
        LOOP
ENDIF
IF 1SYOPT = '10'
        DO 1SYTM 11
        LOOP
ENDIF
IF 1SYOPT = '99'
        RELEASE ALL EXCEPT MP*
        EXIT
        ENDOO
        LOOP
ENDIF
IF SAOPT = '2'
        DO 1SOY02
        LOOP
ENDIF
```

IF SAOPT = '3'

DO WHILE .T.

DO BACKGRD

@ 2, SAY 'SYSTEM ADMINISTRATION'

@ 4, 1 SAY 'NSDC'

@ 4, 31 SAY 'END Of Month Operation'

@ 10,24 SAY '1, Month-end closing'

@ 12,24 SAY '2. Month-end report'

@ 14,24 SAY '9. Exit'

EOMOPT

@20, 45 SAY 'OPTION' GET EDMOPT PICTURE '9'

READ

IF EDMOPT = '1'

DO 1SYEMO1

LOOP

ENDIF

IF EOMPT = '2'

DO WHILE .T.

CLEAR

DO BACKRD

@2,23 SAY DCOY

@4,1 SAY 'NSDC'

@4,37 SAY 'End of Month Report'

@8,23 SAY '1. profit and Loss'

@ 10,23 SAY '2. Balance Sheet'

@ 14,23 SAY '4. Chart of Account'

@ 18,23 SAY '4. Exit'

EOMRPOPT = ' '

@ 19 SAY 'OPTION' GET EOMRPPOPT PICTURE

READ

IF EOMROPT = '1'

DO 1EMROPI

LOOP

ENDIF

IF EOMRPOPT = '2'

DO 1EMRP2

LOOP

```

ENDIF
IF EOMRPOPT='3'
  DO 1EMRPO3
  LOOP
ENDIF
IFEOMROPT= '4'
  DO 1EMRPO4
  LOOP
ENDIF
IF EOMRPOPT= '9'
  EXIT
ENDIF
ENDDO
LOOP
ENDIF
IF SAOPT = '5'
  DO 1SYEYO1
  LOOP
ENDIF
IF SAOPT = '9'
  RETURN
ENDIF
ENDOO
ENDIF
IF MPRIV = '2'
  USE GLSYSCON EXCL
  LOCATE FOR 1SYSCODE = 'LEDGER'
  IF 'NOT' FOUND ( )
    @22,0 SAY 'The Begin of Day identifier not in place'
    WAIT
    @22,0 CLEAR
    RETURN
  ENDIF
  IF IPRIV # 0
    @22, 0 SAY 'The begin of Day operation not yet done'
    WAIT
    @22,0 CLEAR

```

```

        RETURN
    ENDIF
    IF MDATE ≠ NDATE
        @22,0 SAY 'The Begin of Day operation not yet done'
    WAIT
    RRRETURN
ENDIF
DO WHILE .T.
    CLEAR
    DO BACKGRD
    @2,23 SAY 'DCOY'
    @4,1 TRANSACTION PROCESSING'
    @8,23 SAY '1. Add new Transaction'
    @9,23 SAY '2. Modify Accepted Transaction'
    @10,23 SAY '3. Modify Rejected Batch'
    @11,23 SAY '4. Cancel Rejected Batch'
    @12,23 SAY '5. Accepted Transaction Listing'
    @13,23 SAY '6. Rejected Transaction Listing'
    @14,23 SAY '7. Rejected Transaction Inquiry'
    @16,23 SAY '9. Exit'
    TPOPT = ' '
    @ 18, 45 SAY 'OPTION' GET TPOPT PICTURE '9'
    READ
    IF TPOPT = '9'
        RETURN
    ENDIF
    DO BACKGRD
    @ 2, 23 SAY 'DCOY'
    @ 4, 1 SAY 'NSDC'
    IF TPOPT = '1'
        DO ITPO1
        LOOP
    ENDIF
    IF TPOPT = '2'
        DO ITPO2
        LOOP
    ENDIF

```

```

IF TPOPT = '3'
  DO ITPO3
  LOOP
ENDIF
IF TPOPT = '4'
  DO ITPO4
  LOOP
ENDIF
IF TPOPT = '5'
  DO ITPO5
  LOOP
ENDIF
IF TPOPT = '6'
  DO ITPO6
  LOOP
ENDIF
IF TPOPT = '7'
  DO ITPO7
  LOOP
ENDIF
ENDDO
ENDIF
IF MPRIV = 3
  USE GLSYSICON EXCL
  LOCATE FOR ISYSCODE = 'LEDGER'
  IF NOT FOUND ( )
    @22,0 SAY ' The Begin of Day Identifier not in place'
    WAIT
    @22,0 CLEAR
    RETURN
  ENDIF
  IF IPRIV = 0
    @ 22, 0 SAY ' The Begin of Day Operation not yet done'
    WAIT
    @ 22, 0 CLEAR
    RETURN
  ENDIF

```

```

IF MDATE □ NDATE
  @ 22, 0 SAY ' The Begin of Day Operation not yet Done'
  WAIT
  @ 22 , 0 CLEAR
ENDIF
DO WHILE .T.
  CLEAR
  DO BACKGRD
  @ 2, 23 SAY DCOY
  @ 4 , 1 SAY 'NSDC'
  @ 4, 37 SAY 'INQUIRIES'
  @ 9, 23 SAY '1. Daily GL Statement of Accounts'
  @ 10, 23 SAY '2. Monthly GL Statement of Accounts'
  @ 11, 23 SAY '3. Chart of Accounts'
  @ 13, 23 SAY '9. Exit'
  IQOPT = ( )
  @ 17, 45 SAY 'OPTION' GET IQOPT PICTURE '9'
  READ
  IF IQOPT = '1'
    * DO INQ01
    LOOP
  ENDIF
  IF IQOPT = '2'
    * DO INQ02
    LOOP
  ENDIF
  IF IQOPT = '3'
    * DO INQ03
    LOOP
  ENDIF
  IF IQOPT = '9'
    RETURN
  ENDIF
ENDDO
ENDIF

```

PROGRAM
AUTHOR
DESCRIPTION

ITP02
WILLIAMS TOYIN
*This Program Handles The Modifications of Accepted
Transaction of General Ledger Entry.*

DATE

28/09/2004

```
CLOSE DATABASES
USE GLPARAM
STORE NSDCDATE TO MDATE
MBKPERIOD = NSDCPERIOD
USE
MFILE = "GW" + TRIM (Substr (MSECODE, 1, 6)
@ 4, 1 SAY 'ITP02'
@ 4, 25 SAY "ACCEPTED TRANSACTION MODIFICATIONS"
SELECT 1
USE GLTDAILY
IF NETERR ( )
@ 22, 0 SAY 'DAILY TRANSACTION FILE IN USE'
WAIT
@ 22, 0 CLEAR
CLOSE DATA
RETURN
ENDIF
@ 22, 0 CLEAR
DO WHILE .T.
    STORE 0 TO MBATCH
    STORE 0 TO MNUMB
    @ 7, 1 CLEAR TO 20, 78
    @ 8, 11 SAY "BATCH NUMBER:" GET MBTCH PICTURE "999"
    @ 9, 11 SAY "RECORD COUNT: GET MNMB PICTURE '99'
    READ
    IF MBATCH = 0 AND MNUMB = 0
        EXIT
    ENDIF
    MBatch = Str (MBatch)
    SELECT 1
```

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LOCATE FOR MBATCH = GTBATCH AND MNUMB = VAL (GTTRANUM)
IF EOF ( )
    @ 22, 0 SAY "**** Transaction Record not Found"
    WAIT
    @ 22, 0 CLEAR
    LOOP
ENDIF
IF .NOT. RLOCK ( )
    @ 22, 0 SAY "**** Transaction Record in Use"
    WAIT
    @ 22, 0 CLEAR
    LOOP
ENDIF
@ 7, 1 CLEAR TO 20, 78
MGTACCTUUM = GTACCTNUM
MGTTRAATYPE = GTTRATYPE
MGTVOUNUMB = GTVONUMB
MGTDESCR = GTDESCR
MGTTRADATE = GTTRADATE
MGTTRAMT = GTTRAMT
MGTDEBCRED = GTDEBCRED
MGURCODE = GTCURCODE
MPERIOD = GTPERIOD
MGTXRATE = GTVRATE
@ 7, 31 SAY "Currency Code:"
@ 7, 48 SAY "MCURCODE PICTURE" !!!"
@ 8, 3 SAY "Batch No:"
@ 8, 20 SAY "MBATCH PICTURE" !!!"
@ 8, 31 SAY "Exchange Rate:"
@ 8, 48 SAY "MGTRATE PICTURE" 9999.9999"
@ 8, 60 SAY "Entry Count:" + STR (MNUMB,2)
@ 7, 60 SAY "Period " + STR (MPERIOD 2,)
@ 11, 3 SAY " Account Number:"
@ 11, 24 SAY "MGTACCTNUM PICTURE "9999999999"
@ 12, 3 SAY "Voucher Number:"
@ 12, 24 GET MGTVOUNUMB PICTURE '9999999'
@ 13, 3 SAY "Transaction Date"

```


*** PROGRAM** **PBS465**
*** AUTHOR** **WILLIAMS TOYIN**
*** DESCRIPTION** **Program Handles The Rejected Transactions**
*** DATE** **28/9/2004**

CLEAR
PAGNO = 1
LIN = 1
DO BACKGRD
@ 4, 26 SAY 'REJECTED TRANSACTION REPORT'
@ 10, 10 SAY 'PLEASE SET DOWN YOUR PRINTER'
@ 23, 0
WAIT
@ 22, 0 CLEAR
@ 10, 10 SAY 'PRINTING PLEAS WAIT'
SELECT 1
USE GLTREJ
SET DEVICE TO PRINT
STORE 0.00 TO TOT CRAMT, TOTDBAMT
DO WHILE . NOT. EOF ()
 REJECT
 @ 1, 0 SAY 'REPORT: ITPO6'
 @ 1, 25 SAY DCOY
 @ 1, 120 SAY PAGNO PICTURE '9999'
 @ 3, 10 SAY HQMX
 @ 3, 25 SAY DHQMX
 @ 5 21 SAY 'REJECTED TRANSACTION REPORT FOR'
 @ 5, 54 MDATE
 @ 7, 1 SAY 'Trans'
 @ 7, 8 SAY 'Account'
 @ 7, 18 SAY 'VOUCHER'
 @ 7, 33 SAY 'Description"
 @ 7, 64 SAY 'Period'
 @ 7, 74 SAY 'Curr'
 @ 7, 81 SAY 'Transaction'
 @ 7, 94 SAY 'Exchange'

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@ 7, 109 SAY 'Amount'
@ 7, 123 SAY 'Amount'
@ 8, 2 SAY 'No'
@ 8, 9 SAY 'Number'
@ 8, 74 SAY 'CODE'
@ 8, 83 SAY 'Amount'
@ 8, 96 SAY 'Rate'
@ 8, 109 SAY 'Debit'
@ 8, 124 SAY 'Credit'
PAGNO = PAGNO + 1
LIN = 10
SELECT
GO TO P
DO WHILE LIN 58. AND NOT . EOF ( )
STORE 0.00 TO MCRAMT, MDBAMT
STORE GTBATCH TO MGTBATCH
@ LIN, 1 SAY '*** Batch no.' + GTBATCH
LIN = LIN + 1
DO WHILE GTBATCH = MGBATCH
@ LIN, " SAY GTRANUM"
@ LIN, 6 SAY GTACCTNUM
@ LIN 18 SAY GTVOUNUMB
@ LIN, 27 SAY GTDESCR
@ LIN, 66 SAY GTPERIOD PICT '99'
@ LIN, 75 SAY GTCURCODE PICT 'XXX'
@ LIN, 80 SAY GTTRAMT PICT '999999999.99'
@ LIN, 93 SAY GTXRATE PICT '99999.9999'
IF GTDEBCRED = 'C'
@ LIN 120 SAY GTNAIRA PICT '999999999.99'
MCRAMT = MCRAMT + GTNAIRA
ENDIF
IF GTDEBCRED = 'D'
@ LIN, 106 SAY GTNAIRA PICT '999999999.99'
MDAMT = MDAMT + GTNAIRA
TOTDAMT = TOTDAMT + GTNAIRA
ENDIF
LIN = LIN + 1

```

SKIP

ENDDO

LIN = LIN + 1

@ LIN, 1 SAY '*** SUBTOTAL ***'

@ LIN, 120 SAY MCRAMT PICT '999999999.99'

LIN, 106 SAY MDAMT PICT '999999999.99'

LIN = LIN + 1

ENDDO

ENDDO

@ LIN + 2, 1 SAY '*** Total ***'

@ LIN + 2, 120 SAY TOTCRAMT PICT '999999999.99'

@ LIN + 2, 106 SAY TOTDAMT PICT '999999999.99'

@ LIN + 4, 10 SAY 'END OF REPORT'

EJECT

SET DEVICE TO SCREEN

RETURN

*** PROGRAM** **IEMRP02**
*** AUTHOR** **WILLIAMS TOYIN**
*** DESCRIPTION** **the program prints the profit and loss**
 Accounts.
*** DATE** **28/09/2004**

@ 4, 1 SAY 'IEMPO1'
@ 7, 1 CLEAR TO 20, 78
SELECT 2
USE GLMASTER
IF NETERR ()
 @ 22, 0 SAY 'GNEREAL LEDGER MASTER FILE IN USE'
 WAIT
 @ 22, 0 CLEAR
 RETURN
ENDIF
SET INDEX TO GLMASTER
SELECT 1
USE GLACCTYP
IF . NOT. FLOCK ()
 @ 22, 0 SAY 'GENERAL LEDGER ACCOUNT TYPE FILE IN USE'
 WAIT
 @ 22, 0 CLEAR
 RETURN
ENDIF
SET INDEX TO GLACCTYP
SET DEVICE TO SCREEN
@ 22, 0
WAIT " " + ' PLEASE GET THE PRINTER READY - AND PRESS ANY KEY'
@ 6, 1 CLEAR TO 20, 78
@ 15, 15 SAY PRINTING REPORT WAIT
@ 22, 0 CLEAR
LNC = 0
SET DEVICE TO PRINT
EJECT
PGN = 1
 @ 1, 1 SAY 'IEMRPO1
 @ 1, 41 SAY DCOY

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@ 2, 111 SAY 'Page:' STR (PGN, 3)
@ 3, 41 SAY DHQMX
@ 4, 111 SAY 'DATE:' + DTOC (MDATE)
@ 5, 41 SAY "Profit and Loss Accounts"
@ 7, 104 SAY "Credit Balance"
@ 8, 1 SAY 'INCOME..'
LNC = 10
SELECT 2
GOTO P
MINCBAL = 0.00
MEXPBAL = 0.00
DO WHILE .NOT EOF ( )
  IF (SUBSTR (B GMACCTNUM, 1,1 □ '4')
    SKIP
    LOOP
  ENDIF
  MACCT = B GMACCTNUM
  MXACCT = SUBSTR (MACCT; 1, 3)
  NDESC = SPACE (30)
  SELECT 1
  FIND MXACCT
  IF NOT. EOF ( )
    MDESC = A GDESCR
  ENDIF
  LNC = LNC + 1
  @ LNC, 2 SAY MXACCT
  @ LNC, 29 SAY MDESC
  LNC = LNC + 1
  SELECT 2
DO WHILE MXACCT = SUBSTR (B GMACCTNUM, 1, 3)'
  @ LNC, 1 SAY GMACCTNUMB
  @ LNC, 21 SAY 'GMDESCR PICT !!!!!!!!!!!!!!!!!!!!!'
  @ LNC, 104 SAY GMDOPBAL PICT 'CX 999,999,999,999.99'
  MLNCBAL = MLNCBAL + GMDOPBAL
  LNC = LNC + 1
  IF LNC 55
    EJECT

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PGN = PGN + 1
@ 1, 1 SAY "IEMRPO1"
@ 1, 41 SAY DCOY
@ 2, 111 SAY 'Page:' + STR (PGN, 3)
@ 3, 41 SAY DHQMX
@ 4, 11 ' DATE:' + DTDC (MDATE)
@ 5, 41 SAY "Profit and Loss Accounts"
@ 7, 104 SAY 'Credit Balance"
@ 8, 1 SAY ' INCOME... '
LNC = 10
@ LNC, 2 SAY MXACCT
@ LNC, 29 SAY MDESC
LNC = LNC + 1

ENDIF
SKIP
ENDDO
ENDDO
LNC = LNC + 1
@ LNC, 104 SAY '.....'
@ LNC + 1, 1 SAY ' Total Income'
@ LNC + 2, 104 SAY MINBAL PICT 'ECX999,999,999.99'
@ LNC + 2, 104 SAY '.....'
SELECT 1
GOTO P
EJECT
PGN = 1
@ 1, 1 SAY "IEMRPO1"
@ 1, 41 SAY DCOY
@ 2, 111 SAY 'Page:' + STR (PGN, 3)
@ 3, 41 SAY DHQMX
@ 4, 111 SAY ' DATE:' + DTOC (MDATE)
@ 5, 41 SAY "Profit and Loss Accounts"
@ 7, 86 SAY "Debit Balance"
@ 8, 1 SAY ' EXPENSES..... '
LNC = 10
SELECT 2
GOTO P

```

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MEXPBAL = 0.00
DO WHILE .NOT. EOF ( )
  IF (SUBSTR ( B - GMACCTNUM, 1,1) = '5'
    SKIP
  LOOP
ENDIF
MACCT = B - GMACCTNUM
MXACCT = SUBSTR (MACCT, 1,3)
MDESC 1
FIND & MXACCT
IF .NOT. EOF ( )
  MDESC = A - GDESCR
ENDIF
LNC = LNC + 1
@ LNC, 2 SAY MXACCT
@ LNC, 29 SAY MDESC
LNC = LNC + 1
SELECT 2
DO WHILE MXACCT = SUBSTR ( B - GMACCTNUM, 1,3)
  @LNC, 1 SAY GMACCTNUM
  @ LNC, 21 SAY GMDESCR PICT ' !!!!!!!!!!!!!'
  @ LNC, 79 SAY GMDOPBAL PIC ' ECX 999,999,999,999.99
  MEXPBAL = MEXPBAL + GMDOPBAL
  LNC = LNC + 1
  IF LNC > 55
    EJECT
    PGN = PGN + 1
    @ 1, 1 SAY " IEMRPO1"
    @ 1, 41 SAY DCOY
    @ 2, 111 SAY 'Page:' + STR (PGN, 3)
    @ 3, 41 SAY DHQMX
    @ 4, 111 SAY 'DATE:' + DTOC (MDATE)
    @ 5, 41 SAY " Profit and Loss Accounts"
    @ 7, 86 SAY ' Debit Balance'
    @ 8, 1 SAY ' EXPENSES....'
    LNC = 10
    @ LNC, 2 SAY MXACCT

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@ LNC, 29 SAY MDESC

LNC = LNC + 1

ENDIF

SKIP

ENDDO

ENDDO

LNC = LNC + 1

@ LNC, 79 SAY '.....'

@ LNC + 1, 79 SAY 'Total Expenses

@ LNC + 1, 79 SAY MEXPBAL PICT ' ECX 999,999,999,999.99'

@ LNC + 2, 79 SAY '.....'

@ LNC + 3, 3 SAY "**** END REPORT****"

EJECT

SET DEVICE TO SCREEN

RETURN

*** END OF PROGRAM*****