CONTINUOUS STATISTICAL REPORT IN BANKING

CREDIT ADMINISTRATION……..

AFRIBANK NIGERIA PLC PERSPEECTIVE

BY

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CERTIFICATION

A project submitted to the department of mathematics/Computer Science, Federal University of Technology, Minna Post – Graduate School in partial fulfilment of the requirement for the award of A post-Graduate Diploma Computer Science.

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DEDICATION

This project work is dedicated to the **GLORY OF GOD ALMIGHTY** for

His infinite Mercy and guidance as well as my parents, Chief Simpson

Oyebade Iwaye and Mrs Dorcas Olamodesi Iwaye for my proper upbringing.

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Once again, l say than you all and God bless.

ABSTRACT

The alarming rate at which frauds occur these days in the banking industry continue to worry industry watchers, stakeholders and the government. The purpose of this project therefore is to assist and equip credit officers or Branch Manager to get over the problem of staff being seduced by customers to fortify figure inorder to enhance their credit request. Continuous statistical report as presented in this project work will be produced for any customer by the computer automatically without any room for manual adjustment or manipulation of data.

In view of this, the incidence of unauthorised credits or bad debts will be reduced to the bearest minimum.

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CHAPTER ONE

GENERAL INTRODUCTION

1.0   INTRODUCTION

Continuous statistical report is a credit weapon used by the management of a bank to follow or monitor the life of an account on a month by month basis. In other words, it is an instrument that its good understanding can be used to take prompt credit decisions to forestall good credit booking going bad, sticky or hard core.

It brings into focus the average monthly utilization, the total credit movements and ultimately the number of days turnover of the account over the period, that is, the number of days necessary to repay the average monthly outstanding balance considering the recorded credits over the period.

Since banking evolved in the sixteenth century, various innovative devices and technology has been introduced into it to enhance the banking activities. One of the innovative tools developed for writing and control purposes is the continuos statistical report. Banking of the present days is an off-shoot of the sixteen century banking which originated from the Italian Goldsmith who were working in London traditionally, as Goldsmith.

In banking, various types of credits are available for banking customers. Credit administration through the use of continuos statistical report is today a very powerful tool in Afribank Nigeria Plc"s credit operation.

The Goldsmith that introduced the earlier banking system in addition to their traditional duties engaged in lending. These, they do by accepting the risks of keeping peoples valuable and money in consideration for a fee.

They also traded with these monies in their custody by lending or granting credits to interested borrowers for a fee or income. This is presently regarded as interest and commission on the borrowed money.

This was the practice that gave birth to the present day banking that is now highly sophisticated. Before granting credits then, the Goldsmith must have established some facts about their potential debtors.

Their character, trust-worthiness, honesty and properties at their disposal. Then the trend of the relationship once established will be monitored from one period of borrowing to the time of repayment. How long it took the borrower to repay, the payment of the interest and how reliable are the promises made fulfilled. This was the statistical report of the Goldsmith.

The initiative of these Goldsmith have today undergone several surgical development from the ledger days to the automated age.

Afribank Nigeria Plc; whose this study focuses was granted its banking license in October, 1959. This bank subsequently commenced business in 1960 when it opened its first operational branch in Kano. At inception, the bank was called BANK INTERNATIONAL POUR L'AFRIQUE OCCIDENTALE (BIAO). This was in Senegal where it was accorded currency issuing function (a Central bank function) as a result sub-region. The bank is however known as Afribank Nigeria Plc today.

The bank has its Head Office presently at 51/55 Broad Street Lagos and with a network of one hundred and thirty one branches across the country. The ownership structure of the bank prior to 1976 was purely foreign (BIAO). However, the introduction of indigenisation decree changes the structure such that the Federal Government of Nigeria acquired sixty percent (60%) and BIAO, forty percent (40%). The share capital of the bank then was N=3.6m and was increased to N=6.0m as a results of the indigenisation exercise.

The ownership of the bank is widely expanded now. Even though the forty percent (40%) holdings of BIAO are still hold in trust, the ownership of the remaining sixty percent (60%) includes, staff ten percent 10%, and the general public fifty percent (50%). The bank has grown both in strength (financially) and in size (branch network). It has changed its name from BIAO to International Bank for West

African (IBWA) in 1977 and later the present name – Afribank Nigeria Plc all in a bid to fully indigenise the bank. The name changed from Afribank Nigeria limited in 1990 to Afribank Nigeria Public Limited Company (PLC) in 1991. The authorised share capital of the bank as at December, 1998 was N=575M. This is well above the minimum of N=500M stipulated by the apex bank.

The bank is well diversified with interest in Merchant Banking, Security Services, Insurance Brokerage, Estate Management and Financing (Finance Company) in Dublin. These services are performed by the bank in addition to its traditional role of commercial banking.

1.1 OBJECTIVES OF THE STUDY.

The study is set to automate (computer generated) the process of generating continuous statistical report for the purpose of credit administration as against the present manual process.

The project should reduce the ambiguity associated with the number of days in a month in the computation of overdraft turnover in days which has become contentious.

Reducing the burden of too many paper work on the credit managers. The only paper work will be the decision to be taken by the credit manager based on the hard copy obtained from the automation.

Errors in manual computation and human manipulations of figures as well as results is drastically reduced.

1.2 IMPORTANCE OF THE STUDY

The importance of the study is to simplify further the already existing system of deriving information, which is partially automated. The study has the following advantages.

i)   Ability to prepare the total credit/debit movement

ii)   Compute the average total monthly credit/debit movement

iii) Determine the total interest/commission charged, total turnover and other charges.

iv)   Compute the overdraft turnover in days.

1.3 SCOPE OF THE STUDY

The scope of this study includes the determination of and preparation of the continuous statistical report as at when needed to highlight key arrears mentioned in the importance of the study. This will guide management in taking good credit decisions at critical situation. This will also include the preparation of accounts statement from which the statistical report is generated.

However, studies of this nature requires a lot of time and resources particularly, time which is the researches greatest constraint. Hence, the scope is limited to collation and preparation of continuos statistical report for credit managers involved in giving loans and related facilities.

1.4   METHODOLOGY

The project work is to analyse the developmental changes observed in the system currently in use.

This method of generating statistical report has some shortcomings.

i)   Time is being wasted collating data from customer's statement.

ii)   Data acquisition and collating is prone to errors.

iii)   Computation and analysis could be subjected to human manipulation.

iv)   Too much of paper work.

The new system will therefore adopt the methodology of reviewing the accounts statements generation procedure, recording, storing and retrieval procedures as well as the kind of package and hardware equipment in use. The shortcomings associated with these will now be corrected.

1.5   DEFINITION OF TERMS

This section of the study is an attempt to shed more light on some of the key words to be used and those already used in the project. Some of the words may re-occur from time to time and therefore have to be defined with their proper meanings as it relates to this project work.

i) CONTINUOUS STATISTICAL REPORT

This is a condensed or summarrised form of customer statements prepared monthly and updated thereafter, on a cumulative basis, to show the performance or operation on that customer's account (See appendix). This report shows customers Name, Account Number, the year of operation, branch and date of preparation.

It also indicates the month, highest debit or lowest credit, lowest debit or highest credit, average monthly debit or credit, total monthly credit, total monthly debit, overdraft turnover in days and end of the month balance.

ii) CREDIT BOOKING

This is granting of loans or advances to a bank's customer who has applied in writing for a facility and whose application has been appraised satisfactorily and approved.

The approval enables the customer to drawn from the bank's fund by overdrawing his account beyond what he has in the account. The stipulated conditions and procedures attached to the facility must have been fully met by the customer. This process in regarded as credit booking.

iii) FACILITIES

These are various forms of financial assistance granted banking customers by their banks. Facilities are of two types, namely: Loans and overdraft.

Overdraft is the simplest and most common form of credit facility. The customer is given a limit (ceiling) within which his account may be overdrawn. It is normally granted for working capital purposes and the outstanding is expected to fluctuate over the life of the facility.

The facility is normally reviewed annually, repayable on demand and can be cancelled without prior notice by the bank.

Loans are other financial assistance, which a bank provides for her credit customers. Its is monetary assistance extented to a customer for a purpose and for a definite period of time. There are three basic types of loans – short term, medium and long – term loans.

iv) **TURNOVER**

This is the monetary traffic, the lodgment and withdrawals in and out of a customer's account. The larger the turnover the better for the account particularly, the credit facility customers.

v) **STATEMENT OF ACCOUNTS**

It is a computer generated report which displays the name of the customer, the account number, the branch, dates of transaction, description of transaction, debit and credit entries and net balances.

The statement reveals all the daily transactions that took place within the month.

vi) **DEBIT**

This refers to all withdrawals made by a customer from his account(s) within the month. This may be cash withdrawal or money transferred.

vii) **CREDIT**

It is all form of lodgments whether cash or cheques into an account.

CHAPTER TWO

LITERATURE REVIEW

2.0. HISTORICAL BACKGROUND OF INDIGENOUS BANKING.

The establishment of banks in Nigeria dates back to 1890 when a private British shipping magnate and his agent along the West Coast of Africa engaged in intense competition among several European traders. This decision was made in the office of the shipping Company in the City of Liverpool.

As a result of visionary economic and commercial opportunities available in West Africa which requires the supply and distribution of money in some form, universally accepted, at least, among the trading peoples and communities that live along the coastal areas of West Africa, whose Lagos seaport had become an important trading centre gave birth to the idea.

Due to the property in operations of some indigenous entrepreneurs and businesses, a good number of that who for years were engaged as middle men traders became wealthy. This was between 1929 and 1952.

The formation of indigenous banks in Nigeria was pronounced between 1930's and 1950's. Efforts were however, made much, earlier in other West African Countries.

Africanus Horton, a liberated African of Igbo parentage in Sierra Leone founded his own Commercial Bank of West Africa. The Banque du Senegal represented an early successful effort in the establishment of banking institutions in West African. It was established in 1854 and later in 1901, it transformed into Banque de L' Afrique occidentale(B.A.O).

The first indigenous bank to emerge at that time was the Industrial and Commercial Bank (I.C.B) Lagos in 1929.

The aim was to assist industrial and commercial development in Nigeria and West Africa. The Loan profile of the bank could not support its viability as most loans were for unviable businesses. Hence, the bank collapsed in 1930 after a year of operation.

The death of this bank gave birth to another bank called Nigerian Merchantile Bank (NMB) in 1931 by virtually the same group of business entrepreneurs who founded ICB, such names include Dr. A. Maja, Chief T. A. Doherty and Mr. H. A. Subair. The National Bank of Nigeria was next indigenous bank to be established in 1933.

Being founded on a more solid base than the previous two, the bank survived. It had a prudent African Management team. Though due to huge bad loans the bank has been in the limbo for upward of four years now only being revived by the CBN.

The apparent success of the National Bank of Nigeria (NBN) and its survival may have encouraged the establishment of other new indigenous banks. The Agbonmagbe Bank, initiated in 1938 by Chief M. A. Okupe, survived and

modestly too till 1969 when it was acquired by the then Western Region of Nigeria, who re-named it Wema Bank. However, the Nigerian Penny Bank established in 1946 failed almost immediately.

The only important competitors to the National Bank of Nigeria were the Nigerian Farmers and Commercial Bank established in 1947 and the African Continental Bank founded in 1948. The former grew rapidly but overstretched itself. It had some 30 branches in Nigeria within a period of four years. It folded up in 1952.

The African Continental Bank, on the other hand, like the National Bank of Nigeria (NBN) was able to survive until recently when they were distressed and now being revived by CBN and owner states. The bank financed small businesses as well as the activities connected with Zik's interests. The bank was controlled personally by Dr. Azikwe who was determined to see it succeed and end European domination of the Nigerian Banking scene.

Pan Nigerian Bank, Standard Bank of Nigeria, Premier Bank, Nigerian Trust Bank, Afro Seas Credit Bank, Onward Bank of Nigeria, Central Bank of Nigeria (This has nothing to do with the apex bank – CBN) Merchant Bank, Metropolitan Bank of Nigeria, Provincial Bank of Nigeria, Union Bank of British Africa, United Commercial Credit Cosmopolitan Credit Bank, Main land Bank, Group Credit and Agricultural Bank, Industrial Bank, and West African Bank. All of these so called "Mushroom" Banks failed.

At the dawn of Nigeria's independence in 1959 another new bank emerged.

This was the Bank of the North (B.O.N). It was originally formed by the Northern Regional Government to promote banking facilities in the Northern part of the Country in similar manner as the National Bank of Nigeria and the African Continental Bank (ACB) did for Western and Eastern Region respectively. The indigenous banks attempts to break the monopoly of the British Banks and encourage banking competition in the country gave rise to the present day banking environment in Nigeria.

2.1   CONTINUOUS STATISTICAL REPORT

This report is one of the major computer generated hard copies that is being used monthly to monitor the activities and performance of every facility account.

It is also an instrument used in analysing a facility application. That is, help in taking a decision as to whether a facility request be granted or not.

The report is designed in such a way that critical opinions can be formed on a particular account at a glance. This project work intends to improve on the results displayed by this report.

The report is designed to accommodate the customers account number, Name, the branch in which the account is domiciled, the date of preparation, the year under reference, the month by month details of: Highest Debit or Lowest Credit; lowest Debit or Highest Credit, Average monthly Debit or

credit balance, Total monthly Debit entries, Total monthly credit entries, Overdraft Turnover in days and balance end of the month.

All the above are determined and calculated manually using the customers statement of accounts. This project work is therefore to prepare the statistical report direct from the customer's statement by the use of the computer. The improvement will also prepare other data that are not highlighted above.

Such as the interest and commission, the commission on turnover, other charges and many more.

This report is very paramount to taking any credit decision in Afribank because, it tells you a lot about the accounts operation and the characteristic behaviour of even the account owner from the pattern of lodgment. It reveals whether the account is doing well or badly, been window dressed or kit flied. It is therefore, a very good weapon if its preparation and interpretation are well understood.

The report by its pattern of operations tells you when to do business and when to be cautious; when the account is going hard core or sticky; when to call the customer for a chart or recall the facility and several other related decisions.

(i) TOTAL MONTHLY CREDIT ENTRIES

It refers to the total sum of all lodgments made during a month beginning from first day of the month to the last working day of the month.

(ii) OVERDRAFT TURNOVER IN DAYS

This is the number of days it will take any account in debit to return to credit balance within the month. It is determined by dividing total monthly credit entry by the Average monthly debit or credit balance and multiplied by the number of days in the month.

(iii) AVERAGE MONTHLY DEBIT/CREDIT BALANCE

This is determined by adding the Highest Debit/Lowest Credit with the Lowest Debit/Highest Credit and dividing by two.

(iv) BALANCE END OF MONTH

The balance end of the month is the amount outstanding in the account as at the end of the month – the last working day of the month be it credit or debit balances.

(v) AVERAGE UTILISATION

This is the total sum of balances on 7th, 14th, 21st and 28th of each month and dividing by four.

(vi) HIGHEST UTILISATION

This is the highest debit or lowest credit balance for a day during the twelve months that make up a year.

(vii) LOWEST UTILISATION

It is the lowest debit or highest credit balance for a day during the twelve months in a year.

(viii) INTEREST AND COMMISSIONS RECEIVED

It is the interest and commission charged on facility accounts such as loans and overdraft. It also includes commission on turnover, discounted bill, letters of credit, Bonds, Guarantees, indemnities and other services.

(ix) TOTAL MONTHLY DEBIT ENTRIES

This refers to the total sum of all withdrawals in the customers account from the beginning of the month to the end of the month.

2.2 CONTINUOUS STATISTICAL REPORT AND CREDIT BOOKING

Lending is the backbone of banking activities in that lending contributes the larger part to a bank's profits. Associated with the larger contribution to

profit is a proportionate contribution the degree of risk which a Bank takes generally on lending using various parameters or tools.

For a better appreciation of the degree of risk or lending, there is need to state the nature and ownership of the "objects" which a Bank lends as well as the nature of relationship which exist between a Bank and the depositors on one hand and between borrowers and the Bank on the other.

A bank lends money which is a medium of exchange. This money belongs to its depositors. A bank also lends signatures which of course are not the signatures of the bank officials but those of the depositors since every signature so lent is backed with the depositors money.

The bank and the depositors operate completely under different sets of rules from those which exist between itself and the depositors. Since every deposit is payable on demands the effect of own – payment on every legitimate demand for such payment results in total demand by all depositors.

On the other hand, the support given by law to the bank in the recovery of any amount from a borrower is, almost always, conditional with no support at all coming from the public. Essentially, it becomes public business if a depositor cannot get his money on demand but the bank's business when the bank demands from the borrower.

Unlike the depositor who is certain of getting his money back on demand, and or when due, if the bank does not distress, a lending banker is faced with three basic problems as:

(a) delay in re-imbursement

(b) Non- reimbursement

(c) Refinancing the loss

Because of these associated problem, the appraisal of credit request which result in credit booking will largely result from the conversation between the lending officer and the customer on one hand, and the collection of data via customer's account to prepare the statistical report and other essential data on the other hand. It is imperative that the lending officer raise all the appropriate questions and receive the relevant financial information before any facility is granted.

As a matter of fact, the following are taken into consideration along with the report (Continuous Statistical Return) before booking any credit:

(A) History of the account – Character of the account holder, undisputed records and integrity. This is based on the conduct of the account over a duration of least six months.

(B) Overdrawing without previous Arrangement. A good account should not be conducted in this manner and where it does, it reflects bad planning on the part of the account holder in terms of;

(i)   Replenishing inventory from illegal source either by temporary credit movement on the account, or likelihood of getting into trouble with the government.

(ii)   Creditors not being paid until threatened.

(iii)   Cash need for non-business actives.

(iv)   Substitution of bank funds for bad credits granted.

(v)   Inventories which cannot be sold.

(C)   Incidence of unpaid items – where cheques are issued arbitrarily to suppliers to get respite from threats even though there is adequate fund to back it up.

(D)   Lodgment to meet customer's cheques. The source of cash for this sort of lodgment cannot be ascertained but could be, borrowed cash or sales at any price if only to meet the value of the cheques issued.

(E)   Irregular Turnover – This will be considered in line with activities of the customer. Irregular turnover is a bad business for trading account but many be acceptable to an extent for a farmer, or contractor whose proceeds are seasonal.

There are factors that may be used jointly with the above considerations in taking a good credit or lending decision but are outside the scope of this project.

2.3   CREDIT ADMINISTRATION AND CONTROL

Credit administration is concerned with the implementation of credit decision as authorised by the deciding authority. This involves advising and monitoring of all aspects of credit on a day to day basis to ensure it is fully repaid.

Credit control involves a posteriori monitoring of facilities to ensure that each credit is and remains satisfactory. Control in Afribank is usually exercised at the Branch, Regional and Head Office levels while administration is strictly that of the branch.

The following are the credit administration procedures in Afribank:
(i)   Documentation
(ii)   Advising facilities
(iii)   Credit files
(iv)   Follow-up on facilities
(v)   Danger signs
(vi)   Securities
(vii)   Control/Monitoring

Documentation of records is the first or starting point for each borrowing and lending relationship. This starts with the customer's application. A register is usually maintained for the applications showing data received, customer's name, Type of facility, Amount applied for, Deciding authority.

Advising facilities is the communication of the approval of credit line or facility to customers seeking facilities by the bank in writing. This is

referred to as letter of offer. The customer then sign a copy of the offer letter signifying his acceptance or rejection of the offer. This offer letter spelt out the terms of the offer – Amount approved, purpose, expiry date, security, interest rate, commission on Turnover rate, and any special conditions attached.

Credit file must be opened for each approved facility. These files are maintained with copies of all correspondence with the customers kept in them.

The purpose of follow-up is to ensure that all that is required to be done by the customer as a condition for the credit facility is done and that repayment is made as scheduled. It is also to identify problems before they are too late.

The danger signs are used to identify problem accounts and taking the necessary steps to either recall the facility or refinance it. Such signs include frequent and regular request for over draft, pressing for payment against uncleared effects, window dressing, cross firing cheques, over trading and sticky or hard-core.

Security register is maintained for administrative purposes which should contain particulars of all securities held. Individual security file is also to be maintained for all credit customer. These files should be kept in fire proof cabinet or safe.

For credit facilities to ensure that the credit is and remains satisfactory in terms of quality and administration. The purpose is to ensure:

- Compliance with stipulated conditions
- Facility utilised for purposes for which granted
- That any deterioration or negative trend in customers business are quickly noted.

Control can be done at the branch level through the use of customers financials – Audited or management accounts, statement of affairs; operation of the account, securities and records.

Control at the Regional Office level and the Head Office level is vide engagement returns, Doubtful Debtors reports, quarterly credit review and other returns.

2.4   CONTINOUS STATISTICAL REPORT AND OTHER REPORTS

For the avoidance of doubt, credit booking in credit administration is done basically with the use of statistical report and other forms of reports. In Afribank Nigeria Plc; these other reports used jointly with the continuous statistical report are the spread sheet which condensed and analysed the financial statements of credit customers the yield calculation report, and credit report forms 4 – 7 which provides information as to customers indebtedness to other banks, bonds, contract position and the security report forms. These are used jointly with statistical report before brooking any credit.

2.5   THE REPORT

The continuous statistical report in use presently, is been calculated manually and with provision for limited information.

However, this project work intends to improve on this by designing a program or application package that will generate the report automatically at the end of the month. The project will also be such that will provide additional information, which were hither to not available. These may include the interest and commission charges monthly and cumulatively. The commission on Turnover, Total earnings, Average monthly debit entries and credit entries, overdraft Turnover in days which are presently been calculated manually.

CHAPTER THREE

SYSTEM ANALYSIS AND DESIGN

3.0. INTRODUCTION.

For any organisation to be efficient and effective, it must support efficient information system that is geared towards a spontaneous response to significant events within its environment. It must also be sercured against environmental hazards as well as been able to adapt promptly to changing environments.

In view of this system analysis and design which anchore changes and development in information technology is therefore the study and interpretation of findings of studies carried out. That is, study of existing system in order to identify the problems. It could also be to improve on the existing system.

Efforts were geared towards the designing of a system that will automatically generate the relevant data derived from the continuous statistical reports which were calculated manually.

3.1   PROBLEM IDENTIFICATION

No matter what kind of system is being studied, there will always be one problem or the other. That is, no system can claim perfection. Afribank

Nigeria Plc as one of the big four first generation banks has the duty of mobilising funds from the area of surplus to the needy sector of the economy. This financial intermediation brings us to the issue of lending.

In lending activities, the continuous statistical report which forms one of the vital factors for a banking facility consideration was designed to assist in taking prompt credit decisions. There are however, impediments faced by the bank in carrying out this notable service. These constraints or problems includes:

(a)   Difficulties associated with the manual preparation of the report – prone to errors.

(b)   The report cannot be prepared except at month ends.

(c)   The report is not an end on its own.

(d)   Its preparation, understanding, reading and interpretation requires skills.

(e)   Sometimes, the report may be misleading.

3.2   FEASIBILITY STUDY

To design a new system different from the existing one requires that the developer of the system must first of all carry out a reasonable study and analysis of the proposed system, that is, feasibility study. This study therefore, is paramount to this project work.

Feasibility study usually critically focuses at the existing system or the one currently in use. It highlights problems bedeviling the system and design an alternative approach for the system. The approach for achieving this is to obtain or gatter data, studying the data and interpreting them in order to have a sound understanding of the system.

Solutions to the associated problems are then evolved in doing this, other possibilities are considered by outlining and compiling them with the cost – benefit analysis of the option as well as making recommendations.

3.3 PROJECT FEASIBILITY

In carrying out this project work the existing manually operated system of generating continuous statistical report was analysed using:

(a) Operational Feasibility
(b) Technical Feasibility
(c) Economic Feasibility

A. OPERATIONAL FEASIBILITY

The operational feasibility study carried out indicates that the existing system approach is not in line with the modern day banking. Its preparation

is tidious and susceptible to human errors. The present or proposed system will however be a reflection of modern banking as this operation will be automated. This will make the job faster, effective, and cases of human error reduced.

B.   TECHNICAL FEASIBILITY

For the system to succeed, the personnel may have to be re-trained and re-oriented and should be handled by well experienced and skilled personnel. The present equipment may still be used for the new approach except that the application package will need to be modified to suit the present needs and requirement. These is therefore on the basis of the above, technical competence interns of manpower and equipment to effect successful Implementation of the proposed system.

C.   ECONOMIC FEASIBILITY

The economic feasibility of the system is a function of the Cost – Benefit Analysis or ratio of the project. That is, the associated benefits and costs. The resources required or that is needed to be put in place and the expected benefits to be derived after the investments of resources. The introduction of the new system will only require the modification of the application package whose cost will be minimally low. The cost expected to be associated with it will only be that of the computer co-ordinators travelling to various branches to implement the modification. The Regional Computer coordinators will perform that at a very minimal costs. That is, mileage claim and Hotel accommodation expenses.

3.4   OBJECTIVES GUIDING THE INVESTIGATION

The starting point of any system's life – cycle in system analysis is usually, the problem is identified, an analysis of the problem can then be carried out.

Hence, the objectives guiding the investigation are:

(1)   Accuracy of the system

(2)   Automatic output of the result by the system

(3)   Elimination of manual work

(4)   Reduction of paper work

These objectives were used as a guide in the investigation and were reflected in the design of the new system from the implementation plan to the conversion stage.

3.5   THE PROPOSED SYSTEM

The proposed system of generating the continuous statistical report is fully automated. This is very much unlike the existing system that is done manually. The proposed system will therefore, eliminate time wasting, it is reliable and accurate in its output. It is a user friendly system that will generate the report at any point in time that the report is required.

3.6 REQUIREMENT SPECIFICATION

Since the preparation of the report is an integral part of the customer's statement of accounts, it does not require a new hardware. However, the existing software can be modified or a new software introduced.

If the latter option is to be accepted, a new software will have to be introduced into the internal structure of the computer.

There will be no work stations since the report is highly professionalised to credit or loans and advances department.

3.7 COST AND BENEFIT ANALYSIS

The proposed system is not entirely new and will therefore minimise cost elements. This is because new equipment will not be acquired, except for one personal computer. All other costs are fixed cost that will still have to be incurred whether the new system is introduced or not.

The following are the relevant cost for the proposed system.

I. DEVELOPMENT COST
This is further classified into four viz:

(a)   System analysis and design

The project work was done along with two friends who were paid a token of five thousand Naira only (N=5,000.00)

(b)   Software development and implementation.

It took the researcher and two other Corp members about four weeks to develop the programme for a cost of about N=10,000.00 (Ten thousand Naira only).

(c)   Equipment Purchase.

No new equipment is required except one personal computer, a printer and uninterrupted power supply (UPS) that is estimated for about N=125,000.00 (One hundred and twenty five thousand Naira only).

(d)   Personnel Training

The credit officer and his assistant will have to be trained for one week in – house at a moderate fee of about N=10,000.00 (Ten thousand Naira only).

II.   OPERATING COST

The system operating cost such as equipment maintenance and utilities – Diesel and electricity are fixed cost that are not directly associated with the system.

They are not incurred because of the newly introduced approach, the cost is not in any way incremental.

The incremental cost of operating the new system on a one – off basis includes:

-	Software development and implementation	N=15,000.00
-	Acquisition of equipment	N=125,000.00
-	Personnel Training	N=10,000.00
	Total cost of the system -	**N=150,000.00**

III. SYSTEM BENEFITS

The associated benefits of the proposed system are:

- Savings from employing new staffers or programmers.
- Savings from engaging the services of old staffers whose salaries are fixed costs.
- Less paper work and prompt output of accurate report.
- Reduction in stationery expenses.
- Drastic reduction in overtime payment.
- Permits future expansion of the branch.

Other benefits may not be quantifiable but the change will impact positively on the overall performance of credit appraisal.

3.8 INPUT SPECIFICATION

The input data are derived from each customer's statement of accounts produced either daily, weekly or monthly depending on the used. Usually, the report is produced using the monthly generated customer's statement as input data.

3.9 OUTPUT SPECIFICATION

This is the expected outcome of the new system.

The output could be by viewing on the screen or on a hard copy vide a printer. Such output includes:

i)   Customer's monthly statement of accounts.

ii)   Continuous statistical report.

iii)   Associated reports.

CHAPTER FOUR

SYSTEMS DEVELOPMENT AND IMPLEMENTATION

4.0. INTRODUCTION.

Software is a term used to describe all written programs used in a particular computer installation. It is a program procedure or rules and any associated documentation pertaining to the operation of a computer system.

Software development entails series of activities or processes that should be carried out in the cause of developing a new system. The software development begins with the laid down structure in general design and detailed design of the automated system.

The design determines the appropriate language for implementing the system.

However, since system life-cycle is all about system development, the software development is a bye-product of the system development.

When a system is on ground the dummy that automate it is the software. The stages for their development are therefore, interwoven.

4.1 CHOICE OF LANGUAGE

Computer language assist the programmer to interact with the computer. It is a means of communication between the computer and the computer

programmer(s) that need the language to instruct the computer on how certain task or job should be done.

The choices of language depends on the following:

(i)   Type of task or job

(ii)   The application of the task or job

(iii)   The volume of data element

(iv)   Complement of the task or job, and

(v)   The structure of the files and records.

This automation is done using the CLIPPER as the language of choice. It is more or less the same with the Database Management system. There are few differences in the structure and application of the languages. The choice of Clipper is based on its high speed filling system and the fact that its one of the current languages in vogue. Its operation is also similar to that of database in that it is capable of maintaining and creating the database to extract information from it. It is simple to understand by its users and ideal software for management information system (MIS).

4.2   SOFTWARE DEVELOPMENT AND TESTING

In developing this program/software for continuous statistical report, the following essential stages were adopted:

(i)   UNDERTANDING THE PROBLEM: The programmer needs to know what exactly the program is to do and work from a program specification.

These specification include:

(a)   The generation of customers monthly statements.
(b)   The statistical report.
(c)   The summary of the report.

Generally, program specification defines the inputs, processing and output. A good system specification will specify what is needed by giving exact relationship between output and input from which they are derived.

(ii)   SOLUTION METHODS: The method of solution is prepared using a structure chart. When the programs are separated into different parts called procedure and modules as in the appendix 1. Each procedure is tested separately and linked together as a whole by a process called integration.

(iii) CODING OF THE PROGRAM: The is the last step of stepwise refinement. The instruction design in a flow chart are converted to a programming language called Clipper.

(iv)   PROGRAM TESTING: After the programm was written, it was subject to various tests that have been written out and transcribed correctly.

The tests reveal errors which are immediately corrected. Such as unit testing, integration and system testing.

4.3   SYSTEM TESTING.

This testing ensure that the individual programs have been written correctly and that the system as a whole will work with the link between the programs in a suit. There should be coordination with clerical procedure involved. To this end the system must provide as a matter of necessity, list of data as follows:

i)   PROGRAM TESTING

To ensure that all possible contingencies specified in the system specification have been catered for, Test data was supplied by the programmer and the expected result worked out for comparison.

ii)   TESTING PROCEDURE

This ensures the compatibility of the whole system. Ensuring that they fit together as envisaged. That is, from the clerical procedure through input and output procedures.

4.4   CHANGE – OVER PROCEDURE

The process of executing the new system married with the old system is regarded as change over procedure. They include:

(1) Parallel

(2) Direct

(3) Pilot.

1. PARALLEL

This is the process of running the old and new system concurrently using the same input. The outputs compared and differences established and resolved. Once the new system proves satisfactory, the distribution of the old system output is discontinued.

2. DIRECT

The new system is immediately put into use and the old system discontinued. This method is usually, for research work because it is less expensive both financially and in manpower training. It is also more reliable and effective.

3. PILOT

This system recognises the changing over of part of the system at a time using either parallel or direct. It is a hybrid of the above methods.

For the purpose of this study, the direct method was adpoted for the reason stated earlier and because the changeover will not take place in a unit of the bank's branch which will not in any way affect the entire banking operation in case of any failure.

4.5   STARTING THE SYSTEM

The system is started by doing the following:

I.   Boot the computer

II.   At C- prompt, type CD\CSR and press enter key

III.   Type CLIPPER and press enter key

IV.   At the dot prompt, type Do CSR and press enter key

At this juncture, an introductory screen represented in Appendix I appears after which the system prompts the user for entering his password. On entering the password, the main menu appears on the screen as shown in appendix I.

4.6   DOCUMENTATION

The structure of the menu is such that options are displayed with each representing a specific operation provided in the system.

The system has five options in its main menu as represented by figure II in the appendix. These options are:

i.   Creation of Accounts

ii.   Transaction Section

iii.   Monthly closure

iv.   Report generation.

v.   Exit main program.

i.   CREATION OF ACCOUNTS

This is the first step in establishing a relationship with the customers. Once the customer approaches the bank requesting to operate an account with the bank, the bank request for certain criteria from the customer depending on the nature of account to be opened - savings, cheque and current accounts.

For the purpose of this project work, we shall assume that the two types of accounts on which facility can be granted are the cheque account - Personal currents and the current account – Business accounts.

The accounts opening officer completes the computer input form on the basis of information provided by the intended customer.

The form (input form or creation form) is signed and stamped by two officers and sent to the computer operator for creation.

ii.   TRANSACTION SECTION

This section handles the day to day operation – daily transaction on the account by the account holder (customer).

This may include cash lodgment, cheque lodgment, fund transfer, cash withdrawal, clearing chequs, request for drafts and fund transfer by the customer on the account. The computer captures the transaction as either Debit or Credit and obtain a balance on the account daily.

iii. MONTHLY CLOSURE

At the end of every month, the computer closes all the accounts of each customer after recording all the transactions for the month. The outstanding balance for the month on each account, whether debit or credit is obtained as end of the month balance.

iv. REPORT GENERATION

The report generation stage is where the computer output the result of the processing. This output is the hard copy generated and may include the customers statements, continuous statistical report and the summary. At the report generation level, there are three options to be chosen from as mentioned above.

iv. EXIT MAIN PROGRAM

This is where the program terminates. At the end of the processing of the inputed data an output is generated in report form, the system or program is the quitted as an end to the operation.

CHAPTER FIVE

SUMMARY AND CONCLUSION

5.0   DISCUSSION

The introduction of system analysis and design into this level of Afribank credit operation is entirely new. This is because, the preparation of the monthly continuous statistical report used in credit analysis, has hitherto being prepared manually.

Preparing the report manually is prone to a lot of computation errors, it waste time and delay prompt rendering of services to credit customers. However, with the introduction of the new system which will be generated automatically by the computer at the end of the month, along side customers statements, a lot of improvement in service delivery time to customers is expected.

This analysis and design has fully undergone a complete system life-cycle. It was thorough with the aim of identifying associated problems, the viability of the system and the cost and benefit analysis.

The constraint likely to be faced with the new system may be getting the approval of the appropriate authority to implement the system. Other constraints that could be frustrating are logistic and power failure.

5.1   LIMITATION

There are no research works without hindrance or limitation. Therefore, this project work is no exception. The limitations include that of time, logistic and financials. There is no adequate time for the researcher to carry out an in-depth analysis of the system and make comparison with other designs before making a choice.

Constant power failure and mobility of the research to travel to other branches in other locations to harmonies the operations of the branches in line with the new system is another hindrance.

Above all, the generation of the reports on their own are not an end, but a means to an end. This is because the report so generated will still need to be interpreted and analysed. A sound knowledge, expense and skill is therefore paramount.

5.2   CONCLUSION

The vogue nowadays is computerisation . Virtually, every facet of human endeavour is computerised. This interest is however, intensifed by the capability of computers to perform a given set of procedures with all the necessary accuracy.   It also has the capacity to accomplish any task with high speed.

5.3   RECOMMENDATION

Since Afribank Nigeria Plc has network of branches, its operation will be large scale and will therefore requires information for effective performance. In view of this exigencies, the introduction of a package that will eliminate or reduce inherent problems or difficulties associated with the manual operation hitherto in use is highly welcomed.

The new system has a lot of advantages associated with it. It is therefore my recommendation on the basis of the above research work, that Afribank Nigeria Plc should embraced the designed system for generating the continuous statistical report (CSR) in its operations. Particularly, in the preparation and analysis of credit applications for facilities from their customers, for improved service delivery – accuracy, quality output, efficiency and good standard. Hence, attainment of the bank's global vision and mission.

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```
*******************************************************
* program    : creat.prg                 *
* Description : This procedure creates  accounts  *
*******************************************************
set color to 'w/b'
set delim on
set delim to '[ ]'
clear
set escape on
set safety off
Use Gen_Acc
index on Account_no to Gen_acc
store "Y" to ans
Do while uppe(ans) = "Y"
   store space(13) to S_name
   store space(13) to F_name
   store space(25) to maddress
   store ctod(" / / ") to mdate_cre
   store space(10) to mbranch
   store space(9) to maccount
   store 0.00 to mamount
   store "N" to as
 do while uppe(as) = "N"
   date = date()
   set color to 'w/b'
   @2,31 say "Date: "+substr(CDOW(DATE),1,3)+" "+ltrim(str(DAY(DATE)))+ "
"+substr(CMONTH(DATE),1,3)+" "+ltrim(str(YEAR(DATE))) color 'g*'
   @4,26 clear to 6,60
   @4,26 to 6,60 doub
   @5,31 say "procedure open account "
   set color to 'n/w'
   @7,2 clear to 17,77
   @7,2 to 17,77 doub color 'r/w'
   @8,3 say "Customers's Surname: " get S_name pict "@!X" color 'rg/g+'
   @8,40 say "Customer's First Name:" get F_name pict "@!X" color 'rg/g+'
   @10,3 say "Customer's Address:" get maddress pict "@!X" color 'rg/g+'
   @10,40 say "Customer's Account Number" get maccount pict "99999999A" color
'rg/g+'
   @12,35 say "Branch : " get mbranch pict "@!X" color 'rg/g+'
   @15,30 say "Enter Amount :" get mamount color 'rg/g+'
```

```
read
save screen to tt
set color to 'w/b'
@18,30 clear to 18,48
@18,30 say "Data ok ? [Y/N/Q]" get as pict "!" valid as $ "YNQ"
   message "Enter Y to continue : N for correctio : Q to quit"
read
if as = "Q"
  cancel
endif
*@18,00 clear to 22,78
rest screen from tt
enddo
Seek maccount
If found()
@18,10 say "Account Number Already  Exist"
@20,20
wait + space(10) + "press any key to continue"
@18,00 clear to 24,78
loop
else
Append blank
Repl Surname with S_name
Repl First_name with F_name
Repl Address with maddress
Repl date_cre with mdate_cre
Repl Account_no with maccount
Repl branch with mbranch
clear
@10,20 SAY "MORE CUSTOMERS[Y/N] " GET ANS PICT "!"
read
rest screen from tt
clear
@10,20 SAY "THANKS FOR PATRONAGE"
endif
Enddo
@23,20
WAIT "              GOODBYE FOR NOW & GOD BLESS YOU"
close all
```

```
**********************************************************************
*
   This procedure handles daily transaction on Cheque/Logement         *
      database in use are: Daily_Fl.dbf and Gen_acc.dbf                 *
              Trans1.prg                                *
----------------------------------------------------------------*
et talk off
et safety off
et score off
et escape on
et color to 'w/b'
lear
@1,11 say " A F R I B A N K   N I G . P L C"
@3,19 say "M I N N A"
@5,00 say "LOGEMENT/ISSUE CHEQUES SECTION"
store space(8) to acc_n
clear
sele a
USE Gen_acc
index on account_no to Gen_acc
store "Y" to ans
Do while uppe(ans) = "Y"
   close all
   Use Gen_Acc index Gen_Acc new
   store "N" to as
   do while uppe(as) = "N"
   @10,20 say "Enter Account number  :" get acc_n pict "99999999"
   read
   if lastkey() =27
      exit
      return
   endii
   if acc_n = " "
      clear
      @11,20 say "Invalid entries"
      wait +space(20)+"Press any key to Continue..."
      clear
      loop
    endif
   Seek acc_n
```

```
If .not. found()
   clear
   @8,10 say "Account Number Does not  Exist"
   @10,20
   wait + space(10) + "press any key to continue..."
   @8,00 clear to 11,77
   loop
    else
   store surname to s_name
   store First_name to fname
 clear
 date = date()
 @00,1 to 9,77 double color 'gr+/b'
 @02.29 say "Date: "+substr(CDOW(DATE),1,3)+" "+ltrim(str(DAY(DATE)))+ "
"+substr(CMONTH(DATE),1,3)+" "+ltrim(str(YEAR(DATE))) color 'g*'
 @4,3 say "Customers's Surname:  " + surname
 @4,40 say "Customer's First Name  :" + First_name
 @6,3 say "Customer's Address:    "+ address
 @6,40 say "Account Number :   " + Account_no
 @8,3 say "Branch :   " +branch
 set color to 'r+/b'
 @8,40 say "Balance :" + str(Balance)
 set color to 'w/b'
 @10,20 say "Are you sure of this transaction ? [Y/N/Q]" get as pict "!" valid as $
"YNQ"
 read
 if as = "Q"
   clear
   cancel
 endif
 store space(1) to opt
 store 0 to mamount
 if as = "Y"
   set color to 'r/w'
   @10,01 clear to 14,77
   @9,01 to 14,77
   @10,02 say "press  D  for Logement/deposite"
   @11,6 say "   W  ISSUE/withdrawal"
   @10,34 say "OPTION : " get opt pict "!" valid opt $ "DW"
   read
```

```
if opt = "D"
  store space(8) to mchk1
  @10,00 clear to 10,67
  @11,2 say "Enter Value of Cheque to Lodge :  " get mamount
  @13,2 say "Enter Cheque Number" get mchk1
  read
  store Balance to Mbal
  store (Balance+mamount) to new_balan
  store "Logement" to mdescrip
  @9,00 clear to 11,77
  replace Balance with new_balan
  if new_balan <0
    repl Balan with "DR"
    else
    repl Balan with "CR"
  endif
  if Balance <0
    store interest to minter
    store ((25/100*(0-Balance))/360) to inter
    repl interest with (inter+minter)
  endif
  @10,2 say "Current Balance =:  " + str(Balance)
  @11,2 say "Transaction amount: " + str(mamount)
  read
  set color to 'w/b'
  USE DAILY_FL
  Append blank
  repl Acc_num with acc_n
    repl Tran_date with date()
    repl balance with new_balan
  repl Debit with mamount
  repl descrip with mdescrip
  repl Month with Uppe(substr(cmonth(date()),1,3))
  if new_balan <0
    repl Balan with "DR"
    else
    repl Balan with "CR"
  endif
endif
if opt = "W"
```

```
store space(8) to mchk2
@10,00 clear to 10,67
@11,2 say "Enter value of Cheque to Issue : " get mamount
@13,2 say "Enter Cheque Number " get mchk2
read
store balance to Mbal
store (Balance-mamount) to new_balan
@9,00 clear to 11,77
if new_balan < 0
   ? chr(7)+chr(7)
   @10,10 say "Warning !!!  This account is Debit with :  "+ str(new_balan)
   wait space(10) + "press any key to continue...."
   @10,01 clear to 14,77
 endif
replace Balance with new_balan
store "Cheque" to mdescrip
@10,2 say "Current Balance =:  " + str(Balance)
@11,2say "Transaction amount: " + str(mamount)
read
if Balance <0
   store interest to minter
   store ((25/100*(0-Balance))/360) to inter
   repl interest with (inter+minter)
endif
set color to 'w/b'
USE DAILY_FL
Append blank
repl Acc_num with acc_n
  repl Tran_date with date()
  repl balance with new_balan
repl Credit with mamount
repl Descrip with mdescrip
repl Month with cmonth(date())
if new_balan <0
   repl Balan with "DR"
   else
   repl Balan with "CR"
 endif
endif
endif
```

```
    @10,00 clear to 10,60
   endif
   clear
   enddo
    clear
    @10,20 SAY "MORE TRANSACTIONS [Y/N] " GET ANS PICT "!"
    read
    clear
    @10,20 SAY "THANKS FOR PATRONAGE"
Enddo
WAIT "            GOODBYE FOR NOW & GOD BLESS YOU"
close all
RETURN
```

```
*******************************
**Monthly closure procedure
*******************************
set talk off
set safety off
clear
store 0 to account,sum_draw,sum_dep,mvat,mcot,small1,large1,small2,large2
store space (3) to Nmonth
@10,20 say "Enter the Month to close :" get Nmonth pict "!!!"
read
if lastkey() =27
  return
endif
clear
close all
sele a
use gen_acc
sele b
use daily_fl
sele c
use summary
sele d
use tp1
sele a
go top
Do while .not. eof()
   store trim(Account_no) to Account
   store Balance to Re_Balan
   store Balan to mBalan
   store interest to inter
   sele d
   zap
   sele b
   go top
   Do while .not. eof()
   if Acc_num =Account .and. Month =Nmonth
      sum_draw =sum_draw+Debit
      sum_dep =sum_dep+credit
      store Balance to mbalance
      store Balan to mBalan
```

```
mover=(5/3)*30
sele c
append blank
repl Cot with Mcot
repl Vat with Mvat
if Large1 >0 .or. (0-Large1) >0
  repl HigD_LowC with Large1
  else
  repl HigD_LowC with Small1
endif
if small2 >0 .or. (0-small2) >0
  repl LowD_HigC with small2
  else
  repl LowD_HigC with Large2
endif
repl Tot_debit with sum_draw
repl Tot_credit with sum_dep
repl Over with mover
repl Account_no with Account
repl AvmDr_Cr with ((HigD_LowC+LowD_HigC)/2)
repl Balan_end with ltrim(str(Re_Balan)+mBalan)
repl Month with uppe(substr(Cmonth(date()),1,3))
repl interest with inter
sele a
skip
Enddo
```

```
****************************************************************
** This procedure will produce the continues statistical report**
****************************************************************
set talk off
close all
clear
store space(8) to macc
@10,20 say "Enter Customers' Account Num. :" get macc pict "99999999"
read
clear
sele b
use gen_acc
index on Account_No to Gen_acc
seek macc
if .not. found()
  clear
  @10,((80-28)/2) say "Account Number does not exit"
  wait +space(23)+"Press any key to continue...."
  clear
  return
  else
  store Surname to mSname
  store First_name to mFname
  store interest to minter
endif
use summary
tt ='cont.rpt'
set printer to &tt
set device to print
@2,50 say "C O N T I N U O U S   S T A T I S T I C A L   R E T U R N"
@3,50 say "        AFRIBANK NIG. PLC , Minna Branch"
@5,10 say "Account No :- " +Macc
@5,50 say "Year :-"+str(year(date()))
@7,10 say "Name :-  " +alltrim(mSname) +"  "+alltrim(mFname)
n =9
m =11
i =1
@n,02 say "MONTH"
@n,13 say "C O T"
@n,25 say "INTEREST"
```

```
@n,40 say "V A T"
@n,50 say "HIGHEST DEBIT"
@n,65 say "LOWEST DEBIT"
@n,85 say "AV. MONTHLY DEBIT"
@n,105 say "TOTAL M-DEBIT"
@n,125 say "TOTAL M-CREDIT"
@n,145 say "OVERDRAFT RTN"
@n,162 say "BALANCE END"
@n+1,02 say replicate("_",170)
Do while .Not. eof()
 if Account_no =macc
   @m,02 say MONTH
   @m,8 say COT
   @m,19 say minter
   @m,35 say VAT
   @m,50 say HIGD_LOWC
   @m,65 say LOWD_HIGC
   @m,85 say AVMdr_cr
   @m,105 say TOT_DEBIT
   @m,125 say TOT_CREDIT
   @m,140 say OVER
   @m,162 say Balan_end
   i = i +1
   m = m+ 1
   skip
   if m >= 30
    m =7
   endif
   else
   skip
 Endif
Enddo
@m+1,02 say replicate("_",170)
!edit cont.rpt
```

```
*********************************************
** This section will produce summary report
*********************************************
set talk off
close all
clear
store space(8) to macc
@10,20 say "Enter Customers' Account Num. :" get macc pict "99999999"
read
clear
sele b
use gen_acc
index on Account_No to Gen_acc
seek macc
if .not. found()
  clear
  @10,((80-28)/2) say "Account Number does not exit"
  wait +space(23)+"Press any key to continue...."
  clear
  return
 else
  store Surname to mSname
  store First_name to mFname
endif
use summary
@2,18 say "AFRIBANK NIG. PLC"
@3,18 say "  Minna Branch"
@5,5 say "Account No :- " +Macc
@5,30 say "Year :-"+str(year(date()))
@7,5 say "Name :-  " +alltrim(mSname) +"  "+alltrim(mFname)
@8,5 say replicate("-",40)
i =0
store 0 to Ttal_cot, Ttal_debit, Ttal_credit, Ttal_inter
do while .not. eof()
 if Account_no =macc
   Ttal_debit =Ttal_debit +Tot_debit
   Ttal_credit =Ttal_credit +Tot_credit
   Ttal_cot =Ttal_cot+Cot
   Ttal_inter =Ttal_inter+interest
   i = i+1
```

```
    skip
    else
    skip
  endif
 Enddo
 @10,5 say "Total Monthly Debit Movement   ="+str(Ttal_debit)
 @12,5 say "Total Monthly Credit Movement ="+str(Ttal_credit)
 @14,5 say "Average Total Debit Movement  ="+str(Ttal_debit/i)
 @16,5 say "Average Total Credit Movement ="+str(Ttal_credit/i)
 @18,5 say "Total Cot                     ="+str(Ttal_cot)
 @20,5 say "Total Interest                ="+str(Ttal_inter)
 @22,5 say "Gross Earnings                ="+str(Ttal_cot+Ttal_inter)
 @21,5 say replicate ("-",40)


 ********************************************************
 **  This procedure will produce customer's statement
 ********************************************************
 set talk off
 close all
 clear
 store space(8) to macc
 @10,20 say "Enter Customers' Account Num. :" get macc pict "99999999"
 read
 clear
 sele b
 use gen_acc
 index on Account_No to Gen_acc
 seek macc
 if .not. found()
  clear
  @10,((80-28)/2) say "Account Number does not exit"
  wait +space(23)+"Press any key to continue...."
  clear
  return
  else
  store Surname to mSname
  store First_name to mFname
 endif
 use daily_fl
 @2,25 say "AFRIBANK NIG. PLC"
```

```
@3,25 say "  Minna Branch"
@5,5 say "Account No :- " +Macc
@5,35 say "Year :-"+str(year(date()))
@7,5 say "Name :-  " +alltrim(mSname) +"  "+alltrim(mFname)
n =9
m =11
i =1
@n,2 say "S/No"
@n,7 say "Trans. Date"
@n,23 say "Description"
@n,40 say "Debit"
@n,54 say "Credit"
@n,67 say "Balance"
@n+1,02 say replicate("_",74)
Do while .Not. eof()
 if Acc_num =macc
   @m,2 say i pict "999"
   @m,7 say  Tran_date
   @m,23 say descrip
   @m,36 say Debit
   @m,50 say Credit
   if balance < 0
     store (0-Balance) to new_bal
     @m,60 say str(new_Bal)+balan
     else
     @m,60 say str(Balance)+balan
   endif
   i = i +1
   m = m+ 1
   skip
   if m >= 30
     m =7
   endif
   else
   skip
 Endif
Enddo
```

```
**************************************
* Main menu that starts the program
**************************************
set talk off
clear
Bchioce =0
do while .t.
  set color to 'gr/w'
  @10,26 clear to 16,48
  @10,26 to 16,48
  @11,27 prompt "Creation of Accounts"
  @12,27 prompt "Transaction section"
  @13,27 prompt "Monthly Closure"
  @14,27 prompt "Report Generation"
  @15,27 prompt "Exit main program"
  save screen to mk
  menu to Bchoice
  do case
   case Bchoice ==1
     do creat
   case Bchoice ==2
     do trans1
   case Bchoice ==3
     do M_close
   case Bchoice ==4
     do reports
   case Bchoice ==5
    set color to 'w/b'
    clear
    return
  Endcase
exit
Enddo

procedure reports
rept =0
do while .t.
  set color to 'gr/w'
  @14,48 clear to 19,68
  @14,48 to 19,68
```

```
@15,49 prompt "Customer statement"
@16,49 prompt "Continues statement"
@17,49 prompt "Customer Summary"
@18,49 prompt "Exit main program"
save screen to mmk
menu to rept
do case
 case rept ==1
   do cus_rept
 case rept ==2
   do summ
 case rept ==3
 *  do T_summ
 case rept ==4
  set color to 'w/b'
  clear
  rest screen from mk
  return
 Endcase
exit
Enddo
```

```
        store Acc_num to mAcc_num
        sele d
        append blank
        repl Balance with mBalance
        repl Balan with mBalan
        repl Acc_num with mAcc_num
        sele b
        skip
        else
        skip
      endif
    enddo
   Mcot =(sum_draw/1000)*8
   Mvat =(5/100)*Mcot
   sele d
******Calculate Lowest Credit1 *******
************************************
*   procedure credit1
   go top
   locate for Balan ="CR"
   store Balance to small1
   DO WHILE .NOT. eof()
    if Balan = "CR"
    if Balance < small1
       small1 = Balance
     endif
     skip
     else
     skip
    endif
    Enddo


******Calculate Highest Debit1********
*************************************
*procedure debit1
   go top
   locate for Balan ="DR"
   store Balance to Large1
   DO WHILE .NOT. eof()
    if Balan = "DR"
```

```
     if Balance > Large1
        Large1 = Balance
      endif
      skip
      else
      skip
    endif
    Enddo
******Calculate Hghest Credit1 ******
**************************************
 *  procedure credit1
   go top
   locate for Balan ="CR"
   store Balance to large2
   DO WHILE .NOT. eof()
    if Balan = "CR"
    if Balance > large2
       Large2 = Balance
     endif
     skip
     else
     skip
    endif
    Enddo
******Calculate Lowest Debit1********
**************************************
*procedure debit1
   go top
   locate for Balan ="DR"
   store Balance to small2
   DO WHILE .NOT. eof()
    if Balan = "DR"
    if Balance < small2
       small2 = Balance
     endif
     skip
     else
     skip
    endif
    Enddo
```

AFRIBANK NIG. PLC
Minna Branch   -   Customer's Statement of Account

Account No :- 34000001   Year :- 1999

Name :-   ABRAHAMS MICHAEL

S/No	Trans. Date	Description	Debit	Credit	Balance
1	01/12/99	Logement	77890.00	0.00	152445.00CR
2	01/12/99	Cheque	0.00	67000.00	85445.00CR
3	01/12/99	Cheque	0.00	80000.00	5445.00CR
4	01/12/99	Cheque	0.00	70000.00	64555.00DR
5	01/12/99	Logement	90000.00	0.00	25445.00CR
6	02/01/99	Logement	6000.00	0.00	31445.00CR
7	02/01/99	Logement	1000.00	0.00	32445.00CR
8	02/01/99	Cheque	0.00	8000.00	24445.00CR
9	03/06/99	Logement	67000.00	0.00	91445.00CR
10	03/06/99	Logement	12000.00	0.00	103445.00CR
11	03/06/99	Cheque	0.00	32000.00	71445.00CR
12	04/10/99	Cheque	0.00	100000.00	28555.00DR
13	04/10/99	Logement	104000.00	0.00	75445.00CR
14	05/03/99	Logement	30000.00	0.00	105445.00CR
15	05/03/99	Cheque	0.00	32000.00	73445.00CR
16	06/01/99	Cheque	0.00	90000.00	16555.00DR
17	06/01/99	Logement	45000.00	0.00	28445.00CR
18	07/01/99	Logement	20000.00	0.00	48445.00CR
19	07/01/99	Logement	12000.00	0.00	60445.00CR
20	08/02/99	Logement	34000.00	0.00	94445.00CR
21	08/02/99	Logement	67000.00	0.00	161445.00CR
22	08/02/99	Cheque	0.00	90067.00	71378.00CR
23	09/08/99	Logement	45000.00	0.00	116378.00CR
24	09/08/99	Cheque	0.00	34000.00	82378.00CR
25	10/05/99	Logement	30000.00	0.00	112378.00CR
26	10/05/99	Logement	45000.00	0.00	157378.00CR
27	01/12/99	Cheque	0.00	56000.00	101378.00CR
28	02/14/99	Cheque	0.00	23000.00	78378.00CR
29	03/13/99	Logement	12000.00	0.00	90378.00CR
30	04/02/99	Logement	30000.00	0.00	120378.00CR
31	05/06/99	Cheque	0.00	1000.00	119378.00CR
32	06/02/99	Cheque	0.00	87008.00	32370.00CR
33	07/19/99	Logement	120000.00	0.00	152370.00CR
34	08/10/99	Cheque	0.00	98098.00	54272.00CR
35	09/12/99	Logement	120000.00	0.00	174272.00CR
36	10/10/99	Logement	1000.00	0.00	175272.00CR

AFRIBANK NIG. PLC
Minna Branch   –   Customer's Statement of Account

Account No :- 34000002   Year :- 1999

Name :-   AUDU   KOLO

S/No	Trans. Date	Description	Debit	Credit	Balance
1	01/12/99	Logement	7544.00	0.00	178877.00CR
2	01/12/99	Logement	12900.00	0.00	191777.00CR
3	01/12/99	Cheque	0.00	10000.00	181777.00CR
4	01/12/99	Cheque	0.00	45000.00	136777.00CR
5	02/01/99	Cheque	0.00	19000.00	117777.00CR
6	02/01/99	Cheque	0.00	13000.00	104777.00CR
7	03/06/99	Cheque	0.00	15000.00	89777.00CR
8	03/06/99	Cheque	0.00	23000.00	66777.00CR
9	04/10/99	Logement	2000.00	0.00	68777.00CR
10	05/03/99	Cheque	0.00	4000.00	64777.00CR
11	06/01/99	Cheque	0.00	56000.00	8777.00CR
12	07/01/99	Logement	45000.00	0.00	53777.00CR
13	07/01/99	Logement	12000.00	0.00	65777.00CR
14	08/02/99	Logement	56000.00	0.00	121777.00CR
15	09/08/99	Cheque	0.00	100000.00	21777.00CR
16	09/08/99	Logement	56000.00	0.00	77777.00CR
17	10/05/99	Logement	80000.00	0.00	157777.00CR
18	10/05/99	Cheque	0.00	23000.00	134777.00CR
19	01/12/99	Cheque	0.00	100000.00	34777.00CR
20	02/14/99	Logement	45000.00	0.00	79777.00CR
21	03/13/99	Logement	50000.00	0.00	129777.00CR
22	03/13/99	Cheque	0.00	12000.00	117777.00CR
23	04/02/99	Cheque	0.00	90078.00	27699.00CR
24	05/06/99	Logement	89008.00	0.00	116707.00CR
25	06/02/99	Cheque	0.00	34509.00	82198.00CR
26	07/19/99	Logement	34000.00	0.00	116198.00CR
27	08/10/99	Cheque	0.00	100000.00	16198.00CR
28	09/12/99	Logement	134000.00	0.00	150198.00CR
29	10/10/99	Logement	1000.00	0.00	151198.00CR

ACCOUNT SUMMARY

AFRIBANK NIG. PLC
Minna Branch

Account No :- 34000001   Year :- 1999

Name :- ABRAHAMS   MICHAEL

Total Monthly Debit Movement	=	968890.00
Total Monthly Credit Movement	=	868173.00
Average Total Debit Movement	=	96889.00
Average Total Credit Movement	=	86817.30
Total Cot	=	7751.12
Total Interest	=	761.60
Gross Earnings	=	8512.72

ACCOUNT SUMMARY

AFRIBANK NIG. PLC
Minna Branch

Account No :- 34000002   Year :- 1999

Name :- AUDU   KOLO

Total Monthly Debit Movement	=	624452.00
Total Monthly Credit Movement	=	644587.00
Average Total Debit Movement	=	62445.20
Average Total Credit Movement	=	64458.70
Total Cot	=	4995.61
Total Interest	=	0.00
Gross Earnings	=	4995.61

CONTINUOUS STATISTICAL RETURN

AFRIBANK NIG. PLC , Minna Branch

Account No :- 34000002   Year :- 1999

Name :-   AUDU   KOLO

MONTH	C O T	INTEREST	V A T	HIGHEST DEBIT or LOWEST DEBIT	LOWEST DEBIT or HIGHEST CREDIT	AV. MON. DEBIT	TOT. M-DEBIT	TOT. M-CREDIT	OVER. RTN
JAN	163.55	0.00	8.18	34777.00CR	191777.00CR	113277.00	20444.00	155000.00	50.00
FEB	360.00	0.00	18.00	79777.00CR	117777.00CR	98777.00	45000.00	32000.00	50.00
MAR	400.00	0.00	20.00	66777.00CR	129777.00CR	98277.00	50000.00	50000.00	50.00
APR	16.00	0.00	0.80	27699.00CR	68777.00CR	48238.00	2000.00	90078.00	50.00
MAY	712.06	0.00	35.60	64777.00CR	116707.00CR	90742.00	89008.00	4000.00	50.00
JUN	0.00	0.00	0.00	8777.00CR	82198.00CR	45487.50	0.00	90509.00	50.00
JUL	728.00	0.00	36.40	53777.00CR	116198.00CR	84987.50	91000.00	0.00	50.00
AUG	448.00	0.00	22.40	16198.00CR	121777.00CR	68987.50	56000.00	100000.00	50.00
SEP	1520.00	0.00	76.00	21777.00CR	150198.00CR	85987.50	190000.00	100000.00	50.00
OCT	648.00	0.00	32.40	134777.00CR	157777.00CR	146277.00	81000.00	23000.00	50.00

No :- 34000001   Year :- 1999

ABRAHAMS   MICHAEL

T	INTEREST	V A T	HIGHEST DEBIT or LOWEST DEBIT	LOWEST DEBIT or HIGHEST CREDIT	AV. MON. DEBIT	TOT. M-DEBIT	TOT. M-CREDIT	OVER. RTN	BALAN_END
12	76.16	67.16	-64555.00DR	-64555.00DR	-64555.00	167890.00	273000.00	50.00	101378.00CR
00	76.16	2.80	24445.00CR	78378.00CR	51411.50	7000.00	31000.00	50.00	78378.00CR
00	76.16	36.40	71445.00CR	103445.00CR	87445.00	91000.00	32000.00	50.00	90378.00CR
00	76.16	53.60	-28555.00DR	-28555.00DR	-28555.00	134000.00	100000.00	50.00	120378.00CR
00	76.16	12.00	73445.00CR	119378.00CR	96411.50	30000.00	33000.00	50.00	119378.00CR
00	76.16	18.00	-16555.00DR	-16555.00DR	-16555.00	45000.00	177008.00	50.00	32370.00CR
00	76.16	60.80	48445.00CR	152370.00CR	100407.50	152000.00	0.00	50.00	152370.00CR
00	76.16	40.40	54272.00CR	161445.00CR	107858.50	101000.00	188165.00	50.00	54272.00CR
00	76.16	66.00	82378.00CR	174272.00CR	128325.00	165000.00	34000.00	50.00	174272.00CR
00	76.16	30.40	112378.00CR	175272.00CR	143825.00	76000.00	0.00	50.00	175272.00CR