COMPUTERIZATION OF INTERCITY BANK Plc LOAN MANAGEMENT WITH REFERENCE TO OPERATIONS DEPARTMENT

BY

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(PGD/MCS/149/96)

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CERTIFICATION

I cerfify that this work was done by Oguntuga Muyiwa Obafemi of the department of Mathematics/Statistics and Computer Science, Federal University of Technology, Minna, Niger State.

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DEDICATION

This project is dedicated to Almighty God, my loving wife Mrs. DUPE OGUNTUGA and my son JOSHUA OGUNTUGA who have made this became a reality.

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CHAPTER ONE

INTRODUCTION

The Intercity bank PLC is a commercial bank wholly controlled by the central bank of Nigeria who is the banker of all banks. It is specifically set up to deliver banking operation and also to grant credit facility to various sector of the economy.

This commercial bank (ICB) commenced operation in 1987 and serves the Nation through a two tier structure with the Head office in Minna; under the head office, there are two (2) area offices, one in Minna and another one in Lagos. There are centres located in state capitals of the country.
The objectives of establishing the Intercity bank PLC includes:

a) Improving the income and quality of life of the Nigerian citizens;
b) For the development of mutually beneficial, longterm business relationships;

c) To market for and obtain credit businesses that are consistent with financial institution;

d) To manage credit risk so that the bank's portfolio if measured can be classified as one of the best in the industry.

ICB OPERATION SCHEMES

In order to solve or break this cycle of problem, the bank adopted some operational scheme so as to achieve its set objectives.

These operational schemes include:

a) ON LENDING:- Under this scheme, lending is normally made to established institutions for on-lending to small scale farmers. This includes state governments, co-operative organizations, agricultural projects etc.

b) Direct Lending:- Under this scheme, the bank deals directly with individuals/organisations, without going through an on-lending intermediary.

c) Marketing Loans:- In order to reduce the problems posed to peasant farmers by poor transportation and in-adequate marketing facilities, this scheme was introduced to enable beneficiaries purchase excess crops during harvesting seasons and it serves as incentives to farmers to produce more.

d) Corporate Term Loan:- Under this scheme, it assist in financing of base level of working capital expenditures or acquisition of going concerns; it serves longer than one year for repayment.

e) Corporate Advance Facility:- Under this scheme, it assist in financing a specific short-term self liquidating transaction usually for a maximum maturity days of six months.

f) Small Holder Direct Loan Schemes:- This scheme is designed to directly reach small scale farmers. The necessary requirements for granting of direct Loan like certificate of occupancy of project land etc are waived for borrowers under this scheme. It is only required of the applicant to be the rightful owner of the land and must at least produce two guarantors to guarantee the loan.

g) Real Estate Financing:- Under this scheme, the bank undertake real estate financing on selective basis by providing funds for the acquisition/construction of real estate for either residential or commercial purposes.

CONDITIONS FOR BORROWING

The Intercity bank Plc having designed its operational scheme to deliver its services to the various sector of the economy has set conditions guiding the successful implementation of this scheme.

This conditions include:

a) Status of Applicants:

i) The applicant or management of the proposed project must be able to satisfy the bank of his or her ability to manage the project in a sound, competent and efficient manner over a minimum period as slated out in the loan agreement.

ii) The main objective of the applicant should centre majorly on processing and marketing. There should also be sign of good character and reputation by the applicant.

b) Viability of Project:

i) It should be economically desirable.

ii) The income generated (expected) should be able to repay back the loan in full within the agreed terms.

iii) There should not be room for any conflict with local, state or federal government policy.

iv) It should be commercially viable and profit oriented.

c) Availabity of Land:

In as much as bank does not give loan for acquisition of land, any prospective applicant should have land of its own before applying for loan and the applicant will contribute at least 15% of the total project in cash and kind.

d) No Proxy:

The bank will not deal through an intermediary but directly with the intending client.

e) Borrowing Power and Ability to Repay Loans:

It is required that clients applying for loan should keep within the framework of their financial capacities so as not to encounter problem in their repayment period especially limited liability company and individual borrowers.

f) Security:

Adequate security are normally sought from applicants as collateral in case of any default for repayment.

Examples are:-

i) Government guarantees

ii) Stocks and bonds of reputable companies

iii) First legal mortgages of the project

iv) Real Property (if buildings)

v) Personal guarantee

vi) Insurance Policy.

INTEREST RATES

The ICB loans are given at different interest rates depending on the type of operational scheme. The following are in place:

a) On Lending Loans- Prime lending rate

b) Direct lending- PLR plus premium

c) Small Holder Loan - PLR(Prime Rate)

d) Real estate Financing- PLR + Premium mortgage fee, Appraisal and Arrangement fee and penalty for late repayment.

DISBURSEMENT

Disbursement under a facility should not occur until at a minimum, all completed documentation is lodged in acceptable form with the bank. And before any disbursement is done by any branch/area offices within their limit the legal department should be referred to proper review within one month.

LOAN REPAYMENT

This is normally an agreement between the parties involved i.e. the bank and the client. Though some grace period is given to allow the project generate some tangible income before repayment commences.

THE PROSPECTS OF INTERCITY BANK

It was observed that proper implementation of the schemes and the conditionalities has paved way for intercity bank to record some impressive achievements in its operation. Also, it has restored the last confidence agricultural sector as in banking industry, by lending to the farmers who operate under the small holder direct loan scheme.

As a result of the well packaged holder loan scheme being operated by various agricultural and co-operative banks in Nigeria, the Federal Government directed in 1986 that all Commercial banks should incorporate amongst their products, lending to small holder farmers and the directive got a legal backing by Decree No. 18 of 14th June, 1988.

It is also to be noted that after the government directives the Central bank of Nigeria who is the banker of all banks gave some sectorial allocation to loans/credit e.g. Agricultural sector was given 18% of the total credit which is the second best and also that a minimum of 20% of the loan portfolio should be alloted to small scale enterprises.

It was observed that a lot of problems are been encountered over the years like staffing and high cost of administration, which involves too much clerical work and time consuming thereby making disbursement of funds to take a longer time than necessary.

In order to overcome some of the above mentioned problems,

there is the need to introduce the modern technology which is the computer.

AIMS AND OBJECTIVES

In order to achieve the set goal, one have to critically examine the objectives and aims of the study. This include:-

a) The management should provide an easy to use process of updating customers record like computer based system.

b) Timely information should be provided for effective management, planning, and control.

c) The system of keeping and retrieving records as at when due should be encouraged.

d) There should be accountability and also ensure that accurate records or data are stored.

e) With the use of an electronic form to capture and store customers data, will reduce the workload of clerical staff.

f) The main objective is to minimize cost and maximize profit.

g) The understanding of hardware and software applications in management.

However, it is well known that to achieve these objectives a lot of work has to be done because improper record keeping is been observed before and this forms the basis of this study so that solutions could be sought for effective, timely, and accurate loan system.

CHAPTER TWO

WHAT IS A COMPUTER

A computer is referred to as an electronic machine used for processing information. The term computer can literally be used to mean any device used for calculation, modern technology has manipulated this machine to perform various functions apart from calculation, that is why it is also referred to as an electronic device which stores information on magnetic tape or disc, analyse it and produces information as required from the data.

The computer is therefore, made up of components and parts of which work together to provide the processing capabilities for which the computer is known. This components are classified into two, the Hardware and software.

2.1 TYPES OF COMPUTERS

Having defined what computer is, it is necessary to critically examine the types of computers and their importance. This are classified into three main headings by considering their size, use logic, and purpose.

2.1.1 Micro Computers/Personal

These are computers normally used in government parastatals, organisations and academic institutions. Due to the size of the computer which is small, they do not require any special environment or knowledge to use, they are used for specific task and have a software available at anytime. The memory

capacity of this computer is very small and slow in operation amongst others, that is why they are very easy to program.

2.1.2 Mini Computers

This type of computer have a greater speed and memory storage capacity as compared to the micro computer, though they are more versatile and flexible than micro computers but not as flexible as the Mainframe Computer.

2.1.3 Mainframe Computers

This type of computers are mostly used by big organizations for processing sophisticated problems. They have the largest memory capacity and very expensive to buy. These computer generates a lot of heat as a result they need a special environment to operate. An example of this type of computer is the Super Computers which is very expensive but faster in operation.

2.2 CLASSIFICATION OF COMPUTERS AS TO DATA HANDLING TECHNIQUES

2.2.1 Analog Computers

This type of computers assign numeric values by physically measuring the actual property such as length, electric voltage etc., that passes through a point in an electric circuit. They are however, effective for some applications, this method of number representation is a form of limitation to the analog computer. It should be known that the accuracy of the data used in an analog computer is directly related to the precision with which the measurements are made.

2.2.2 Hybrid Computers

This type of computer serves as a dual role between the digital and the analog computer. They are normally applied to specialized problems because of their capabilities by inputing data through a series of measurement, converted into a digital format before processing the final stage which is the output. This computer are used in computer controlled manufacturing processes and production facilities.

2.2.3 Digital Computers

This computers are systems used to accomplish business tasks. They normally represent data as numbers. Unlike the analog computer which is limited to measurements made, the digital computer can accurately represents data using as many positions and numbers as necessary; common examples are the adding machines and pocket calculators.

2.3 CLASSIFICATION OF COMPUTERS

2.3.1 General Purpose Computers

The general purpose computers are designed to serve many purposes and can also be applied to solve different types of problems, that is why they represent the majority of computer systems employed in business today. These computers process

business related data without any problem by using formula representation. Moreover, regardless of the large amount of data for processing. It also possesses the storage capacity to retain such data.

2.3.2 The special purpose computers are designed to handle specific problems and will not be applied to other computerized activities. Though they have many of the features of general purpose, but are constructed to support highly specialized data processing tasks. For example, they may be designed to process only numeric data or guide a missile.

2.4 COMPUTER SOFTWARE

The entire machine referred to as a computer is a "dead" object without the softwares i.e. data and instructions. These software help manipulate the computer towards achieving results. Basically there are three types or categories of software:

2.4.1 System Software

The system software are programs written by computer manufacturers. They are provided to simplify the operations of the computer by assisting the user in the art of providing his own instructions to the computer and to make the entire operations of the computer efficient and automatic, examples are MS-DOS, PC-DOS, and Windows '95.

2.4.2 Application Software Packages

These are instructions written by the user of the computer himself for solving his problems. Also these are programs prepared by manufacturers, suppliers of computers to aid users accomplish their tasks with ease. Examples are; spreadsheets data management, word processing and integrated software like the SpecPay software that prepares ICB staff salaries.

2.4.3 Utility Software

This type of software is been developed by computer manufacturers to perform routine processing activities in order to accomplish a particular task.

2.5 DATA BASE MANAGEMENT SYSTEMS

Data base management system is defined as a mechanised, shared, and centrally collection of data used in an organisation. DBMS is a software that enables the user to create, retrieve, maintain, select, organize, record, summarize and print data from our data file.

Related information are been kept in the data base systems file and they are organised into rows and columns with each row making up a record and the field name. The contents of a field determines the field type which are usually numerics, date, logic and character.

2.6.1 Data Integration is Achieved:

Here, information from several files is co-ordinated, accessed

and operated upon as if in a single file. Though it is possible for two or more application to be sharing compatible data, it only allows the users to gain valuable information across the organisation.

2.6.2 Data Redundancy is Reduced or Eliminated

Redundancy of data do occur in file processing system when the data cannot be arranged to suit the application program accessing these data, as a result the data appears in more than one file whereby leading to wastage of storage and duplication of efforts.

2.6.3 Data Independence is Achieved

This is the insulation of application programs from the physical or logical storage of data. If any changes occur to the data records during the life of the file, then such programs accessing these data must be changed to conform with the changing nature of data.

2.6.4 Data Integrity can be Maintained

With this system, data redundancy can lead to lack of data integrity, as such all information generated by the data processing system may no longer be trusted.

2.6.5 Data are Centrally Controlled

In database environments, data and operations are centrally

control so as to achieve a better result to management of data and to set standards for all database users so as to avoid users releasing vital information out for security reasons.

2.7 DATA BASE STRUCTURE

2.7.1 This is popularly known to be the most simple and understandable approach by information systems professionals and many users. It refers to the relationship that exist between the rows and column, where the column identify the field name, known as data elements and the row keep tracks of the record. They store data containing values relating to a particular relation, which may be a stock item, employee record or customer record.

2.7.2 Hierachical Structure

Under this approach, datas are arranged on hierachical basis in the form of an inverted tree where there is the Main root that is surrounded by various branches called sub branches. This hierachy structure determines the record types needed and the amount of redundancy required at any point in time.

2.7.3 Courting

This process is concerned with finding data held twice so as to avoid or remove unnecessary redundancy.

2.7.4 Normalization

This process helps to normalize by way of separating items which are independent of ane another into groups for recording

in different files. An example is Personal data of an employee or payroll data.

2.7.5 Data Modelling

This define the structure of files and assist a common business man to be more enlighten of his data requirement for any business. Also when files are in the developing stage, data modelling assist to separate data into files.

2.8 DBASE III PLUS

dBase III plus is one of the leading database program. It is referred to as a relational database, the database file is subdivided into rows of records where each of the record is made up of fields and the corresponding fields must be of the same structure and contain same information. The dBase III plus is of great importance to the user because it can be use to keep names and addresses or inventory records, it can also be used to create more complex applications such as accounts receivable, general ledger (Internal control of an organisation), payroll, accounts payable and a lot of others. dBase III plus accepts five (5) different types of fields; character, numeric, memo, logical and date. In creating a database file, firstly you define the structure using a menu after which you enter data into the database file. There are various types of commands to use while manipulating records like add, search, print, delete and so on, but it should be known that dot commands can be used directly without going

through the menu facilities.

dBase III plus offers a programming language that enables the user to construct its own database applications. There are a lot of built in functions and commands which are used to perform conditional branching like mathematical, string manipulation, data type conversion, time and date functions. dBase III plus requires a minimum of 25th bytes of memory and two disc drives, it is advisable to be used on computers with more than 256 bytes of memory.

dBase III plus can be used to generate reports and mailing labels, records can also be grouped, totalled and sub-totalled from database files.

In dBase III plus, there is provision for error checking in the screen. Multiple database file can be joined to perform a larger database. There is also provision for local area network operating mode so as to permit multiple users have access to the system.

2.9 DBASE IV

This is a refined version of dBase III because it provides a full relational database environment to users. In dBase III plus, many users see the assistant mode been very restrctive but with the existence of control centre of dBase IV a lot of improvement has come in, like you can design database, edit, record, file, manipulate and generate reports without the use of command language. Data can also be verified automatically

as they are entered into field. In dBase IV, there can be up to 255 fields per record and a database can be related to more than two other databases. Other significant improvement over dBase III plus is the larger number of memory variables, up to 99 files can be opened at a time. There is also improvement in the area of indexing, command line editor, faster execution and a lot of others.

It will be seen from the above analysis of database management system that the loan management of intercity bank will be well effective when all this are in place and properly managed.

CHAPTER THREE

FEASIBILITY STUDY

The aim of this study is to find out whether the proposed system in question is required and to achieve this, the following have to be considered:

1) What is the project request?
2) What is in existence before?
3) What is required to accomplish by the system?
4) Any need for the new system?

To achieve this, the size cost financial and technical feasibility of the project has to be determined.

During my investigation, it was discovered that ICB activities are numerous and because of this, I limited the study to ICB site management in the operation department. With the derermination of the size of the project, the cost will equally be determined and this will involved machine (computers) and training of personnel.

The operational efficiency of the system will equally be determined and this is a factor of technical and financial capability of the organization.

In any system, growth is the keyword, therefore it is required that findings are reported to management for decision making in order to determine growth.

OPERATION OF THE EXISTING SYSTEM:- ICB Plc is a commercial

Bank and it has branches in Lagos, Kano, Kaduna, Suleja, Abuja and Minna; its payroll has been computerized at the Head Office, but the main functional areas are being done manually. Activities of the bank right from customers desk appraisal to loan disbursement and recording of repayments received are being done manually.

Moves have been made by ICB buying computers which are yet to be installed in some branches. File management is of great importance in ICB and this area need to be computerised so as to enhance updating and calculation of mid/monthly interest easier and to be done more accurately.

PROBLEM WITH THE EXISTING SYSTEM:- ICB operations are not yet computerised therefore it cannot be without having some hidden problems. The main problem with the operation of the system is its paper work and time consuming, and moreso in accurate results are often arrived at. For example, for a large scale loan to be approved and disbursed, about two to three rims of paper will be required and it may take about two to two and half months before completion of the process to final disbursement, at times it used to take longer than that and this affects implementation of a project at the right time.

Another major problem is the procedure for loan approvals. (see appendices) The requirements are too demanding to some genuine customers who cannot afford

them. The volume of work involved is too much and would need to be reduced to a manageable size with the aid of computer.

There is also the problem of too many staff manning one thing or the work of one person is being done by more than one staff.

ICB, occupies an important place in the economy of the Nation and should not be allowed to be overloaded with problems there is urgent need for modern management techniques via computerization.

BENEFITS OF THE PROPOSED SYSTEM:- This new system being proposed for file management in ICB operation department will go a long way to achieve its desired objectives, which include:

1) Efficiency:- Computer based system design can be applied in any organization and this brings about efficiency.

2) Security:- There is a back up of work produced and this is kept in case the original copy is damaged or loss.

3) Hard Copies:- The work done using the computer can be produced on a hard copy using the printer.

4) Accuracy:- Due to the manual system in operation before is subject to in accuracies, this new system using the computer will lead to accuracy of work.

5) Retention and Storage:- The work executed using this system can be retained and stored for use at a later date.

6) Reliability:- With the new system in place, work done is reliable and the output of the work is also reliable than the manually executed work.

7) Speed:- ICB work has mostly been manually executed and a lot of time wasted, this new system will enhance speedy execution of work which will further lead to overall efficiency of the organization.

8) Timeliness of Information:- Through the use of this system information can be got easily and as quickly as possible.

TESTING PROJECT FEASIBILITY

Project feasibility can be tested using the following:-

1) Operational feasibility

2) Financial feasibility

3) Technical feasibility

OPERATIONAL FEASIBILITY:- Operational feasibility has to do with the workability of the system when it is in place. Though it has not started, it is believed that it will not pose any problem when installed but rather lead to effective performance.

FINANCIAL FEASIBILITY:- A lot of money is being spent by ICB on paper work which seems to be on routine basis, by implementing this new system it is believed that the cost of loan management administration will be greatlly reduced to a minima thereby reducing over head cost.

TECHNICAL FEASIBILITY:- This seeks to know whether the project can be embarked upon using existing machineries, technology and available personnel. From my study I discovered that ICB already have a good number of computers in stock and what they need is to improve on the existing manpower by training staff for effective handling of the computer to increase their operational efficiency.

Any project to be considered feasible must have gone through the above mentioned tests. ICB therefore stands to gain from this new system because the technical operational and financial feasibility are attainable by the bank.

CHAPTER FOUR

SYSTEM ANALYSIS AND DESIGN

In this chapter a system shall be design for data handling and file management so as to achieve the set objectives of this study.

A system is a set of elements or components that are formed and interact to accomplish goals or objectives; the relationship between the elements determine how the system works.

Design can also be defined as the drawing or outline from which something can be made. Therefore in an effort to design a system to manage files in ICB operations department, the following were examind so as to get facts about the existing system which equally assisted in designing the new system.

1. Interview:- This is the most widely used tool and most productive; facts about the operation of ICB and its attendant problems were gathered. During the investigation most of the workers opted for the simplification of the existing system so as to reduce cost and time wasting. Some customers of the bank interviewed in Minna complained of late disbursement of funds to them.
2. Observation:- One observed the way the existing system works, from the purchased of application form, submission, processing, approval and disbursement of

funds which has to be done especially satisfying the conditions for loan approvals and disbursements. This can hardly go well with the computerization of a system. therefore there is urgent need for simplifying and computerising the system.

3. Record Review:- This involves the study of the organisational charts, procedures, manuals and statistics. These were studied during my investigation and results gathered enhanced the designing of the new system.

Facts gathered were appropriately recorded as they regards to each problem area.

ELEMENTS FOR SYSTEM DESIGN

The items to be considered in system design include:

i) output

ii) input

iii) files

iv) procedures

i) Output Design:- In any system design the output requirement is what informed the design of the system. Therefore when it is determined first then the input requirement for the design of the system can best be sought for. The output is the end result generated from the system and it is this result that determine how effective and useful the system is to the organisation.

During the design the following were determined:

a) What information is required

b) Can the information be displayed or printed

c) How often is the information required

d) What format to present the information

i) Input Design:- The input design is necessitated by the output requirement by specifying which data the system operator directs the system on the action to take. In doing this the following have to be taken into consideration:

a) What type of input media

b) How is the data collected?

c) What is the design of input layouts

d) What is the volume of input.

These areas were looked into especially the data placement, headings and titles on display.

iii) File Design:- File design has to do with the structure and content such as:

a) file for easy access

b) suitable for storing facility

c) to maintain file security

d) is the file for Historical data,

e) reference data forwarding.

Four files are used for this system and they are:

i) Loan disbursement

ii) Loan repayment

iii) Interest

iv) Outstanding Loan.

PROCEDURES

The procedure which seeks to unify and link the processes involved to produce the desired result have been considered both machine and man. The acquisition of computers already made by ICB is an indication of this.

SYSTEM DESIGN

During the process of this work, the following questions were raised.

* What is being done in ICB?
* How is the work being done?
* How often is the work being done?
* If there is any problem?
* What are the problems?
* Why the problems?
* Advantages and disadvantages of the existing system.

These questions and others were raised and the various staff discussed with gave their views and opinions as to what is happening within the organization. Some customers

of the bank interviewed equally gave their views on ICB and the problems associated. Procedure manuals and worked reports were studied so as to come out clearly with what the system is all about. A detail study of this is in chapter one. This study now gives impetus to the features required in the new system and the output expected.

Any system designed is required to produce the information or details that state how a system can meet the requirements identified when studying the system.

The design of this system is informed by the output that it will produce which further enhances the specification of input data in the system to be developed.

DATA MODELLING

The strutures of files have been clearly stated and data are separated accordingly to files for easy access items of different nature are handled separately for recording in their files and relationship between their established using data base keys.

The file structures drawn are as follows:

Field	FileName	Type	Width	Dec
1	Loan number	N	6	0
2	Name of Client	C	10	0
3	Project Type	C	8	0
4	Amount Approved	C	10	0

5	Date Approved	D	8	0
6	Date of 1st Disb	D	8	0
7	Duration of Loan	C	7	0
8	Amount Disb to Date	C	10	0
9	Repayment	N	10	0
10	Balance Outstanding	N	10	0

In as much as mistakes cannot be avoided in recording data or in doing a particular function, some of these mistakes may be minor or so serious that they can result in erasing data or the system can turn out a different thing entirely. Provision for these have been given so as to arrest the situation in case it occurs. For example room for display to correct, recall, and confirm before saving, password for sensitive areas to allow only authorized users in the system have direct access for security reasons.

IMPLEMENTATION

Implementation involves the coordination of all those activities that take place in the user department and data processing department to get the new system into operation. The system may be entirely new, replacing an existing manner, semi- automated or completely automated system or a major modification to an existing system. Proper inplementation is very inportant in order to have a reliable system that will meet organisational needs. Implementation however, will have to take the following factors into consideration:-

1. TRAINING OF PERSONNEL:

The success or failure of any system designed depend largely on its user. Type of training received by various categories of personnel assist or prevent the successful implementation of any system. The operator of the system must know details of their roles and have the skills on how to operate the system. Training is quite good for the operators and the end-users. The training system for operators, must ensure that they are able to handle possible operations as required, they should be able to handle correct data entry.

In case of situations where the installation of how machines is required such as a new computer system, special terminals etc., the training should take into cognisance how to handle the machine. The training should also take into consideration how to use electrical terminal.

The operator should know likely areas of problems and where to seek assistance. In short, the training should be comprehensive enough as to provide a good understanding of all the operational techniques of the system.

2. CHANGE OVER PROCEDURE OR CONVERSION:

This is the process of changing from the old system to the new system. This is best handled in the following ways:

i) Parallel system: Here both systems are run concurrently using the same inputs and outputs compared while reasons for difference in output resolved. The output of the old system continue in circulation till the new system in place is satisfied, when the old system is discarded off the new takes over. This comversion method is the safest, it gives guarantee if there is any problem. The old system can be referred to immediately with out waste of time. However, this method has the following disadvantages:

a) Users who knows that they can fall back to the old system especially if they preferred the old system than the new one may not be given room for testing and time to mature.

b) double costs because of two sets of systems costs involved.

ii) DIRECT CUT OVER OR ONE TO ONE CHANGE:

This is the direct and abrupt change from the old to the new system which becomes operational immediately the change over may be over a weekend or overnight. Lack of having a

system to fall back becomes a serious disadvantage if problems arises and this may lead to stoppage of operation in the organisation.

iii) PILOT SCHEME:

This approach is when an organisation wants to introduce a stystem, part of it may be introduced in a section of the organisation, say a department. For example, a bank may start its computerisation from one branch to another, this is then handled by a specialised team who carry on the inplementation process. It is considered completed and accurate then they move on to another branch. The advantage with this method is that it is considered correct before trying it on others.

iv) PHASE IN METHOD:

This method is used when the installing of a new system is not feasible within an organisation at any one time. File conversion, training of personnel or piecemeal arrival of equipment are the possible factors which delays the implementation of the new system in good time.

POST IMPLEMENTATION

Post inplementation is referred to as the review of any system or project that has been fully implemented. It is the X-ray of the system to ascertain whether it has conformed with the laid down implementation procedures. Review of a system is usually done by analyst and those who use it. The review give room for determining how well the system is working, its acceptability and to see where modification is required; also it enables management to know how the system will be maintained since depreciation are bound to take place.

The main focus to post implementation is to ascertain whether the set objectives for which it was design has been achieved, for example, has the productivity level of the system improved. Analyst ask certain questions in order to obtain or gather correct information about the system being reviewed, and the questions are:

i) How relevant is the information?

ii) How accurate is the information?

iii) How timely is the formation?

iv) Is the system easily adaptable?

v) How complete and appropriate is the information?

These questions assist the analyst to determine the success of the system and what necessary steps to be taken in case of lapses.

The acceptability of a system by users is quite good for its

success. This gives confidence to the operators and they do all their best to maintain the system thereby lasting longer. Reviewers/Analysts should try to find out why a system is not acceptable and necessary corrective measures taken. A system that is simple to use and yet produces good results is generally accepted by users than one that brings poor results. A typical post implementation report contents in ICB is shown in the appendice(iv).

SYSTEM REVIEW

A number of approaches were used for collecting data about the new system such as, interview, observation and review of manuals and records, some other information gathered such as handling of repayments, the receipting and entering on to the ledger cards necessitates the design of the system. The system to be installed was surveyed and performance known through the following questions:

i) What is the general feeling about the system?

ii) What are the possible effects of change over?

iii) What is the volume of work before and now?

iv) What is the quality of work?

v) How acceptable is the new system?

vi) How is the cost compared with the benefits?

The answers to these questions determined the importance and acceptability of the system.

MAINTENANCE

In any system developed maintenance is very important, even the human body if poorly maintained, can degenerate and leads to subsequent death. Therefore proper maintenance is very necessary for this new system. This can take the form of servicing the machines, training staff to be more practical and efficient, replacing worned out parts and even introducing modern equipment that can perform well on the system. Modern software will give good and efficient output from the system than outdated ones, and the operatous of the system will be happy and their confidence restored. The recommendation is that there should be tri-annual overhauling of the system.

This study was timed to look at the Intercity Bank Plc set-up, its aims, objectives and the operational activities. The area of file Management in the operation department have been grouped into eight from approval conditionalities to disbursement and loan repayment.

The prospects and attendant problems within the establishment also have been highlighted. The existing system which is lacking behind in terms of effectiveness and accuracy needed to be reorganised using modern technology which requires the use of computer. Hardware and software have been discussed in this study and their importance in promoting the operational set-up of the Bank. The need to enhance ICB operations mostly

in the Operation department has brought about the new system designed which focused attention on file management which tried to look at the effective management of, Date of approval, Date of first installment disbursed, amount repaid, amount outstanding from any particular file, also how the new system could be used for retrieving and up-dating have been provided.

A database management system has been designed with the aim of reducing paper work to mere punching of computer keys to increase effectiveness, accuracy, timeliness and proper management control.

CHAPTER FIVE

CONCLUSION

A database management system has been developed for file management in the operation department of ICB. This system, if properly managed, it will bring about accuracy, effectiveness, information dissemination, proper planning and workers morale could be sustained.

It is required that the system be harnessed and areas like interest data screen be redesigned as changes in interest occurs, file structure and defaulters screen should be developed so that as soon as a loan falls due and not paid it can be called via defaulters screen. It should be known that no system is static as new ideas and development comes into the establishment so shall the system be redesigned inconformity with the development.

Staff should be given good training in a way that they can be moved around within the organisation to serve

in any department, this type of training renders flexibility and free flow of information and productivity high.

In this regard management is therefore advised to provide the necessary support such as providing stand by generators as alternative source of power, periodic service of the terminals and sending the opertors of the system on course for proper training as to be conversant with the latest development in the software industry.

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Manual

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RECOMMENDATIONS

It is recommended that:-

1. The Bank should immediately computerised the Loan management to:
   a. Reduce the work load of manual operations, as a job of three persons can be effectively handled by one person.
   b. Save cost by avoiding wastage of stationery items in manual operations, especially if there is a single mistake.
   c. Ensure data security which is less or absence in manual operations.
   d. Ensure fastness and efficiency in processing data and the output.

2. The staff should be given adequate and good training on the operations and maintainance of computer systems.

3. There should be tri-annual overhauling of the computer systems.

APPENDIX (i)

INPUT REQUIREMENT FOR INVESTMENT LOAN APPROVAL

1. Name of Applicant:
2. Amount Applied for:
3. Purpose of loan:
4. Age of Applicant:
5. Three Recent Passport Photograph of Applicant:
6. Address of Applicant:
7. Current Tax Clearance Cerfificate:
8. Secutity Property Offered:
9. Satisfactory Bank Status Report of Applicant:
10. Applicants to Contribute not less than 15% of total project cost
11. Positive Profit Margin

APPENDIX (ii)

INPUT REQUIREMENT FOR LOAN DISBURSEMENT

1. Submission of a Copy of feasibility report
2. Clearance Cerfificate from ICB Legal Department
3. Submission of certrificate of Occupancy of Property Pledged
4. Submission of customers letter of Acceptance
5. Submission of Insurance Policy Certificate of the Property pledged/Certificate of Share.
6. Submission of Current Income Tax Certificate
7. Pretake off report/ implementation plan.

APPENDIX (iii)

INTEREST RATES:

1. Small Holder Loan Scheme- Prime rate of 16%
2. Agro Services - Prime rate of 16% + 4% = 20%
3. Direct Marketing - Domestic - Prime rate of 16% + 5% = 21%
4. On Lending - Prime Lending rate of 16%
5. Agro - Allied - Prime rate of 16% + 4% = 20%

APPENDIX (iv)

CONTENTS OF ICB POST IMPLEMENTATION REPORT

1. Loan Particulars
2. Schedule of planned and Actual Disbursements
3. Schedule of Planned and Actual Achievements in targets and timing
4. Revised cash flow projections for the current year (This should be compared with previous projects)
5. Repayment projects including a repay schedule based on current position and projection from there.
6. Comments of Client on loan approval and implementation, and prospects for repayment. This shall include a signed statement by the customer as a separate annex.
7. Details of properties mortaged and their conditions.
8. General comments and conclusions.
9. Recommendations.

```
****LOAN.PRG (MAIN MENU PROGRAM )
*****PROGRAM WRITTEN BY OGUNTUGA MUYIWA OBAFEMI*****
* SAVE SCREEN TO SAVSCREEN
CLEAR
SET ECHO OFF
SET TALK OFF
SET STATUS OFF
SET DATE BRITISH
SET COLO TO W+/B
SET SCOREBOARD OFF
SET BELL OFF
SET ESCAPE ON
CLEAR
DO SCREEN1
SET COLO TO R+/G
@ 15, 17 SAY " I N T E R C I T Y          B A N K          P L C
@ 18, 17 SAY "       L O A N            M A N A G E M E N T
SET COLO TO R+*/W
@ 24,5 SAY "PRESS ANY KEY TO CONTINUE."
READ
SET COLO TO W+/B
DO WHILE .T.
        CLEAR
        @ 2,4 TO 5,75 COLO G/R+
        @ 3,25 SAY "INTERCITY   BANK    PLC   " COLO R+/B
        @ 4,25 SAY "     LOAN MANAGEMENT      " COLO R+/B
        @ 6,4 to 21,75 COLO G/R+
        @ 10,20 SAY "D         LOAN DISBURSEMENT " COLO R+/B
        @ 12,20 SAY "R         LOAN REPAYMENT    " COLO R+/B
        @ 14,20 SAY "I         INTEREST          " COLO R+/B
```

```
        @ 16,20 SAY "O         OUTSTANDING LOAN " COLO R+/B
        @ 18,20 SAY "Q         QUIT             " COLO R+/B
        SEL = SPACE(1)
        @ 23,5 SAY "MAKE A CHOICE : " GET SEL PICT "!"
        READ
        DO CASE
                CASE SEL = "D"
                        DO LOANDISB
                CASE SEL = "R"
                        DO LOANREP
                CASE SEL = "I"
                        DO INTDAT
                CASE SEL = "O"
                        DO LOANOUT
                CASE SEL = "Q"
                        SET TALK ON
                        SET STATUS ON
                        SET SCOREBOARD ON
                        SET BELL ON
                        SET COLO TO N+/GB
                        RETURN
                OTHERWISE
                        ? CHR(7)
                        LOOP
        ENDCASE
ENDDO

PROCEDURE SCREEN1
SET COLO TO N/N
@ 2, 2 CLEAR TO 22,77
```

```
SET COLO TO gr+/g, gr+/B
@ 2, 2 CLEAR TO 21,75
@ 2, 2 to 21,75
RETURN
```

```
set escape on
USE LOAN ORDER LOANNO
DO WHILE .T.
        CLEAR
        @1,10 SAY "I.C.B       L O A N         D I S B U R S
        STORE SPACE(10) TO mSURNAME, mISTNAME, mLOANNO, mPRO
        STORE 0 TO mAMTAPP, mAMTDISB
        STORE CTOD(" / / / ") TO mDAPP, mDISTDISB
        mLOANPER =  SPACE(4)
        @ 4,3 SAY "ENTER LOAN NUMBER: " GET mLOANNO PICT "99
        @ 6,3 SAY "SURNAME OF CUSTOMER: " GET mSURNAME PICT "
        @ 6,35 SAY " FIRST NAME OF CUSTOMER: " GET mISTNAME F
        @ 8,3 SAY "PROJECT CODE: " GET mPROJTYPE PICT "9"
        @ 10,3 SAY "AMOUNT APPROVED: " GET mAMTAPP PICT "999
        @ 12,3 SAY "DATE OF FIRST APPROVAL: " GET mDAPP
        @ 14,3 SAY "DATE OF FIRST DISBURSEMENT: " GET mDISTDI
        @ 16,3 SAY "LOAN PERIOD: " GET mLOANPER
        @ 16,30 SAY "MONTHS."
        @ 18,3 SAY "AMOUNT DISBURSED: " GET mAMTDISB PICT "99
        READ
        STORE SPACE(1) TO ANS
        @ 20,3 SAY "SAVE ? (Y/N) : " GET ANS PICT "Y"
        READ
        IF ANS = "Y"
                SEEK mLOANNO
                IF FOUND()
                        @ 20,0 CLEAR
                        @ 20,5 SAY " THIS LOAN NUMBER ALREADY
                        READ
                        LOOP
```

```
                    ELSE
                            APPEND BLANK
                            REPLACE LOANNO WITH mLOANNO, SURNAME WI
                            REPLACE AMTAPP WITH mAMTAPP, DAPP WITH
                            REPLACE LOANPER WITH mLOANPER, AMTDISB
                    ENDIF
            ELSE
                    ANS = "N"
                    @ 20,3 CLEAR
                    @ 20,3 SAY "QUIT ? (Y/N) : " GET ANS PICT "Y"
                    READ
                    IF ANS = "Y"
                            CLOSE DATABASES
                            RETURN
                    ELSE
                            ANS = "N"
                            LOOP
                    ENDIF
             endif
    ENDDO
    RETURN
```

```
******LOANREP.PRG (LOAN REPAYMENT) ****
SET ECHO OFF
SET TALK OFF
CLEAR
USE LOAN ORDER LOANNO
DO WHILE .T.
        CLEAR
        mLOANNO = SPACE(11)
        @1,25 SAY " L O A N        R E P A Y M E N T "
        @2,25 SAY " ---------------------------------- "
        @4,5 SAY "ENTER LOAN NUMBER : " GET mLOANNO
        READ
        IF mLOANNO = ""
                CLOSE DATABASES
                RETURN
        ENDIF
        SEEK mLOANNO
        IF .NOT. FOUND()
                @ 20,0 CLEAR
                @ 20,5 SAY "THIS LOAN NUMBER DOES NOT EXIST. PRESS ANY
                READ
                @ 20,0 CLEAR
                LOOP
        ENDIF
        mNAME = RTRIM(SURNAME) + RTRIM(FIRSTNAME)
        mPROJTYPE = PROJTYPE
        mAMTDISB = AMTDISB
        STORE 0 TO mPRINREP, mINTREP
        @ 4,5 SAY "NAME OF CUSTOMER : " GET mNAME
        @ 6,5 SAY " PROJECT TYPE : " GET mPROJTYPE
```

```
        @ 8,5 SAY "AMOUNT DISBURSED : " GET mAMTDISB
        CLEAR GETS
        @ 9,5 SAY "PRINCIPAL REPAID : " GET mPRINREP PICT "9999999.99"
        @ 11,5 SAY "INTEREST REPAID : " GET mINTREP PICT "9999999.99"
        READ
        ANS = .T.
        @ 20,0 CLEAR
        @ 20,5 SAY "SAVE ? (Y/N) : " GET ANS PICT "Y"
        READ
        IF ANS
                mPRINC = PRINREP + mPRINREP
                mINT = INTREP + mINTREP
                mPOUT = PRINOUT - mPRINREP
                mINTOUT = INTOUT - mINTREP
                REPLACE PRINREP WITH mPRINC, INTREP WITH mINT
                REPLACE PRINOUT WITH mPOUT, INTOUT WITH mINTOUT
        ENDIF
        @ 20,0 CLEAR
ENDDO
RETURN
```

```
***** INTDAT.PRG (INTEREST DATA)****
USE LOAN ORDER LOANNO
CLEAR
DO WHILE .T.
        @1,20 SAY " I N T E R E S T    D A T A          S C R E E N "
        mAMTDISB = 0
        mINT = 0
        TAMT = 0
        mLOANNO = SPACE(9)
        @ 3,5 SAY "ENTER LOAN NUMBER     : " GET mLOANNO PICT "9999999"
        @ 5,5 SAY "ENTER AMOUNT DISBURSED : " GET mAMTDISB PICT "99999
        @ 7,5 SAY "ENTER INTEREST : " GET mINT PICT "9999999.99"
        READ
        TAMT = mINT + mAMTDISB
        @ 9,5 SAY "TOTAL AMOUNT ACCRUING IS" GET TAMT
        CLEAR GETS
        ANS = SPACE(1)
        @ 20,3 SAY "SAVE? (Y/N): " GET ANS PICT "Y"
        READ
        IF ANS = "Y"
                SEEK mLOANNO
                IF FOUND()
                        @ 20,0 CLEAR
                        REPLACE INTOUT WITH mINT
                        @ 20,3 CLEAR
                        @ 20,3 SAY "QUIT? (Y/N): " GET ANS PICT "Y"
                        READ
                        IF ANS = "Y"
                                CLOSE DATABASES
                                RETURN
```

```
Z

                        ELSE

                                LOOP

                        ENDIF

                ENDIF

        ELSE

                ANS = "N"

                RETURN

        ENDIF

ENDDO

RETURN
```

```
****LOANOUT.PRG (LOAN OUTSTANDING)****
CLEAR
USE LOAN ORDER LOANNO
DO WHILE .T.
        CLEAR
        mLOANNO = SPACE(7)
        @1,20 SAY " I. C. B.    L O A N      O U T S T A N D I N G "
        @2,20 SAY " ********************************************** "
        @4,5 SAY "              CUSTOMER'S DETAILS                  "
        @6,5 SAY "ENTER LOAN NUMBER: " GET mLOANNO PICT "99999999"
        READ
        IF mLOANNO = ""
                ANS = .F.
                @ 20,3 CLEAR
                @ 20,3 SAY "ARE YOU SURE YOU WANT TO QUIT? (Y/N): " GE
                READ
                IF ANS
                        CLOSE DATABASES
                        CLEAR
                        RETURN
                ENDIF
                LOOP
        ENDIF
        @ 20,0 CLEAR
        SEEK mLOANNO
        IF .NOT. FOUND()
                @ 20,1 SAY "THIS LOAN NUMBER DOES NOT EXIST. PRESS ANY
                READ
                @ 20,3 CLEAR
                LOOP
```

```
        ENDIF
        mNAME = RTRIM(SURNAME)+ " " + RTRIM(FIRSTNAME)
        mPROJTYPE = PROJTYPE
        mAMTDISB = AMTDISB
        mPRIOUT = PRINREP
        mINTOUT = INTOUT
        @ 7,3 SAY "NAME OF CUSTOMER : " GET mNAME PICT "@!"
        @ 9,3 SAY "PROJECT TYPE : " GET mPROJTYPE
        @ 11,3 SAY "AMOUNT DISBURSED : " GET mAMTDISB
        @ 13,3 SAY "PRINCIPAL OUTSTANDING : " GET mPRIOUT
        @ 15,3 SAY "INTEREST OUTSTANDING : " GET mINTOUT
        CLEAR GETS
        @ 24,3 SAY "PRESS ANY KEY TO CONTINUE."
        READ
        @ 24,3 CLEAR
ENDDO
RETURN
```

I N T E R C I T Y B A N K P L C

L O A N M A N A G E M E N T

ESS ANY KEY TO CONTINUE.

INTERCITY BANK PLC
LOAN MANAGEMENT

D	LOAN DISBURSEMENT
R	LOAN REPAYMENT
I	INTEREST
O	OUTSTANDING LOAN
Q	QUIT

KE A CHOICE :

ER LOAN NUMBER:

NAME OF CUSTOMER: FIRST NAME OF CUSTOMER:

JECT CODE:

UNT APPROVED: 0.00

E OF FIRST APPROVAL: / /

E OF FIRST DISBURSEMENT: / /

N PERIOD: MONTHS.

UNT DISBURSED: 0.00

I.C.B L O A N D I S B U R S E M E N T

ER LOAN NUMBER: 10979744

NAME OF CUSTOMER: OGUNTUGA FIRST NAME OF CUSTOMER: MUYIWA

JECT CODE: 6

UNT APPROVED: 19000000.00

E OF FIRST APPROVAL: 03/02/98

E OF FIRST DISBURSEMENT: 23/02/98

N PERIOD: 12 MONTHS.

UNT DISBURSED: 15000000.00

E ? (Y/N) : N

ENTER LOAN NUMBER :

I N T E R E S T D A T A S C R E E N

ENTER LOAN NUMBER :

ENTER AMOUNT DISBURSED : 0.00

ENTER INTEREST : 0.00

NTER LOAN NUMBER : 1097974

NTER AMOUNT DISBURSED : 1400000.00

NTER INTEREST : 190000.00

OTAL AMOUNT ACCRUING IS 1590000

E? (Y/N): N

I. C. B. L O A N O U T S T A N D I N G

****

CUSTOMER'S DETAILS

NTER LOAN NUMBER: 1097974

YOU SURE YOU WANT TO QUIT? (Y/N): N