AUTOMATED FOREIGN EXCHANGE TRANSACTION IN BANKS

(CASE STUDY OF FIRST BANK NIGERIA PLC)

BY

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PGD/MCS/2000/2001/1020

A PROJECT SUBMITTED TO THE DEPARTMENT
OF MATHEMATICS/COMPUTER SCIENCE
FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA

IN PARTIAL FULFILMENT OF THE
REQUIREMENT FOR THE AWARD OF A POST
GRADUATE DIPLOMA IN COMPUTER SCIENCE

APRIL 2002

CERTIFICATION

This is to certify that this project work was carried out and written by ADEBAYO ADEYEMI BENJAMIN under the supervision of Mall. Isha Audu of Mathematics/Computer Science Department, Federal University of Technology, Minna, Niger State.

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DEDICATION

This project work is dedicated to Almighty God.

ABSTRACT

In most banking and financial institutions, customers desire is an efficient service form those institutions. Some of the factors that influenced effective services are the behavioral attitude of some banks executives and most importantly the manually oriented or semi – automated approach that they employ in processing their data.

This project aims at increasing the effectiveness and efficiency of services in banks such as in the areas of foreign exchange transaction. Implementing those operations, which are broken down into smaller components and can be managed independently, but interlinked programs that share common data file.

The proposed system an Automated Foreign Exchange Transaction will produce information on status of the organization instantaneously when called upon for a quick decision – making.

The computer, because of its various advantages and characteristics such as high processing speed, high degree of accuracy, storage facilities, automation quick accessibility, and so on will be efficient in providing such a real – time services.

ACKNOWLEDGEMENT

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CHAPTER ONE

GENERAL INTRODUCTION

1.0 INTRODUCTION

Foreign exchange is a system being adopted by banks of various countries to enhance business interaction within individual, business organizations and Governments abroad. Foreign exchange transactions is a means by which the worth of currency can be measured.

Foreign exchange is either to discourage importation or to encourage importation. This is done to achieve a good economic situation of a country. If a country wants to encourage importation, the country increases the worth of her currency and if otherwise the country decreases the worth of her currency.

The Exchange Control Act of Nigeria (1962), as amended remained the principal legislation government foreign exchange transactions in Nigeria up to September 1986. The main objective of the Act had been to prevent the outflow of funds form the country and to conserve the country's reserves of gold and foreign currencies.

The Act vests overall authorities with the minister of finance. The minister normally appoints the Central Bank of Nigeria as the principal agent to administer exchange control regulations. In addition, all licensed banks in the country act as Authorised Dealers. Authorized Dealers are required to carry out their duties in accordance with Central Bank directives and instructions, with limited authority to approve a certain category of applications like Basic Travel allowance, M – forms and other minor sundry payment. A number of selected hotels are also empowered to buy foreign currencies from travelers to Nigeria. These approved hotels are called Authorised buyers. Thus, under the old regulations, responsibilities for the determination of application for exchange control approvals were designated to the;

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i.)   Federal ministry of finance

ii.)   Central Bank of Nigeria

iii.)   Authorised Dealers – licensed commercial and merchant banks and

iv.)   Authorised Buyers – standard hotels in the country.

There was a clear demarcation of authority for final approval of applications depending on the sensitivity and importance of the request, for examples, all applications relating to the:

i.)   repatriation of capital, profits and dividends to any country outside Nigeria;

ii.)   raising of external loans, including repayments of such Ions;

iii.)   granting of 'Approved status' for non – resident capital investment in Nigeria;

iv.)   payment for copyright, patents and royalties;

v.)   any dealings in foreign securities, etc, had to be referred to the Federal ministry of finance for determination.

Applications relating to payments for imports, commission and brokerages, insurance, leave and medical tours (private), training and leave payments etc. could be processed by Authorised Dealers. Applications in respect of education and training courses for staff and applications for final home remittances by expatriates had to be forwarded to the Central Bank through an Authorised Dealer for approval.

1.1   MODE OF OPERATION

The foreign exchange market is the international market in which currencies are bought and sold. For example, a Nigerian company that imports goods form Germany buys deutche marks in order to pay for the purchase. A

Nigerian company exporting to Germany receives deutche marks, which it sells in exchange for Naira. Both firms make use of the foreign exchange market.

Except in a few European centers, the foreign exchange market has no central market place. All business is conducted by telephone or telex. The principal dealers are the larger commercial banks and the Central banks. Any corporation that wants to buy or sell currency usually does so through a commercial bank.

1.1.1 EXTERNAL TRANSACTIONS

Under the Exchange Act of Nigeria (1962), residents of Nigeria were required to obtain approval form the appropriate authorities before effecting the following foreign exchange transactions:

i.) Payment to, or for, the credit of a person resident outside Nigeria.

ii.) Payment to, or for, the credit of a person resident in Nigeria by order of, or on behalf of, a person resident outside Nigeria, where such a transaction would involve a compensating payment by the Nigerian resident.

iii.) Placing any sum to the credit of a person resident outside Nigeria.

iv.) Borrowing any foreign currency form, or lending any foreign currency to, any person other than an Authorised Dealer.

Any resident who own foreign currency were required to offer it for sale to an Authorized Dealer.

1.1.2 THE BIRTH OF DOMICILIARY ACCOUNTS

The first revolutionary step taken by the Federal Military Government to deregulate and liberalise foreign exchange transactions was the introduction of the Domiciliary Accounts Scheme in October 1985.

The guidelines for the operation of the scheme continued in a circular issued by the Central Bank of Nigeria in December 1985, stipulated that

residents, foreign nationals, Nigerian – registered companies, Embassies, High Commissions and other diplomatic missions are allowed to open and operate foreign currency accounts domiciled with selected Nigerian banks.

Foreign currency accounts are now free form exchange control formalities. (Hitherto, all foreign exchange transactions, no matter how small in value, were passed through the Central bank for determination, as earlier mentioned. Lodgments may be made into the accounts by Travelers' cheques, foreign bank notes, drafts, mail or Telegraphic transfers, or any other credit instruments that may be approved by the Central Bank.

According to the Central Bank guidelines, proceeds from the following sources are not eligible for lodgments into domiciliary accounts:

    i.)   Sales of crude oil or petroleum products

    ii.)   Foreign currencies officially purchased in return for Naira

    iii.)   External loans

    iv.)   Proceeds of oil bankering operations

    v.)   Proceeds of export of goods and services, except the portion approved for retention by the exporter.

The following transactions may be settled with funds from the foreign currency accounts:

    1.)   Payment for invisible trade items such as educational expenses, medical expenses, business trips, subscriptions and other services.

    2.)   Payments for visible trade imports.

The benefits derivable from the scheme include:

1.)   Easing the pressure on the official foreign exchange resources as people can now meet part of their requirements for foreign exchange through the domiciliary accounts; and,

2.)   Encouraging repatriation of capital and foreign currency holdings of Nigerians abroad.

1.1.3 THE SECOND – TIER FOREIGN ECHANGE MARKET (SFEM)

The second –tier foreign exchange market (SFEM) is a market established by law for the buying and selling of foreign exchange at market – determined rates. The objective of the SFEM, according to the Governor of the Central Bank of Nigeria, is to evolve a realistic market – determined exchange rate for the Naira. So as to reduce the demand for foreign exchange to available supply, reduce the pressures on the balance of payments to stop further accumulation of trade debt, reduce imports, stimulate exports and pave the way to a self – reliant and sustainable growth.

The scheme is expected to achieve the goal of satisfying the demand of Nigerian creditors, as well as usher in an era of external and internal economic balance in the long run. It is also expected that SFEM will absorb the parallel illegal exchange market by stopping smuggling and the illegal in the Naira and obviate the need for import licensing.

The SFEM is a free market where anyone can buy or sell foreign exchange. 'Authorised Dealers' or 'Appointed Foreign Exchange Dealers' which are corporate organization are appointed by the government to deal in the SFEM. The transactions must be supported by applications to purchase, accompanied by satisfactory documentary evidence of a valid, due or outstanding obligation in respect of a Commercial, Service or Capital transactions.

Traditional foreign exchange instruments such as foreign bank notes, travellers' cheques, bank draft, mail and telegraphic transfers will be used for

trading in the SFEM. This is in place of the medium of security coupons originally proposed for the scheme.

1.2 BENEFITS OF FOREIGN EXCHANGE

In Nigeria, foreign exchange has helped the economy especially during the period of Structural Adjustment Programme (SAP). The federal Government decided to encourage the purchase of home made goods thereby decreasing the worth of our currency. In this wise, business organizations or individuals find it difficult to go abroad for goods and services since the cost of doing that could be too exorbitant than when acquired at home.

Countries which have their currency worth higher than that of Nigeria thereby find it profitable to buy goods and services in Nigeria since the focus of foreign exchange is to increase the Per Capital Income of a country, the Government has the final say over how the currency should be changed to meet their demand.

Foreign exchange promotes investment between two countries. It make it possible for a firm to produce at a time more efficient scale of operation producers of main frame computers, aircraft, and heavy machinery need a very large market to produce at a scale which will lower their costs per unit.

Foreign exchange also increase trade between two nations and as well increase the range of goods and suppliers from one nation to the other. The aim of this project is to go into how foreign exchange is been carried out in he organizations concerned and the possible ways of improving the system by the use of a computer.

1.3 OBJECTIVE OF THE PROJECT

The origin of foreign exchange could be traced back as far as exporting one's goods for profit, importing other countries good and selling it for profit too.

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The Structural Adjustment Programme (SAP) is due to reduce Nigeria's spending.

The debt burden is one of the loudest red signals about the economy. In 1985 one of the objectives of Nigerian Government was to halt and reverse the external debt which then was over $15billion. Today, 16years later, the debt has goose – stepped its way to a frightening $25billion some $28Billion for federal Government, the other for states, individual and private companies.

The official debt of Nigeria is of 3 folds:
   I. those owed the Paris Club
   II. the London Club
   III. the World Bank

I.   THOSE OWED THE PARIS CLUB

They are the group comprising of creditor government and governmental organizations. The repayment terms for the Paris Club are long – term and are usually soft. They are usually tied to monitor able projects and are thus arguably debts that are self – discharging.

II.   THE LONDON CLUB

They are the association of Banks and private finance houses, the debts are short and medium – term use and in the Second Republic's heady days of sleazy loan deals, this club's debts were for purposes as frivolous as rice and other food imports.

For Nigeria, of the $35Billion debt some $20Billion to $21.5Billion was sourced from the London Club, making repayment a matter of great urgency.

III.   **THE WORLD BANK**

The repayments of debts are usually soft and long term. The long – term debts since the last 16years have been falling due.

As more people cultivated the habit of Saving and converting money, they grouped themselves together, not only for company but for mutual – benefit from one another and mutual protections from danger and attack from robbers. I intend to write on this so as to give people an insight into what and how the bank is all about, the types of service provided, how exchange rates are cultivated, how the customers are attended to and what is required of the customer as well.

This project will also afford the Bank Management to understand their customers the more, it will also breed a long lasting happy relationship between the management and the customer.

This project will also look critically into the various forms and method (existing methods) used and probably came out with an alternative method with the use of computers.

Banks provide job opportunity for the masses, people are needed to come and work under the various department in the bank establishment and to provide good services to customer,

Bank is the ideal place to collect money. In this country where the currency is changed at will, only bank has the access to give the correct money where Bank draft is given, only bank has the power to change it to legal tender.

Bank is the only body that can create money i.e the Central Bank of Nigeria (CBN) is the body that can issue and destroy unwanted currency. Bank is the only place where one can know things about foreign exchange, something about black market, Structural Adjustment Programme (SAP), Second – tier Foreign Exchange Market (SFEM), International Monetary Fund (IMF).

With the above facts, a prompt and better service should be provided for the customers and the calls for the introduction and uses of Computer.

Computer as we know is an electronic device capable of accepting data through the input unit, process the data and then produce information though the output unit at a very fast speed. With the use computer, the following are taking care of:

i. BETTER SERVICES

The computer as an electronic machine which is able to accept data, solve complex arithmetic and logical questions as well as store large information. With these characteristics, the computer will be able to carry out the work of the cashier very fast, it will be able to do the same type of work repeatedly without getting bored or fatigue. It also has the advantage of providing accurate answers to questions asked.

ii. REDUCTION IN WORK LOAD OF THE RECEPTIONIST

Since it has memory, information are stored in its memory can be accessed easier and faster. The computer also calculate the sum expected of the customer to pay, it proves to be effective and reliable.

iii. The computer also prevents the case writing, wasting of stationary, biro and so on its makes referencing very easy.

1.4 PECULIAR FEATURES OF THE PROJECT

The most special feature of this project is that it is based on the **EXPERT SYSTEM PACKAGE**. This system have the following characteristics:-

1. An interface interaction between the computer and user.
2. A database which contains all the data about the specific field which is being computerized.

3. An interface system to reach a logical conclusion from the interface.

4. A system to store the recent information form 1 –3 above.

1.5 DATA COLLECTION METHODS

Data are basic raw facts and information is processed data. Every report must have a source from which I receive. He needs to know how to seek out fact, how to learn what he does not know about the topic in arrangement.

Checking and clarification of facts obtained, and finally evaluate all data gathered including the ones he already has. Gathering data quickly and efficiently can be done through any of the following methods;

1. Questionnaire
2. Interview
3. Experiment in the filed or in the laboratory
4. Research through encyclopedia, journals etc.

After data have been collected by any of these methods, the next thing to do is to select those which comes within the scope of the topic in arrangement and then arrange the materials in a definite order. This order determined by the writer, which may either be chronological, geographical, increasing complexity or order of importance.

For the purpose of this project work, the interview method was used for gathering information used.

CHAPTER TWO

FOREIGN EXCHANGE AND BANKING OPERATION

2.0 FACTORS INFLUENCING EXCHANGE RATES

The present international monetary system consists of a mixture of "freely" floating exchange rates and fixed rates. The currencies of the major trading partners of Nigeria are traded in free markets. In such a market the exchange rate between two countries is determined by the supply of, and the demand for, those currencies. This activity, however, is subject to intervention by many countries' central banks. Factors that tend to increase the supply or decrease the demand schedule for a given currency will bring down the value of that currency in foreign exchange markets.

Similarly, the factors that tend to decrease the supply or increase the demand for a currency will raise the value of that currency. Since fluctuations in currency values result in foreign exchange risk, the financial executive must understand the factors, causing these changes in currency values.

Although the value of a currency is determined, by the aggregate supply and demand for that currency, this alone does not help our financial manager understand or predict the chances in exchange rates. Fundamental factors, such as inflation, interest rates, balance of payments, and government policies, are quite important in explaining both the short – term and long – term fluctuations of a currency value.

2.1.1 INFLATION

Parity between the purchasing powers of two currencies establishes the rate exchange between the two currencies. Currency exchange rates, therefore,

tend to vary inversely with their respective purchasing powers in order to provide the same or similar purchasing power in each country. This is called the "Purchasing power parity theory".

When the inflation rate differential between two countries changes, the exchange rate also adjusts to correspond to the relative purchasing powers of the countries.

2.1.2 INTERESTS RATES

Another variable that has a significant influence on exchange rates is interest rate. It is important to know that investment capital flows in the direction of higher yield for a given level of risk. This flow of short – term capital between money markets occurs between investors seek equilibrium through arbitrary buying and selling. If investors can earn 10 percent interest per year in Nigeria and 16 percent per year in Britain, they will prefer to interest in Britain, provided that the inflation rate and risk are the same in both countries.

As investors buy British pounds with Nigeria Naira, the value of the pound will appreciate relative to the Naira. At the same time the increased demand for British securities also tends to reduce the interest rate differential between the United Kingdom and Nigeria. This, interest rates and exchange rates adjust until the foreign exchange market and the money market reach equilibrium.

2.1.3 BALANCE OF PAYMENTS

This refers to a system of government accounts that catalogs the flow of economic transactions between the residents of one country and the residents of other countries.

When a country sells (Exports) more goods and services to foreign countries than it purchases (Imports) from abroad, it will have a surplus in its balance of trade. On the other hand, continues deficits in the balance of payments are expected to depress the value of a currency, because such deficits would increase the supply of that currency relative to the demand.

2.1.4 GOVERNMENT POLICIES

A national government may; through its Central bank, intervene in the foreign exchange market, buying and selling currencies as it sees fit to support the value of its currency relative to others. Sometimes a given country may deliberately pursue a policy of maintaining an undervalued currency in order to promote cheap exports.

In communist countries, the currency values are set government decree. Even in some free market countries, the Central Bank fix the exchange rates, subject to periodic review and adjustment. At times, some nations affect the foreign exchange rate indirectly by restricting the flow of funds into and out of the country. Monetary and fiscal policies also affect the currency value in foreign exchange markets.

For example, expansionary monetary policy and excessive government spending are primary causes of inflation, and continual use of such policies eventually reduces use of such policies eventually reduces the value of the country's currency,

2.2   FOREIGN EXCHANGE AND BANKING OPERATION

After my visit to First Bank of Nig PLC and an interview with the Head of Foreign Exchange Transaction, I was able to know and understand what is required of each customer and how the management provides the best assistance to customers. Each customer is made to fill a form t explain the type

of money with him and the country's currency he wants to change it to, his particulars and reason(s) for wanting to change the money.

The federal Government gives foreign currency out weekly. The Central Bank does the BIDDING. Bidding is more or less like auction, a public sale in which each item is sold to the person who offers the highest price.

The foreign currency given out may be about $50Million. The Central Bank acts as the Central body where various bank delegates meet. The Central bank as the coordinator sends messages to commercial banks. When all bank delegates meet, they start negotiating. The foreign currency the government sends out varies, it can be more or less than $50mollion.
All banks cannot be given the same amount of currency because some banks will definitely have more customers.

2.3   MECHANISM OF RELATING TO CUSTOMER

After sorting and buying of foreign currency, the meeting comes to an end for that week. Individual banks will look into their conversion rate to see how they would do it to yield interest for them.

When all necessary calculation is done, they sell to public. The rate of a dollar to Nigeria currency as at August 2001 was ₦120. By mid November (3months later) it was ₦130 to a dollar, it is increasing everyday because the country's money is devaluated.

The reason why commercial banks buy directly from the Central Bank and sell to the public is to miximise profit. Since thee will be a standard value whereby no bank must sell his foreign currency higher tan that, the Central bank has helped in maximizing profits. Banks also sell services to their customers. This they do by treating them kindly and giving them prompt attention.

The commercial banks need no requirement before they can buy foreign currency from the bank since they are bonafide member of the parliament. The representative of the bank will just go for the meeting after negotiating, they arrive at an average figure and ser a standard value of existing operation, as procedure and system in order to obtain a full appreciation of the prevailing situation so that an effective computerized systems may be designed and implemented if proved flexible. It is the study and evaluation of activities and procedures. It implies the examination of each and in relation to the whole.

System analysis involves 4 stages which are as follows:

- *INVESTIGATION*: Facts finding and recording
- *ANALYSIS OF THE FACTS RECORDED*
- *DESIGN OF ALTERNATIVE SYSTEM USING COMPUTER*
- *IMPLEMENTATION OF THE NEW SYSTEM AND REVIEW*

- **_INVESTIGATION_** – This is a miniature systems analysis and design effort that entails an exploration of alternatives design options and an analysis of the costs and benefits of each alternative. If several alternatives seem to be realistic in their potential costs and benefits, the project proceeds to the next phase, SYSTEM ANALYSIS.

However, if no feasible alternatives cost exist the project can be terminated.

- **_SYSTEMS ANALYSIS_** – Here, full detailed study of the current system, including its procedures, information glows, and methods of work organization and control. Here certain vital questions are asked.

1.   Why did the problem occur?

2.   Why were the present methods adopted?

3.   What are the alternative methods?

The analysis also spells out the strength and weakness of the existing system.

- **_SYSTEM DESIGN_** – The analysis of the current problems is used at the beginning of systems design to develop objectives for the proposed system.

The analysis may lead to number if possible alternative designs. For example, different combinations of manual and computersed elements may be considered. Once one alternative has been selected the purpose of the design stage is to work from the requirements specification to produce a system specification.

The system specification will be a detailed set of input documents, forms, report layouts, which provide details of all feature of the system.

DESIGN ELEMENTS

1.   **INPUT** – Considering of input will be influenced greatly by the needs of output e.g. the necessity for quick response from the system world determines the need for an on – line type of output. Considered would be given to:-

(a)   Data collection method and validation
(b)   Types of input media available
(c)   Volumes of input documents
(d)   Design of input layouts.

2.   **OUTPUTS** – It is necessary to consider what us required from the system before deciding how to set about producing it. These requirements will have become clear as the project progressed. The analyst will need to consider.

(a)   Form
(b)   Types

(c)   volume and frequency of reports and documents.

Choice of output media will also have to be made.

   3.   **FILES** – This element is very muck linked to input and output. Input is processed against the files to produce the necessary output. Considerations involved in designing files are:-

   (a)   Storage media
   (b)   Method of file organization and access
   (c)   File security
   (d)   Record Layouts

▪   ***IMPLEMENTATION*** – This is the process of coding, testing and documenting programs in the system. This process may take as much as 60 to 70 percent of the overall systems development effort. It involves development of quality assurance procedures, including data security, backup and recovery, and system controls. It also involves testing programs with both artificial and live data and training users and operating personnel.

   The system analysis procedure carried our in this project is as illustrated below.

INVESTIGATION:

SUBJECT: FOREIGN EXCHANGE RATE AT FIRST BANK OF (NIG) PLC

SCOPE: THE CASHIER AND FOREIGN TRANSACTION DEPARTMENT

OBJECTIVE: REVIEW OF FOREIGN EXCHANGE RATE AT FIRST BANK OF (NIG) PLC USING THE COMPUTER INSTEAD OF THE CURRENT SYSTEM (MANUAL) BEING USED.

DISCOVERIES: TIME WASTAGE

LACK OF STAFF

ACCURACY

LACK OF STANDING MACHINE

LACK OF GOOD DOCUMENTATION

A system is a network of interrelated procedures that are joined together to perform an activity or assembly of component united by some form or regulated inter – action to form an organized whole. A system is likely to be divided into many sub – systems. Foreign Exchange system is a sub – system under the activities of First Bank.

System Analysis can then be said to be concerned with converting the objectives of management as far as information and data are concerned into methods that are amenable processing by the Computer. It is also the process of collecting and analysing facts in respect.

After purchasing the foreign currency, it is not possible to send the remnant back. Infact, there will be no remnant because any bank is liable to buy what he can consume within the stipulated time, there may be an increase in interest rate by next week and all banks will give account of their gain during meeting. So, any bank will purchase what is enough for him and not excess.

The current exchange rate as at 7th January 2002 at

First bank of (Nig) Plc.

Foreign Exchange			
We →		**Buy**	**Sell**
1	US Dollar	114.00	118.00
2	UK Pound	163.90	171.50
3	Swiss Franc	62.4126	70.4218
4	Japanese Yen	0.8702	0.9873
5	Swedish Kroner	9.8519	11.5139
As At 04 – 03 – 2002			

CHAPTER THREE

ANALYSIS OF EXISTING SYSTEM

3.0   THE EXISTING SYSTEM

Foreign Exchange as we have said is a system adopted by banks of various countries to enhance business interaction within individual, business organizations and Government abroad.

This project work is limited to foreign exchange transaction in Banks using First Bank as case study. The existing system of foreign exchange transaction in this bank is a manual system, customers who wants to buy foreign exchange is made to go through the manual process.

The manual process of exchange transaction is that whenever a customer is interested in buying a foreign currency, he/she is made to fill a form stating his / her particulars. In this form the customer will specify amount of money he wants to change to foreign currency and also the type of foreign currency he want.

After submitting this form, all the customers will be asked to wait while other process is going on. The officer in – charge will now register each customer's particular in a register before passing the firms to the senior officer who will verify all the forms accordingly.

Then the customers will be given another form on which the current exchange rate to Naira of major foreign foreign currencies are stated. Followed by this the customer will sign on the form and submit with the Naira equivalent to the officer in charge.

As we can see in some cases it is only one officer who is attending to more than 100customers at a time.

3.1   PROBLEMS FACING THE EXISTING SYSTEM

Manual exchange rate services do pose some problems just like all other systems that are done manually. The main aim of this project is to find ways by which all these problems can only be solved through the detail understanding of the systems.

However, the head of foreign transaction unit needs to understand some of the problems before any necessary solution to the problems. The main problems facing the exchange system in the bank are as follows:-

- o   Shortage of staff

- o   New staff not well trained

- o   Time consuming

- o   Lack of standard machine

- o   Lack of good documentation

The system is uneconomical

SHORTAGE OF STAFF

This is inadequate supply of qualified staff to deal with the customer present in the bank at any given time. First bank is such a large Bank that needs prompt services to be given to their customers, who has come from all walks of life and who needed to be treated with care and caution.

NEW STAFF ARE NOT WELL TRAINED

Staffs are recruited when old ones are laid off and when there are lots of work to be done. These new staffs find it hard to adapt to the system they find it hard to acquire the necessary know how of the system, so they need lot of time before they can fix in properly into the system.

TIME CONSUMING

Due to lack of staffs, customers are subject to un – necessary waiting and standing at the desk. They are made to wait or even take queue, this queue may take up to 5 minutes per customer, this is a constrain for customers that hate un – necessary attraction.

LACK OF STADARD MACHINE

Absence of good, standard and automatic machine like the Computer makes the work very sluggish in obtaining information about the current exchange rate, absence of such machine makes it difficult to know when there is a change in the currency value and the increase rate. All these work are done manually and human beings are liable to memory failure, inaccuracy and ineffectiveness.

LACK OF GOOD DOCUMENTATION

Inadequate write – up about the existing system coupled with illegible writings contributed to the insufficient documentation of the existing system. Documents are easy to lost or burn. Insufficient documentation makes it hard and difficult for referencing to the past.

THE SYSTEM IS UN – ECONOMICAL

Instead of employing about 10 workers to make up a department, a computer machine and about two or four staffs could be employed to carry out

the activities of the department and this will save the management lots of money, instead of paying for 10 – workers, 2 people will be fine for the work.

3.2 SOLUTIONS TO THE PROBLEMS ON THE EXISTING SYSTEM AND THE IMPORTANCE OF USING COMPUTER TO SOLVE THESE PROBLEMS

Computer is an electronic machine that can perform series of arithmetic and logical problems without human intervention. It also has the ability to store data for future use regardless of the volume of the data. Also, it has the facilities to access and update the files to show current position of things. Referencing can also be made to these existing files without much problems.

With the above characteristics of computer, the problem involved in exchange transaction in banks could be given a possible solution by computerization of the existing system. Computers are very fast in nature, it can process information at a very high speed.

However, computer can process millions of instructions per second with the required output given immediately. The use of computer will save time, it will be accurate and effective. These are some of the functions that will be taken care of by the use of the computer.

CONSISTENCY

Once a correct program has been written and tested to satisfy our need, this program can be access as many times as possible without the computer getting annoyed as the case may be when dealing with human beings or bring out mistake due to boredness or tiredness.

The computer is ever consistent; it can do a lot of repeated work or repeated process without making errors.

TIME SAVING & SPEED

The computer is an automatic electronic machine that can perform series and complex problem at a very high speed. It will save the customers from un – necessary standing and waiting and at a the same time save the customer embarrassment of attracting undue attraction.

RELIABLE

Once the program has been written and tested, the output will be the same anytime the same input is processed without any difference in the output. This will eliminate the mistakes made manually.

The computers also prevent the problem of shortage of staff. With the use of the computer, a staff or two is needed to operate the system, instead of employing about 6 staff or more to do the job manually.

The computer can also solve the problems of untrained staffs. With the use of well-written and tested program. Operating the computer to give the desired output shouldn't be a problem and more over the program is a menu driven program that simplifies each steps and ask in simple English what their next state of action would be.

It also solve the problems of lack of standard machine. With the use of the computer, the problem faced during calculation of exchange rate will be eliminated and the embarrassment associated with this old existing problem will be eliminated. It also solve the problem of referencing. With the use of the computer machine, past existing records and files could be referred to ascertain what is contained there in the file.

The running of the computer system is economical. With the use of the computer one or two people will only be needed to operate the computer, this will

reduce the salary structure to be paid to workers and this will also prevent the normal "Workers Unrest" which are normally associated with workers when they are in group.

3.3   SYSTEM DESIGN AND FORMAT

This is concerned with the co – ordination of activities, job procedures and equipment utilization in order to achieve the organizational objectives. It is a highly creative process and facilitated by the following:-

- Strong problem definition

- Pictorial description of the existing system

- Act of requirement of the system

In the design phase, we look into the various alternatives:-

i.)   It determines the choice set, that is all possible systems

ii.)   It divides the choice – set into the attainable and the unattainable sets. The former contains only those alternative that have a reasonable chance of acceptance by management

iii.) It places in order the alternative in the attainable set from the most favoured to the least favoured.

iv.)   It prevent the most highly favoured alternative to management for review and hopefully, approval of the alternatives.

3.3.1 INPUT DESIGN

It shows the design that is carried out within the system before output. It includes processing data to give required design. It includes the countries conversion equivalent;

e.g.   Amount Submitted
- Naira equivalent
- Dollar equivalent
- Pound equivalent

It shows the type of data numeric, alphanumeric or special purpose. It also shows the field or character length for the data.

3.3.1.1 INPUT FORMAT

Includes adding or keying in all data required for the program running. Input format design what the program will look and what if should do. It required keying in of data. It requires information and they are fed into the system. It deletes unnecessary data and modify the useful ones.

After keying in process of the data into system information starts after which it is fit for designing.

3.3.2 OUTPUT DESIGN

The output design should give what is required of the program, how it will be utilized when other data are key in.

FIRST BANK OF (NIG) PLC

CONVERSION OF FOREIGN EXCHANGE AS AT 9TH JANUARY – 10TH DECEMBER, 2001

AMOUNT SUBMITTED	NAIRA EQUIPMENT	DOLLAR EQUIVALENT	POUND EQUIVALENT

Continues entry of data as wish, the program can generate any set of numbers of input.

3.3.2.1 OUTPUT FORMAT

Output format is to show how the process will work and what it looks like, input format undergoes all the process of debugging and finding out that it works well. It works to suit the requirement of the programmer. Output formats include, addition, editing, saving until the program runs well. Output formats require testing the program using all data for inputs to give out desired output which it the expected result. It shows when system can be quit.

3.3.3 FILE DESIGN

A file is a collection of related data or records which are stored in an I/O (Input / Output) medium which can then be accessed for processing. There are 4 type of file organization.

1. Serial file organization
2. Sequential file organization
3. Indexed sequential file organization
4. Random file organization

In the computerization and design of this project, the indexed sequential file is used for both the input system design and the processing system design.

Each record on the file has record key which is unique to each record. The records are therefore stored on the file in the sequential of their record. This indexed sequential allows for both sequential and random accessing of records which makes it faster and easier to access. This gives a good response time to the processing of the data.

These files are stored on the floppy diskettes or the main memory of the computer. The output file is organized sequentially and it is directed to the printer for hard copy printing.

3.4 IMPLEMENTING THE NEW SYSTEM

The system implementation involves a lot of steps, it is a process of putting the new system into operation; which include the following:

1. Designing of conversion tasks & Procedure: The input (Data) operator are to be instructed on the entire input operation of the system, not that the actual processing is not known by them (Close – box Processing).

2. Instruction Manual and Training materials should be produced for those that would be involved in the actual operation of the system, they should have the ideals about the system (Existing system).

3. The acceptance document should be produced by the system users which serves as a confirmation note that the system is well approved and friendly with the users.

HARDWARE AND OPERATING SYSTEM REQUIREMENT

In the new system, some hardware and software that is required for the system is of great important to be discussed.

1. Hardware Requirement

The hardware support is the physical component, which make up the visible part of a computer system. In the new system, the hardware require for the operation are based on how data are to be processed in the exchange transaction.

1. Full multimedia PC
2. Line printer or Laser jet printer
3. UPS

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2. Software Requirement

The software, which are basically program used in the implementation of this system consist of the following:

- Visual Basic 6.0
- Windows '98
- Desktop Word Processing

Other relevant operating system can also be used. Anti – Virus to protect system against Virus infection such as Dr. Solomon, Norton Anti Virus

MAINTENANCE AND MANAGEMENT

At every stage of system life span, minor changes to an operational system to meet requirement that arises in the normal cause of events. The areas that are likely to be affected will definitely be he software aspect, to cover new changes in software version and some other hardware like the hard – disk capacity, because as the system continues, large hard – disk space will be required for storing of information.

In carrying out the maintenance of the system, the procedures and functions that have taken place before the installation of the system must be accomplished according to procedures for authorizing change to the system.

The staff handling the new system should cultivate the attitude of maintenance culture of all the hardware and software that make up the system. And at time of maintenance, staff should be retained I areas where major changes are made, either to the system (PC) or the software been used.

3.5 ADVANTAGES OF THE PROPOSED SYSTEM

The proposed system is aimed at solving the problems of the existing system. The advantages includes:

i.) The processing time in the bank is enhanced

ii.) Staff in foreign exchange section may also have the advantage of being a computer literate

iii.) Mistakes made when writing on forms are avoided because inputs are typed on to programmed storage locations.

iv.) Error can e easily corrected

v.) Efficiency of bank operation is enhanced

vi.) Output can always be obtained in any desired format

vii.) Workflow I the bank as a whole is made satisfactory

viii.) Security – A high degree of security is enforced by the new system i.e. it allow only the authorized user to work on the system through the use of password

ix.) It reduce redundancy among staff and disallow duplication of records.

CHAPTER FOUR

4.0   SYSTEM DOCUMENTATION

Documentation of system provides necessary means of coordinating the procedure, programming and other operations involved in the system. Proper system documentation refers to a well - written description of all the components parts and the operation of the system. The documentation usually the form used, the personnel, the equipment needed and the sequence operation form input to output.

This system is developed using VISUAL BASIC programming language and it is the menu – driven system in which it is possible for non computer literate to operate and perform some necessary operations.

Just immediately the program is put in place, it takes you to the MAIN MENU; the main menu gives you five options:

        (1)   Rate Transaction

        (2)   Exchange Transaction

        (3)   Customer's Registration

        (4)   Exchange Transaction Report

        (5)   Customer Detail Report

        (6)   Exit

The stage of analysis requires the summary and precise description of all the program modules that makes up the whole packages. The program is menu driven, at the beginning of the program a menu is displayed to enable the operator to make his choice. Data can e input as required.

➤   PROGRAM DOCUMENTATION

This is the detailed description of the proposed new system. It involves the operating procedure and the logic used for each of the program modules.

This documentation is important because it serves many purposes such as a means of communicating all that is required to be known about the new system to all interested parties that will make the system an operational success. It also helps in keeping a permanent record of the new system which is used for evaluation and training purposes.

4.1 INPUT SPECIFICATION

The inputs are the raw material (data) that is fed into the computer for processing. This input specification describes in detail the input layout having the field name, data type and the filed length.

FIELD NAME	DATA TYPE	FIELD / CHARACTER LENGTH
Amount Submitted	Numeric	9,2
Naira Equivalent	Alphanumeric	9,2
Dollar Equivalent	Alphanumeric	9,2
Pound Equivalent	Alphanumeric	9,2

The input specified are supplied through the keyboard and the visual display unit (VDU) for interactive purposes.

This interactive mechanism makes data entry easier, interesting and useful for validation purposes.

INPUT VALIDATION

This system provides on line validation for all the input files during the data entry storage. The system makes sure that all the inputs entered are valid as specified in the input specification.

4.2   OUTPUT SPECIFICATION

The output specification describes the detail output record to confirm with the design format described in the output design stage. All the output records has a maximum of 80 characters per line for the line printer.

The output produced contain information that is needed from the input. The output is designed to space the information evenly to give a meaningful and easy reading of the output.

The output are produced on the hard copy computer sheets for visibility and legibility purposes. This allows only sequential accessing which enhances good report generation.

4.3   LOGIC STEPS OF EACH PROGRAM

As earlier mentioned, this computerization system is made up of many programs, which are united together to attain the required objectives.

The steps to executing the entire program system can be shown by using the pseudo – algorithm shown below:

1.   Display headings on screen
2.   Display the available options / program modules
3.   Accept the options by entering the corresponding number against each option
4.   The program calls the corresponding program module and executes it.

The steps in executing the program is as enumerated below:

1st step

After the program is loaded, it goes straight to Log On Screen where any authorized user will be allow entry to the program. Each user will be requested to type in his name and password which must have been entered into the system to ascertain authorized users. If the user gets it right, it goes to the next stage else, the computer says "Invalid Password". The Log on Screen is as shown below.

LOG ON SCREEN
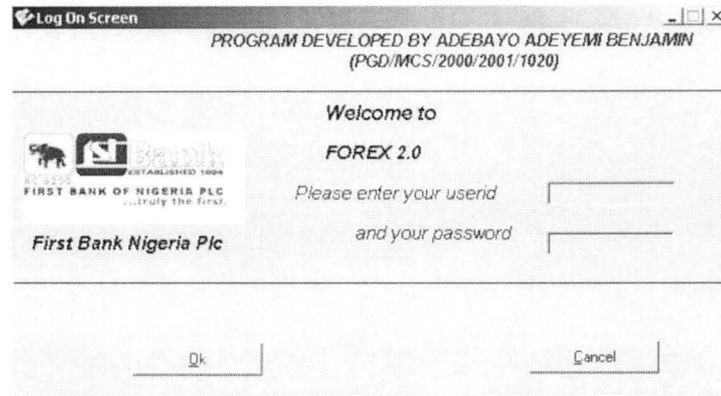
2nd STEP

After the user must have successfully entered his identification and password, the program goes to the next stage which is the Information Screen. There are Five Menus on the information screen each of which has sub menu under them. The main menus on the information screen are explained below with each sub menus enumerated under them.
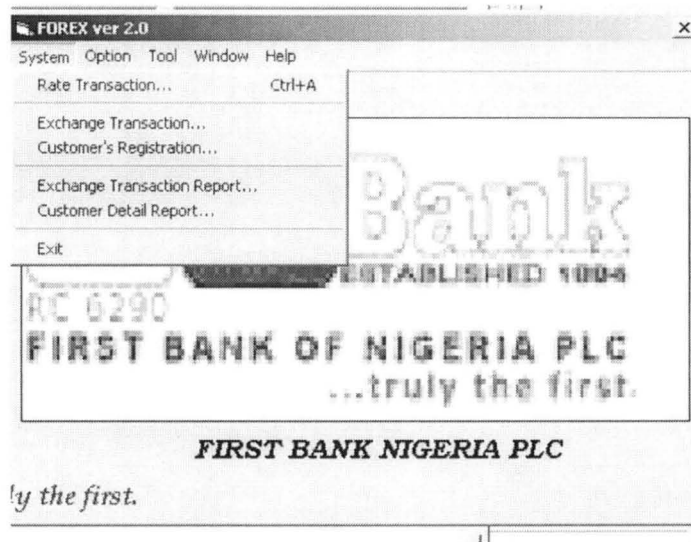
MAIN - MENU

1. SYSTEM

i.) Rate Transaction

ii.) Exchange Transaction

iii.) 　 Customer Registration

　 　 　 iv.) 　 Exchange Transaction Report

　 　 　 v.) 　 Customer Detail Report

　 　 　 vi.) 　 Exit

i.) 　 *Rate Transaction*

The Rate Transaction explains the conversion rate of each currency in the Foreign Exchange Transaction. It shows the conversion rate of each currency.

ii.) 　 *Exchange Transaction*

Under this menu, customer's request is processed. That is, the particular currency any customer want to buy from the bank or sell to the bank.

iii.) 　 *Customer Registration*

All customers keeping account with the bank is registered under this sub menu with their particulars.

iv.) 　 *Exchange Transaction Report*

Report of all transactions made can be printed out using this menu name. All customers can be viewed using their account number.

v.) 　 *Customer Detail Report*

Customer detail can be viewed on the screen and also it can be printed out.

vi.) 　 *Exit*

The program can be terminated using exit.

2. 　 **Option**

　 　 　 i.) 　 Trailing

　 　 　 ii.) 　 Password

i.) 　 Trailing

Each time the programmer make any modification on the program it will be registered under audit trailing which can be viewed for record purpose.

ii.) 　 Password

User can change his password under this menu name

3.   **Tool**
    i.)   Log In
    ii.)   Log Out
    iii.)   Users
    iv.)   Revision Log

i.)   Log In

This menu is used to validate users to the program.

ii.)   Log Out

This menu name disallow users from having access to the program.

iii.)   Users

It allows new users to be added to systems. This is where all valid users will be added for proper identification.

iv.)   Revision Log

If there is any observation or complain by users it will be registered here so that programmer can take note of it for proper implementation.

4.   Help
    i.)   Help Contents
    ii.)   Search for Help on
    iii.)   About Foreign Exchange Transaction

i.)   Help Contents

This is not included because it is still under development

ii.)   Search for help on

Still under development

iii.)   About Forex Transaction

It talks about the program foreign exchange transaction

4.4 IMPLEMENTATION OF THE NEW SYSTEM

Implementation is the coordination of the efforts of the user department and the data processing department in getting into operation. Therefore, this is the step of taking what has been designed (computerized) into operation.

To implement this computerized system, the following steps must be taken:

1. **Training of Staff** – This involves computer literacy program for the user department (foreign exchange) before working with the computer. The functions and operation of the design system will be carefully explained to the user.

2. **System Testing** – Before the system can be accepted and used, it has to be tested using test data so as to ensure that it is working according to the objectives of the organization. This program is tested using some data to see whether it will convert money or not.

3. **Change Over Procedure** – This is the process of implementation in which the new system takes over directly form the manual system immediately or the new Automated system is been run and used concurrently using the same set of data to make sure that the computerized system is working according to specification.

For record purpose, this automated system was designed and implemented on an IBM compatible. This means that this system can be implemented on any IBM compatible computers.

4.5 SYSTEM REVIEW AND MAINTENANCE

Since the main reason for introducing the automated system is to achieve certain goal and objectives, then, the new system has to be examined from time

to time once it has become operational to ensure that the computerized system us still working as required.

Therefore, the operations and users of this system must constantly check the output of the system to make sure that it works accordingly. The reasons for reviewing and maintaining the system are:-

1. To deal with unforeseen problems that might arise later during the operation which was not included during the systems development.
2. To ensure that the designed system is able to cope with the changing requirements of the organization.
3. To ensure that the planned objectives are being met and necessary actions taken if they are not

4.6 SYSTEM SECURITY

This Automated system ensures adequate security for foreign exchange transaction – history file of banks so that only authorized users can have access to the system or to any record on the file.

The security is ensured by the use of PASSWORD which is the access code to this system. This helps to put the mind of the banks at rest because all transaction history file are given maximum security and privacy so that no one can access the information on the file except the authorized user.

CHAPTER FIVE

RECOMMENDATION

5.0   THE PROJECT LIMITATION

This project was designed to handle only the receptionist and cashier unit in the bank, however, the program is flexible, it can still be modified at a later stage to incorporate other aspect of the job done in the bank.

5.1   RECOMMENDATION

The recommendation of any projects depends largely on the capability, flexibility and reliability of such program. This project is designed to solve exchange rate problems faced in the bank with particular reference to **FIRST BANK NIGERIA PLC**.

I finally recommend that computer should be used instead of the manual system being used presently, since computer has proved to be consistent, accurate, fast, reliable, effective and has the ability to store large volume of data.

I would like to recommend to the management of *First Bank* to go computerized considering the above facts of the computer.

5.2   CONCLUSION

In this project the essence of analysis, design, investigation and implementation of computerization of a system have been adequately studied.

With particular reference to *Automated Foreign Exchange Transaction* at *First Bank* have proved all right and beneficial, economical.

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PROGRAM SECTION FOR MAIN MENU

```
Option Explicit
Dim myuser As Recordset

Private Sub cmdcancel_Click()
Unload Me
End Sub

Private Sub CMDOK_Click()
Dim mytargetdb As Database
Dim myinv, myinvcount As Recordset
Dim rdset As Recordset
Dim logtime, logdate, logwhen As String
logtime = Str(Time)
logdate = Str(Date)
logwhen = "Log on " & logdate & " " & logtime
Set mytargetdb = OpenDatabase("c:\foreignexch\forexdata.mdb")
mytargetdb.Execute "insert into trailing(who,what) values('" & myname & "','" & logwhen &
"')"
Unload Me
frmsystem.Show
If myright = "N" Then
   frmsystem.mmnfilter.Enabled = False
   frmsystem.mmnwaybill.Enabled = False
   frmsystem.mmnpassword.Enabled = False
   frmsystem.mmnusers.Enabled = False
Else
   frmsystem.mmnfilter.Enabled = True
End If
If myrpt = "N" Then
        Else
End If
If mydel = "N"Then
   frmtrailing.Command1.Enabled = False
   frmuser.cmdde.Enabled = False
Else
   frmtrailing:Command1.Enabled = True
   frmuser.cmdde.Enabled = True
End If
frmsystem.Toolbar1.Buttons.Item("waybill").Enabled = True
frmsystem.Toolbar1.Buttons.Item("tariff").Enabled = True
frmsystem.Toolbar1.Buttons.Item("password").Enabled = True
frmsystem.Toolbar1.Buttons.Item("user").Enabled = True
frmsystem.Toolbar1.Buttons.Item("help").Enabled = True
frmsystem.mmnlogin.Enabled = False
frmsystem.mmnusers.Enabled = True
frmsystem.mmnlogout.Enabled = True
frmsystem.mmnwaybill.Enabled = True
frmsystem.mmntariff.Enabled = True
frmsystem.mmnexchrpt.Enabled = True
frmsystem.mmnusers.Enabled = True
frmsystem.mmnrevlog.Enabled = True
frmsystem.mmnpassword.Enabled = True
frmsystem.mmncust.Enabled = True
frmsystem.mmncustdetail.Enabled = True
```

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```
End Sub

Private Sub CMDok_GotFocus()
Dim mychbase As Database
Dim mycustcount, mycust As Recordset
Dim MSG
Set mychbase = OpenDatabase("c:\foreignexch\forexdata.mdb")
Set mycustcount = mychbase.OpenRecordset("select count(*) As numberd from sysuser
where userid = '" & txtuserid & "' and userpassword = '" & txtpassword & "'")
If mycustcount("numberd") >= 1 Then
cmdok.SetFocus
Else
 MSG = MsgBox("Invalid Password, Please enter valid users password", 16)
 txtpassword = ""
 txtpassword.SetFocus
 End If
End Sub

Private Sub Timer1_Timer()

End Sub

Private Sub Form_Unload(Cancel As Integer)
Unload Me
End Sub

Private Sub txtpassword_GotFocus()
Dim mychbase As Database
Dim mycustcount, myextract, myinv As Recordset
Dim MSG
Set mychbase = OpenDatabase("c:\foreignexch\forexdata.mdb")
Set mycustcount = mychbase.OpenRecordset("select count(*) As numberd from sysuser
where userid = '" & txtuserid & "'")
If mycustcount("numberd") >= 1 Then
Set myextract = mychbase.OpenRecordset("select * from sysuser where userid = '" &
txtuserid & "'")
myid = myextract("userid")
myname = myextract("username")
mypass = myextract("userpassword")
myright = myextract("supervisor")
myrpt = myextract("report")
myback = myextract("backup")
mydel = myextract("deleteright")
lblusername = "Hello, " + myextract("username")
mychbase.Close
        Else
 lblusername = "Invalid Userid, Please enter valid userid"
 txtuserid = ""
 txtuserid.SetFocus
End If
End Sub

Private Sub txtpassword_KeyPress(KeyAscii As Integer)
If KeyAscii = 13 Then cmdok.SetFocus
End Sub
```

```vb
Private Sub txtuserid_KeyPress(KeyAscii As Integer)
If KeyAscii = 13 Then txtpassword.SetFocus
End Sub


Private Sub cmbcutype_DropDown()
Dim mytargetdb As Database
Dim mybook, tno, mycustcount, myinv As Recordset
Dim MSG, stdate, total, dat1 As Variant
Set mytargetdb = OpenDatabase("c:\foreignexch\forexdata.mdb")
Set mycustcount = mytargetdb.OpenRecordset("select * from convertion order by
country")
cmbcutype.Clear
Do Until mycustcount.EOF
    cmbcutype.AddItem mycustcount("country")
    mycustcount.MoveNext
Loop
mycustcount.Close
mytargetdb.Close
End Sub


Private Sub cmbcutype_LostFocus()
Dim mydb As dao.Database
Dim myrset As dao.Recordset
Set mydb = OpenDatabase("c:\foreignexch\forexdata.mdb")
If cmbtranstype <> " " Then
Set myrset = mydb.OpenRecordset("select * from convertion where country = '" &
cmbcutype & "'")
If cmbtrantype = "Buy" Then
  txtrate = FormatNumber(myrset("Buy"), -1, vbTrue, vbTrue, vbTrue)
Else
  txtrate = FormatNumber(myrset("Sell"), -1, vbTrue, vbTrue, vbTrue)
End If
End If
End Sub


Private Sub Command1_Click()
Dim mydb As dao.Database
Dim rs As dao.Recordset
Dim rscount As dao.Recordset
Dim v_transdate As Date
Dim v_custname1 As String
v_transdate = Date
If cmbtrantype = "Buy" Then
txteqamt = Round(FormatNumber(Val(txtcustamt * txtrate), -1, vbTrue, vbTrue, vbTrue))
End If
If cmbtrantype = "Sell" Then
txteqamt = Round(FormatNumber(Val(txtcustamt / txtrate), -1, vbTrue, vbTrue, vbTrue))
End If
If txtacctno = "" Then
v_custname1 = InputBox("Enter Customer's Name", "Customer's Name Capture")
  v_rate = FormatNumber(txtrate, -1, vbFalse, vbFalse, vbFalse)
  Set mydb = OpenDatabase("c:\foreignexch\forexdata.mdb")
  txtcustamt = FormatNumber(txtcustamt, -1, vbFalse, vbFalse, vbFalse)
  mydb.Execute ("INSERT into sales values('" & v_custname1 & "',Cdate('" &
v_transdate & "'),'" & cmbtrantype & "','" & cmbcutype & "'," & v_rate & "," & txtcustamt &
"," & txteqamt & ")")
```

```
          Else
'   v_custname1 = InputBox("Enter Customer's Name", "Customer's Name Capture")
    v_rate = FormatNumber(txtrate, -1, vbFalse, vbFalse, vbFalse)
    Set mydb = OpenDatabase("c:\foreignexch\forexdata.mdb")
    txtcustamt = FormatNumber(txtcustamt, -1, vbFalse, vbFalse, vbFalse)
    mydb.Execute ("INSERT into sales values('" & v_custname & "',Cdate('" & v_transdate
& "'),'" & cmbtrantype & "','" & cmbcutype & "'," & v_rate & "," & txtcustamt & "," &
txteqamt & ")")
End If
MSG = MsgBox("Any More Transaction To Process", vbYesNo)
If MSG = vbYes Then
    txtacctno = ""
    cmbtrantype = ""
    cmbcutype = ""
    txtrate = ""
    txtcustamt = ""
    txteqamt = ""
    txtacctno.SetFocus
Else
    Unload Me
    frmsystem.Show
End If
End Sub
```

PROGRAM SECTION FOR EXCHANGE RATE TRANSACTION

```
Private Sub Command2_Click()
Unload Me
frmsystem.Show
End Sub


Private Sub Form_Load()

End Sub


Private Sub txtacctno_LostFocus()
Dim mytargetdb As Database
Dim mybook, tno, mycustcount, myinv As Recordset
Dim MSG, stdate, total, dat1 As Variant
Set mytargetdb = OpenDatabase("c:\foreignexch\forexdata.mdb")
Set myinv = mytargetdb.OpenRecordset("select count(*) as numbr from customer where
custaccountno = '" & txtacctno & "'")
Set mycustcount = mytargetdb.OpenRecordset("select * from customer where
custaccountno = '" & txtacctno & "'")
If myinv("numbr") = 0 Then
    MSG = MsgBox("Customer Does Not Exist, Program Will Exit Out", vbCritical)
    Unload Me
    frmsystem.Show
    Exit Sub
Else
    v_custname = mycustcount("custname")
End If
mycustcount.Close
myinv.Close
mytargetdb.Close
End Sub
```

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```
Private Sub txtcustamt_LostFocus()
If txtcustamt <> "" Then
txtcustamt = FormatNumber(txtcustamt, -1, vbTrue, vbTrue, vbTrue)
End If
End Sub
```

PROGRAM SECTION TO GENERATE REPORT

```
Private Sub cmbair_DropDown()
Dim mytargetdb As Database
Dim mybook, tno, mycustcount, myinv As Recordset
Dim MSG, stdate, total, dat1 As Variant
Set mytargetdb = OpenDatabase("c:\foreignexch\forexdata.mdb")
Set mycustcount = mytargetdb.OpenRecordset("select * from convertion order by
country")
cmbair.Clear
Do Until mycustcount.EOF
    cmbair.AddItem mycustcount("country")
    mycustcount.MoveNext
Loop
mycustcount.Close
mytargetdb.Close

End Sub


Private Sub cmdcancel_Click()
Unload Me
frmsystem.Show
End Sub


Private Sub CMDOK_Click()
Dim X As Printer
Dim MSG, myinv, mycode As Recordset
Dim mycustcount As Recordset
Dim mytargetdb As Database
Dim i As Long
Set mytargetdb = OpenDatabase("c:\foreignexch\forexdata.mdb")
If txtdatefrom = "" Or txtdateto = "" Then
MSG = MsgBox("Date cannot be empty", vbCritical)
txtdatefrom.SetFocus
Else
If Not correctdat(txtdatefrom) Or Not correctdat(txtdateto) Then
MSG = MsgBox("Invalid date in From or To", vbCritical)
txtdatefrom.SetFocus
Else
If CDate(txtdatefrom) > CDate(txtdateto) Then
MSG = MsgBox("Date From cannot be greater than Date To", vbCritical)
txtdatefrom.SetFocus
Else
If Check1.Value = 1 Then
DataEnvironment1.Commands.Item("My_sales").CommandText = "select * from sales
where transdate >= cdate('" & txtdatefrom & "') and transdate <= cdate('" & txtdateto & "')
order by transdate"
rptsales.Show
Else
```

```vb
DataEnvironment1.Commands.Item("My_sales").CommandText = "select * from sales
where transdate >= cdate('" & txtdatefrom & "') and transdate <= cdate('" & txtdateto & "')
and currencytype = '" & cmbair & "' order by transdate"
rptsalespec.Show
End If
Set DataEnvironment1 = Nothing
mytargetdb.Close
End If
End If
End If
End Sub


Private Sub Combo2_DropDown()
Dim mytargetdb As Database
Dim mybook, tno, mycustcount, myinv As Recordset
Dim MSG, stdate, total, dat1 As Variant
Set mytargetdb = OpenDatabase("c:\foreignexch\forexdata.mdb")
Set mycustcount = mytargetdb.OpenRecordset("select * from airline order by code")
Combo2.Clear
Do Until mycustcount.EOF
    Combo2.AddItem mycustcount("code")
    mycustcount.MoveNext
Loop
mycustcount.Close
mytargetdb.Close
End Sub


Private Sub Combo2_LostFocus()
If Combo2.Text = "" Then
Combo2.SetFocus
Else
Dim mytargetdb As Database
Dim mybook, tno, mycustcount, myinv As Recordset
Dim MSG, stdate, total, dat1 As Variant
Set mytargetdb = OpenDatabase("c:\foreignexch\forexdata.mdb")
Set mycustcount = mytargetdb.OpenRecordset("select * from airline where code = '" &
Combo2 & "'")
Lbldesc.Caption = mycustcount("description")
End If
End Sub


Private Sub Form_Unload(Cancel As Integer)
frmsystem.Show
End Sub


Private Sub txtdatefrom_KeyPress(KeyAscii As Integer)
If KeyAscii = 13 Then txtdateto.SetFocus
End Sub


Private Sub txtdateto_KeyPress(KeyAscii As Integer)
If KeyAscii = 13 Then cmdok.SetFocus
End Sub
```
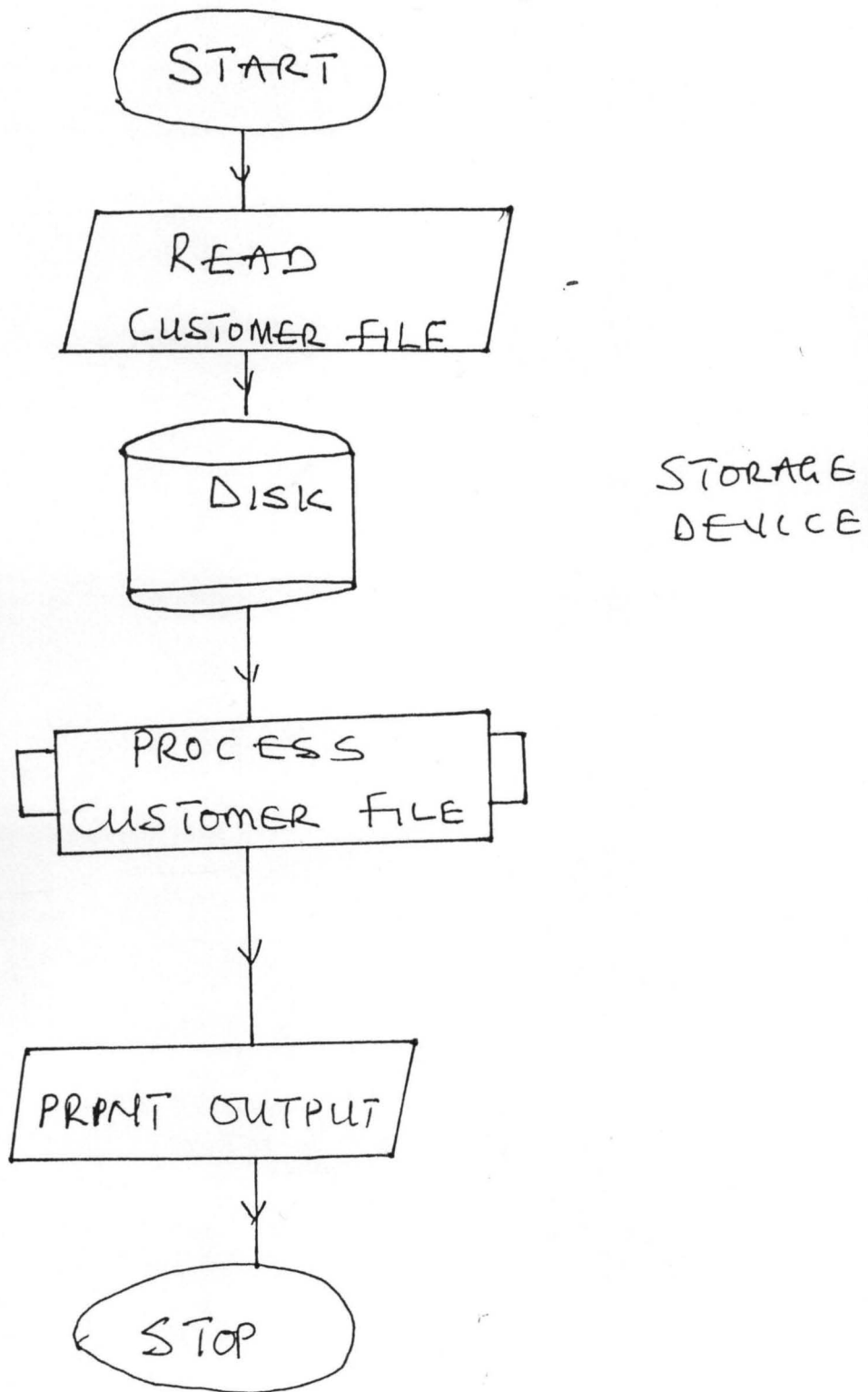
SYSTEM FLOW CHART

START

READ CUSTOMER FILE

DISK

STORAGE DEVICE

PROCESS CUSTOMER FILE

PRPNT OUTPUT

STOP

FIRST BANK OF NIGERIA PLC
...truly the first.

First Bank Nigeria Plc

Customer Detail Listing

ACCOUNTN	NAME	ADDRESS	TELEPHONE	NEXT OF KIN	E-MAIL
AC - 111120	Adetokunbo Ademole	Ademola street, off Isheri Road, Lagos	01 - 4701284	Mr Rotimi	Ademola@yahoo.com
AC - 111121	Mr Waheed Sanni	10, Sanni Street, Lagos	01 -7743791	Mr Abioye	sanni@yahoo.com
AC - 111124	Mr Adetokunbo Olawale	Olawale Street, Lagos	01 - 881234	Mr Olaosebi	olawale@yahoo.com
AC - 111125	Mr Olowola Femi	Femi Street, Lagos	01 - 771761	Mr Benson	olowola@yahoo.com
AC - 11121	Mr Tunji Olawole	Olawole Street, Lagos	01 - 771232	Mr Idowu	tunji@yahoo.com

FIRST BANK OF NIGERIA PLC
RC 6290
...truly the first.

First Bank Nigeria Plc

Daily Exchange Transaction Report

Transaction Date	Customer's Name	Transaction Type	Currency Type	Rate =N=	Customer's Amount	Amount Paid
19/03/2002	Mr. Temeidemi Sogunle	Buy	Tokyo (Yen)	145.00	125,000.00	18,125,000.00
21/03/2002	Mr. Olumide Eleshin	Sell	Canada (YEF)	134.00	2,500.00	19.00
24/03/2002	DAYO	Buy	Duche (Duc)	110.00	2,500.00	275,000.00
24/03/2002	Ojo Aina	Buy	Canada (YEF)	120.00	14,200.00	1,704,000.00
24/03/2002		Buy	Duche (Duc)	110.00	12,000.00	1,320,000.00
24/03/2002		Buy	Duche (Duc)	110.00	12,000.00	1,320,000.00
24/03/2002	DAYO	Buy	Duche (Duc)	110.00	1,200.00	132,000.00
24/03/2002	Mr. Wale Thompson	Buy	Canada (YEF)	120.00	1,200,000.00	144,000,000.00