THE USE OF ELECTRONIC BANKING AS A TOOL FOR QUALITY SERVICES AND CASH MANAGEMENT

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APPROVAL PAGE

This is to certify that this project work undertaken by BALA HABIBU with Admission Number G92/BAP/7058 has been prepared in accordance with the regulations governing the preparation of project in Ahmadu Bello University, Zaria.

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DECLARATION

I hereby declare that this project has been conducted by me under the guidance and supervision of Mallam Ibrahim Fari Okeji, my project supervisor of the Department of Business Administration, A.B.U. Zaria and that I have not copied any previous project work or any literature. Writers whose work has been referred to in this project has been acknowledged.

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DEDICATION

This project is dedicated to the Glory of Allah, to my late father, Alhaji Abdulsalam Adamu, my late wife Mrs Mohammed Habib Bala and my children, Asmau, Nafisat and Nasiruddeen.

ACKNOWLEDGEMENT

I would like to place my sincere gratitude and appreciation to my parents for giving me a full support throughout the course of my Education.

To my Supervisor, Mal. Ibrahim Fani Okeji, for his invaluable guidance in making this work a reality. And to all my lecturers for their academic assistance. Also, to all people who offered useful advises and criticisms while making this project.

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My thanks also goes to all my friends, my staff and well wishers, whom by one way or the other assisted me to see that this programme is successfully completed.

BALA HABIBU
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ABSTRACT

This research project seeks to examine and appraise the use of Electronic Banking as a tool for quality services and cash managements. It extensively examines the theory of cash management and deals with Electronic Banking as it relates to it. Avery detailed conventional banking procedures used by cash managers to achieve the overall objectives of ensuring that a company retains adequate liquidity and properly manages the timing of cash inflow and outflow was presented at the end of the discussions.

The objectives of the appraisal is to examine the applications or uses of . Electronic Banking for quality services and or cash management keeping in mind the solution offered by conventional manual banking procedures. The'idea is to highlight its use, bring out the advantages for quality effective services and shows its identified shortcomings along with measures to deter fraudulent practices. Availability of information at the disposal of every cash manager using Electronic Banking for cash management makes its use invaluable if the joint objectives of accelerated collection of receivables and systematic delay of payable is to be achieved. Also, by the touch of a computer button, information regarding bank balances are within the manager's reach instantly. Similarly, instructions can be issued by the cash manager on his personal computer in the office to the bank using software, computer communication. In both cases, accuracy of information is assured and faster decision on the use of funds can be taken appropriately.

This research study was compiled following interviews with Electronic Banking Consultants in FSB International Bank Pic and Access Bank Pic who have worked together with Cash Managers of various companies to design account receivable and account payable systems that make extensive use of Electronic

Banking. Reference materials from various authors regarding the origin and banking history, conventional banking and cash management procedures and practices were also used. Also discussions held with the supervisor and colleagues were acknowledged.

The practice and use of the system is just coming into being in Nigeria. With time to come, more people will join in its uses most especially when the cost of the electronic products become less. This of course means that a lot of companies will use Electronic Banking for Cash Management and fraudulent practices will rear its ugly head.

Future research on the subject should be aimed at itemising various successful or attempted frauds reported and proffer solutions to mitigate losses should be forwarded.

TABLE OF CONTENTS

TITLE PAGE----------i
APPROVAL PAGE----------ii
DECLARAION----------iii
DEDICATION----------iv
ACKNOWLEDGEMENT----------v
ABSTRACT----------vi
TABLE OFCONTENTS----------viii
CHAPTER ONE
GENERAL INTRODUCTION
1.1 INTRODUCTION----------1
1.2 RESEARCH PROBLEM----------2
1.3 OBJECTIVE OF STUDY----------3
1.4 SCOPE OF THE STUDY----------4
1.5 RESEARCH METHODOLOGY----------5
1.6 LIMITATION OF THE STUDY----------6
1.7 DEFINITION OF TERMS----------6
CHAPTER TWO
LITERATURE REVIEW
2.1 INTRODUCION----------9
2.2 HISTORY OF BANKING----------10
2.3 CONVENTIONAL BANKING PROCEDURES----------14
2.3.1 TELEGRAPHIC TRANSFERS----------15
2.3.2 THE CLEARING HOUSE----------18
2.4 ELECTRONIC BANKING----------22
2.5.1 ELECTRONIC BANKING PRODUCTS----------31

CHAPTER THREE

THEORY OF CASH MANAGEMENT

3.1 INTRODUCTION OF CASH MANAGEMENT----------39

3.2 FUNCTION OF CASH MANAGEMENT IN A FIRM----------41

3.3 MANAGING COLLECTIONS----------42

3.3.1 CONCENTRATION BANKING----------43

3.3.2 LOCK BOX SYSTEM----------44

3.4 CONTROL OF DISBURSEMENT----------46

3.4.1 CENTRALISING PAYABLES----------47

3.4.2 DELAYED POSTMARKS----------48

CHAPTER FOUR

USE OF ELECTRONIC BANKING IN CASH MANAGEMENT

4.1 INTRODUCTION----------53

4.1.1 COLLECTION SERVICES AND DISBURSEMENT----------53

4.1.2 *PRODUCT INQUIRY SERVICES*----------56

4.1.3 TRANSACTION INITIATION SERVICES----------59

4.2 ELECTRONIC RISK AND SECURIT CONSIDERATIONS---------64

CHAPTER FIVE

SUMMARY AND CONCLUSION

5.1 SUMMARY----------68

5.2 RECOMMENDATIONS----------70

5.3 CONCLUSION----------75

BIBLIOGRAPHY AND FOOT NOTES----------80

CHAPTER ONE

GENERAL INTRODUCTION

1.1 INTRODUCTION

The banking Industry in Nigeria over the last few years have designed several commercial products to improve the quality if services provided to customers.

These Commercial products were also designed to meet the increasingly sophisticated needs of Finance Managers in a cross section of organisations operating in different sectors of the Economy.

Recently, there has been an evolution resulting from a paper transfer system to an electronic transfer system leading to an increased sophistication on computer application to cash management and in Electronic Funds Transfers.

The finance manager or controller has among other things the responsibility to ensure a proper management of organisations accounts receivables and payable.

Improper management of these two important variables could result in losses arising from inability to take discounts because of late payments and inability to take interest because of too early payments. Overdraft and loan interest charges could be incurred because of unnecessary working capital borrowings. Therefore, the Finance Manager faced the task of accelerating collections and slowing disbursements which is increasingly being done Electronically.

Companies are usually offered discounts if payment for certain goods and services are made within a specified period according to the terms of credit.

Similarly, payment by companies outside this period attracts no discount and loss of discount can cost the company substantial income when aggregated over an annual period. Companies also have to collect proceeds of sales quickly within the

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allowed time frame to provide shortages prompting the company to borrow from banks at high interest rates to fill the gap between Sales and Collection of proceeds.

Between 1989 and 1995, several banks have the means to make payments very quickly and transfer funds very quickly to cities in Nigeria within few minutes of the request. For Finance Managers this is an invaluable tool as it provides an enhanced Cash Management capability and use of Electronic Funds Transfer has resulted in greater economisation of money balances.

In an attempt to elucidate on the use of Electronic Banking in Cash Management, this write-up traces the History of Commercial Banks and Origin of Electronic Banking, provides an in-depth treatise of conventional banking procedures as it affects Cash Management and introduces Electronic Banking. It goes further to examine the role of Electronic Banking in Cash Management, the advantages and obvious concerns about security of funds.

1.2 RESEARCH PROBLEM

Financial Management is a key to the growth of any business irrespective of the size and geographic spread of the firm. As businesses conquer their immediate environment and spread to other towns and cities, it becomes more difficult to exercise control over the finances of the firm. There is need to deliver funds to locations where it is needed and collect excesses from some other locations where it is needed and collect excesses from some locations across the country.

A number of problems abound in the Cash Management Services department of any organisation in Nigeria they range from inefficient funds transfer from one town to another. Float, delay in collecting receivables and effecting disbursements without considering interest rates and discounts that could be earned.

How effective is the use of Electronic Banking in Cash management? Has it successfully eliminated float? Has the Financial Manager been equipped fully on the use of Electronic Banking in successfully managing cash? What are the services that are rendered by Electronic Banking that makes it applicable to Cash Management?

What strategies and steps are being taken to introduce Electronic Banking to today's banking in Nigeria? How has the importance of Electronic Banking been impacted on Management of an organisation? Nevertheless, solutions to these numerous problems will to a large extent, explain the roles of Electronic Banking in Cash Management – a panacea for improved quality services to customers in Nigeria which Commercial banks crave for.

1.3 OBJECTIVE OF THE STUDY

The main objective of this research work is to highlight the important task of the Finance Manager which is to ensure proper Cash Management and how this has been improved with the use of Electronic Banking products. It aims at showing the essence of Electronic Banking as a Cash Management tool, attempt is made to highlight the various Cash Management products offered by banks in Nigeria. The

study particularly seeks to present a review of the conventional banking procedure in Cash Management, its limitations are used as a launching pad for the introduction of Electronic Banking.

It presents an understanding of the concept of Cash Management, stress its importance in terms of Collections and disbursements as its affects discounts, interest and loan/advances charges. It presents computer application in Cash Management and how it has aided modern banking and eased the duty of the Finance Manager. In as much as the study aims at highlighting Electronic Banking as a cash management tool, also takes into cognisance its modus operandi, attendant risks and mitigating steps employed in the industry. The study ends with summary, conclusion and careful recommendations that will go a long way to improving the area of finance and application of Electronic Banking to Cash Management.

Particularly, the findings will provide a framework of reference to practitioners either in academics or in the business world as well as to business investors.

1.4 SCOPE OF THE STUDY

This research attempts to bring to light the services, which are provided by the use of Electronic banking in Banks/Industries in Nigeria. The focus of the study is therefore on the use of Electronic Banking as a tool for quality services and Cash control.

1.5 RESEARCH METHODOLOGY

In the quest for collection of data for this project, the researcher employed the use of primary and secondary data. In the use of these, bearing in mind the topic and significance of the study detailed discussion on each of them are as follows.

The primary source of data was the INTERVIEW METHOD. This involved verbal interaction between the researcher and experts in Electronic Banking. To some extent, it was discovered that personal interview is the most versatile method of data collection because important questions asked on the subject and responses recorded. It was a face-to-face interaction with some Electronic Banking professionals working with FSB International Bank Plc and Access Bank Plc. It helped in speeding up the data gathering because it enhanced quicker collection of information.

The response rate was high and there was flexibility in the process of questioning. Topics were introduced in a variety if ways and questions were clarified responses. Follow up was possible because the researcher could ask more questions on a particular issue and there was more room for probing and exploration until validity of responses was ascertained.

The secondary source of data was the DOCUMENTARY METHOD. The researcher relied on some extensive use of various relevant materials such as Textbooks and unpublished materials. Some of these materials are available in the library which were useful on the research topic. Also, part of the study are largely

of a theoretical orientation which were drawn substantially from the works of different scholars. The data collected were analysed through composition and comparative analysis.

1.6 LIMITATION OF THE STUDY

In any research study undertaken there are limitations, which are often likely difficulties that may impair the quality of the research work. A research of this nature is not without its constraints.

This research work will only limit itself to those Electronic Banking services which have played a very vital role in cash management.

1.7 DEFINITION OF TERMS

In a study like this, it is necessary to define at the beginning, those terms and concepts that are used in the study to avoid ambiguities.

Account: The recording in the ledger of the financial transactions that have Taken place; the account will show the receipts, the expenditure and Expenditure and outstanding balance.

Bank: An account held by a bank or banker recording account the deposits And withdrawals of a customer from the account. A statement is sent by the bank to its customer at agreed or regular intervals.

Bill of Exchange: An unconditional order in writing, addressed by one person to exchange another, signed by the person giving it, requiring the person to whom it s addressed to pay on demand, or at a fixed or determinable future time, a sum certain in money to, or to the order of, a specified person or bearer.

Cash: being Consist of the firms holdings of currency and demand deposits

The most important for most firms. It is an asset and scarce resource which must be conserved and earn a reasonable return for the company.

Cash Mgt: Involves controlling the investment in current assets which involves Managing the monies of the firm in order to maximise cash availability and interest income in any idle funds.

Clearing House: The clearing house committee of Nigeria Clearing banks situated in The premises of Central Bank of Nigeria in Lagos and some other cities.

Computer: An electronic device designed to store and process large volume of Data at high speed. Input is by Paper Tape, Punch Card, Magnetic Tape or Disc. Output is by high speed Printers or Visual Display

Unit (VDU). Most accounts of bank customers are now kept in the memory stores of computers, and are updated daily.

On-Line: This means that there is an active connection between two computers, or between a terminal and a host computers

Modem: A device that converts data in the computer memory from digital to analog format so that data can be transmitted over public or private telephone lines. The Modem perform the reserve conversion when data gets to the other computer.

Protocol: Is an agreed format or structure if data exchange between two computers. If the protocol used by both computers are not the same, data cannot be transferred effectively.

CHAPTER TWO

LITERATURE REVIEW

2.1. INTRODUCTION

A bank is a body, corporate or otherwise, that has been recognised by the Central Bank. under the banking Act of 1969, to accept deposits as defined by the Act. Banking as a business took place under different arrangement by several communities and only acquired standardisation due to civilisation.

The 1969 Act defines banking business as the "Business of receiving monies from outside sources as deposits irrespective of the payment of interest, and the granting of money loans and acceptance of credits or the purchase of bills and checks or the purchase and sale of securities for the account of others or the incurring of obligation to acquire claims in respect of loans prior to their maturity or the assumption of guarantees and other warranties for others or the effecting of transfers and clearings, and such other transactions as the commissioner may , on the recommendation of the CBN, by order published in the Federal Gazette designate as banking services".

Only companies duly incorporated in Nigeria and in possession of a valid license granted by the Federal Ministry of Finance can undertake banking business in Nigeria. On application for banking license the following must be accompanied with it;

Copy of the Memorandum of association

Latest balance sheet

Any other document called for by CBN.

The need for laws and regulations to control the activities of banks led to the paton commission being set up in 1948. The report of the commission led to the enactment of the first banking legislation – the Banking Ordinance 1952. Before the enactment of the Banking legislation, it was a period of free for all banking which culminated in several bank failures and losses to depositors. This banking Act was intended to give greater protection to depositors.

2.2 HISTORY OF BANKING

Right from its inception, the basic principle for banking operation has not changed, the main aim is to make profit which is the same case as in other trades and professions. Due to civilisation, the scale and scope of banking operation has changed. This is because dealing with money is becoming an integral part of survival aspects of human activities as reflected in the Social, Political and Economic environment.

Banking is the creation of man and is as old as civilisation itself. The genesis of banking can be traced back to as early as 2000 BC in Babylon, the Babylonians developed a complex system of lending, borrowing and holding money on deposit. During the 13th and 14th Century, banks were re-established in Genoa, Italy. Banking grew rapidly as the Italians became which World-wide traders. The word "Banco" (bench) symbolised the business which was carried over the Italian word "Banca" and the French word "Banque".

Services offered by Ancient Banks included credit by compensation, transfer orders, renewal of Commercial Papers, acting as government agents in tax collection, lending for interest with land as collateral security, discounting foreign and local bills, receiving of deposits and settlement of indebtedness through the use of checks or drafts.

Today, the mode of banking operation has changed, the trend has lifted up the age of manual calculating (banking) and we are currently in the 'age' of computers. Banks have computerised their data system, information system and as such most of banking operations are being performed electronically.

Evolution of modern banking is traceable to Britain, the roles of the Goldsmiths in Britain and the effect of the Gold rush 1848 in the United Sates were significant in the evolution of modern banking. It is significant to note that Financial institutions evolved from the activities of Goldsmiths and Merchants. Gold was one of the most cherished treasures of the world. The need keep wealth especially Gold, in safe custody led to the development of the first and most popular function of banks – their safe keeping function. It was made possible because Goldsmiths and Silversmiths had vaults for the safekeeping of Gold deposits. The modern paper money developed from the receipts issued by the Goldsmiths and Silversmiths certifying that a specified fineness of Gold was being kept. It was the genesis of the currency – issuing function of the banks, the Goldsmiths observed that depositors hardly ever withdrew all the money deposited thus evolved the lending

function. The evolution of International banking was accidental. Insecurity in transference of valuable items internationally led to the development of international banking. Since the banks were known to assist Merchants in financing their trade, governments later turned to the bans for financial assistance.

HISTORY OF BANKING IN NIGERIA

The evolution of banks in Nigeria cannot be divorced from the growth in International trade. There is no precise date when banking started in Nigeria. In 1892, the first banking institution was established in Nigeria, this was the African Banking Corporation (ABC). Messrs. Elder Dempster & Co, a shipping firm based in Liverpool, was instrumental in its formation. Its objective was to make easier transaction with the company's customers in Nigeria.

This bank was short – lived as its collapsed barely after two years of operation due to the fact that the financial system was not developed at that time and also because the banking habit had not cultivated in the mind of Nigerians.

The assets and liabilities of the African banking Corporation were taken over by the British Bank of West Africa (BBWA) in 1893. The establishment of this bank could be regarded as the beginning of modern banking in Nigeria. The primary objective of British Bank of West Africa was to extend banking facilities to British businessmen. The successor of this bank is the Standard Bank Limited now First Bank of Nigeria Plc. The British Bank of West Africa served as the Central Bank in Nigeria. Gold Coast, Gambia and Sierra Leone. Barclays Bank DCO

(Dominion Colonial and Overseas) opened its first branch in Lagos in 1917. It was an amalgamation of three banks; Colonial bank, Anglo-Egyptian Bank and National Bank of South Africa. It is now known as Union Bank of Nigeria Plc.

The British and French bank, now called United Bank for Africa Plc, was established in 1949 making it the third expatriate bank to dominate early Nigerian Commercial banking. The Central Bank, which is at the top of the financial system opened for business formally on July 1st, 1959. The years between 1947 and 1952 was a period of free for all banking (neophytic banking) in Nigeria. The period was characterised by initial implanting of banking services to correct the unorganised and multi-unit monetary banks, and the uncontrolled establishment of banking institutions, especially indigenous banks.

After the establishment of CBN in 1959, its first task was to Nigerianise the credit base by creating avenues for local investment of funds of the banking system. Several legislation were enacted after the establishment of CBN which empowered it to control other banks in the economy in the pursuit of its statutory duties. The regulations have been directed at promoting the Money and Capital Market in terms of the instruments and also strengthening its powers.

Other developments in the banking industry include establishment of development and Merchant banks, indigenisation of banking and deliberate creation of habits in Nigerians through the rural banking scheme.

2.3 CONVENTIONAL BANKING PROCEDURES

Individuals and organisations open bank accounts for several reasons; some for savings, others do so to take advantage of the banking services offered, perhaps the most highly sought after are cash handling and funds transfer. Some of the services offered by banks are:

1. Mobilisation of savings and other deposits
2. Extension of credit facilities to customers
3. Providing facilities for the transfer of funds
4. Management of customers investment and advising on insurance matters
5. Creating money
6. Providing facilities for the financing of International trade
7. Safekeeping of valuables
8. Brokerage services
9. Providing foreign exchange facilities for travellers
10. Providing night safe facilities
11. Providing business status reports, references and business advisory services

Accounting records of individual and corporate customers are maintained on manual ledger cards which gets updated transactions flow through the bank account. In a bank with multiple branches across the country or within the same town, each branch functions as an independent with no physical linkage to other branches. Account holders in a branch can only transact business as account

holders in the branch of the account. They can only deposit and withdraw cash from that branch. Transfer of funds between branches of the same bank within the same town or different cities is accompanied by telegraphic transfers of bank drafts.

Due to the branch banking transfer of funds from an account in one bank to one in another bank, both banks being in the same or different locations. Such interbank transfers are effected through the Clearing House.

2.3.1 TELEGRAPHIC TRANSFERS

A customer of a bank can transfer money to a third party resident in another part of the country. Telegraphic transfers are only possible between branches of the same bank. Since there is no integration of the Accounting records of the individual branches, delays are very much a dissuading factor in this form of money transfer method. For example, if an Account holder with FSB International Plc. Ibadan branch initiates a telegraphic transfer in favour of a beneficiary in Zaria, the cash is only payable at its branch in Zaria, the cash is only payable at its branch in Zaria-which is not existing. Even though there may be branches of other banks in Zaria, because there is no Accounting relationship between those banks and FSB International Plc, payment cannot be effected. However, if FSB International operates a Current Account with United Bank of Africa, Zaria branch, payment instructions can be honoured by UBA as long as the instructions conform with FSB's mandate with UBA and the Account holds enough funds to accommodate the payment. This method of achieving funds transfer is called correspondent banking.

The shortcomings of telegraphic and mail transfer arise from the slow speed of delivering instructions to the paying bank. For transfers through a branch of the same bank in another city, the instruction may be delivered by mail which could take about three weeks. Apart from the transit time of the instructions, upon receipt, the paying branch will have to ensure thorough confirmation from its supervising regional office that a settlement of accounts between it and the originating branch has been effected.

The originating branch is expected to authorise debit to its account at the regional office and credit the account of the paying branch with the exact value of the transfer. This has to be in place and verified by the paying branch before releasing cash to the beneficiary. The reason this is done is to forestall the activities of fraudulent staff in other branches of the bank or common criminals in the public.

Today, the process of confirmation and receipt of instructions take anything between three to four weeks and constitute a loss of float to the customer who initiated the transfer instruction as well a the beneficiary. This obvious disadvantage raises serious concerns for individuals and companies who need cash to be transferred quickly between locations.

TRANSFERS BY BANK DRAFTS

In an attempt to reduce the delay that arises from the use of public delivery services for funds transfer instructions, bank drafts or bankers cheque, a Bill of Exchange, is used. A cheque is a Bill of Exchange drawn on a banker payable on demand. A bank draft or Bankers Cheque is a cheque drawn by a branch of a bank

on itself or another branch of the same bank, payable on demand. As a funds transfer instrument, a company or individual requiring a bank draft is made to fill out an application and provide particulars of the beneficiary as well as branch of the bank where the cheque/draft will be drawn. Finally, the account of the requester must be funded with the value of the draft requested. The bank then proceeds to debit the account of the requester and issue its own cheque in favour of the stated beneficiary payable at the branch or any other branch of the bank.. if the bankers cheque/draft is payable at another branch of the bank, the issuing branch dispatches a cover advising the branch of the bank on which the draft is drawn that;

- It has issued a draft drawn on the branch
- The value of the draft
- The beneficiary of the draft
- The date of issuance

The draft when released to the beneficiary can then be presented at the paying branch or any other branch of the bank or even another bank for collection. If the draft is presented at the branch on which it is drawn, the paying branch only needs to cheque through records of advises received and honour the instrument once the details tally. It then requests for reimbursement from the issuing branch which proceeds to effect settlement at the regional office.

However, if the draft is presented at a branch different from that on which it is drawn, the receiving branch will contact both the issuing branch and the branch on

which the draft was originally drawn, to confirm the details and agree it with that presented for payment. Also, confirmation is sought from the original paying branch that the draft not been paid previously. Depending on the responses, the receiving branch honours the draft and claims reimbursement from the issuing branch refuse to honour the draft for fraudulent reasons.

Transfers by Bankers Cheques/Drafts also removes float from both requester and beneficiary and is prone to delays arising from late advise by the issuing branch. Drafts presented to branches of other banks are cleared or collected through the Clearing House. The beneficiary of a Cheque/Draft can deposit the instrument into a current account held with another bank and collect value after a transit period. Such settlements are effected through the Clearing House.

2.3.2 THE CLEARING HOUSE

In the early part of the 18th Century, checks were new developments and treated on manual basis. Clearing items were collected and exchanged at a convenient place in the city and settlement took place between Bankers and Customers, Accounts were debited or credited accordingly. The use of checks as a means of payment demanded a sophisticated structure to clear banks indebtedness. As early as 1833, London Bankers Clearing House was formed in order to simplify the growing demand of checking processes.

In Nigeria the first Clearing House was established in Lagos (1961) prior to 1961 there was no co-ordinated Clearing system. Each bank operated its own reciprocal

arrangement with other banks which in practice meant that each bank maintained Clearing Accounts with every other bank. The Kano Clearing House followed next in 1963, Port Harcourt in 1964, Ibadan and Enugu commenced in 1966 while Benin and Kaduna in 1967 and 1969 respectively. With the creation of more states in Nigeria, more and more clearing houses were established.

The clearing principle is simple but the massive number of items involved makes the process intricate. But from the point when the customer pays a cheque into this account, the clearing system everything being equal is supposed to be completed in three (3) working days. But in developing countries, the information mechanism is far adequate, it ranges from four (4) to five (5) working days.

BANKERS CLEARING HOUSE

Bankers clearinghouse is the place where Clearing banks assemble to transact clearing business. Membership of the Clearing House is restricted to only Commercial Banks and CBN. The clearing House is located at the premises provided by the CBN and is usually situated at the state capital. The management and administration of the Clearing House committee comprising a Chairman appointed by the CBN or the Branch Controller or his representative in the case of upcountry Clearing Houses and representatives of all members.

Each clearing area is defined in the rules and regulations governing it. This definition highlights the locations that are part of the Clearing are for the purpose of cheque clearing.

LOCAL CHEQUES

Local Cheques are those drawn on branches of banks in locations defined as being within the clearing area. Such checks are cleared within four (4) working days, i.e. three (3) clearing sessions.

INTRA CHEQUES

Intra Checks are those drawn on branches of banks locations not within the clearing area within the same state as the clearing house. Those checks are cleared within seven (7) working days or six (6) clearing sessions.

UPCOUNTRY CHEQUES

These are checks drawn on locations outside the state of the clearing house and within states which have their own clearing house or belong to another clearing area. These are usually within twelve (12) working days or eleven (11) clearing sessions.

THE CLEARING PROCESS

Each bank which is represented in the clearing committee of participates in the clearing house will have to open an operating account with the Central bank. In a clearing area, only one branch, usually the main branch of a bank sends representatives to the clearing house. Therefore in all the branches at close of business, all checks received from customers and drawn on other banks are assembled by the branch's clearing department. The Clearing Clerk lists the checks according to the banks on which they are drawn. A copy of the machine list

and the checks delivered by the branches are consolidated bank by bank and into Local, Intra and Upcountry categories. Machine list of all checks to be presented on each bank are then prepared for individual banks. The grand total of all the banks are then prepared for individual bank. the grand total of all the banks is agreed with the grand total is agreed with the grand total of all checks received. The totals are entered bank by bank on the credit side of the Central bank presentation form. There will be separate presentation forms for Local, Intra and Upcountry checks. The presentation forms and the checks are taken to the clearing house of the CBN the following morning where they are presented to the representatives of the respective banks.

At the Clearing House, checks drawn on each bank are presented to the clearing representatives by the other banks. These are later entered on the debit side of the presentation form bank by bank. Local checks received are recorded on the debit side of the local presentation form and similarly for intra Upcountry checks. When presentations are completed, each representative works out the net position of his bank on his presentation form which is normally completed in duplicate. The original copy is submitted to the clearing house superintendent who supervises daily clearing sessions. Upon receipt of the completed presentation forms, from all banks, the clearing house superintendent balances the day's work by the net balances of the banks on a clearing settlement form. The settlement form is later balanced and used as the authority by CBN to debit or credit individual banks in their books, depending on whether the bank has a favourable (credit) or adverse (debit) balance.

At the end of the clearing session, the bank representatives bring back all checks drawn on all its branches which were presented on its bank by other banks. The checks are handed over to the officer in charge of clearing. The checks are sorted out into branches and a machine list prepared for each branch. Later in the day, these checks are picked up by accredited representatives of these branches for further processing or dispatched to branches in other cities by courier. Dishonoured checks must be returned immediately as local checks not returned within three(3) clearing sessions are deemed to have been paid. Intra and upcountry checks also have to be returned to the clearing house within six (6) and eleven(11) clearing sessions respectively, or are deemed to have been paid.

For a company wishing to transfer proceeds of goods delivered to its agents who make payments by checks or bank drafts, the agents can deliver checks drawn/drafts drawn on a branch of a bank in any part of the country. These checks are then deposited into the company's account with its bank where it is collected through CBN clearing. This process like mail/telegraphic transfers does not deliver funds to the point of where its required in good time. The company has to cope with loss of float to the banking system and thoughts of these gave rise to the use of Electronic Banking as a Cash management tools.

2.4 ELECTRONIC BANKING

Every week, everyone embarks on a paper chase to find a lost file, or is it merely a file transit or one that is buried on someone's desk? Paper is a space hog and space is money. At most retail bans, hours are spent and misspent in document processing, data re – entry, retyping to correct errors, collation, decollation,

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copying, routing through the inter-office mail and faxing, filing, retrieval and re-filing. Paper wastes time, saps productivity and is a boondoggle for the banker's daily business.

Electronic Banking is a system of inputting electronically, accounts ledger into the memory unit of the computer system, making use of a main frame computer system. The computer stores accounting information in its memory and has processors, which are capable of making several million additions or subtractions per minute. Bank account management software like DIVINE, GLOBUS, MICRO BANKER, etc., can be loaded into the computer memory and all the bank's customer database updated using the software.

All debits and credit postings into any account is then done on the computer instead of using manual ledger cards. Computer terminals are usually connected to the mainframe computer and located in different departments of the bank. all functional departments who have access to the computer terminal will be able to update account information and generate timely and accurate reports. Some banks in Nigeria have also been able to create Wide Area Network (WAN), connecting terminals in branches in remote upcountry locations to the main computer in the head office. This has been achieved by advances in telecommunications and make use of dedicate telephone connections or satellite. With this arrangement, all accounts held by customers of the bank at any of its locations in the country are updated in the memory of the mainframe computer. Therefore, any branch of the bank can have access to the accounts of any customer and process transactions on

the account irrespective of the branch where the account was opened. This is the concept of integrated banking systems pioneered by Nigeria International bank Limited in 1988. Several other banks including Diamond Bank, Citizens International Bank, Eco Bank plc and FSB International Plc have acquired capabilities for the system of banking.

Electronic banking has been an instrument in banking revolution in Nigeria. The growing recognition that the adaptation of innovations in the electronics, computer and related fields to suit banking needs in Nigeria and all over the world have for sometime to come continue to contribute towards improving the quality of services available. An important fact to note is that the internalisation of these innovations through the acquisition of appropriate technical resources is seen as an effective means of securing a significant competitive advantage.

This new competitive environment in the industry has brought to an end the kind of baking services rendered by the first generation banks which is now described as "armchair banking". As against the pre-revolution years, the old banks have today been challenged by the ingenuity of the smaller and younger banks, who daily research and introduce new products and services in order to meet the ever changing needs of their numerous customers.

All categories of banks driven by survival instincts in continuous struggle to stay afloat in the highly competitive sector, gave come up with one innovation or the other in terms of products or type of services to customers. "The competitive bank

of tomorrow is the one which equips itself today with a strategy to be a winner tomorrow. With technology that fulfils the strategy .....Technology for counter transactions, complementing back office work, case handling, cash dispensing, inquiries, staff training and communication". This caption succinctly expresses the motives zeal of introduction of automation machines into the banking industry today.

These machines today have taken over most of the banking business hitherto operated manually. Electronic Banking has taken the first place in terms of type of services with its characteristics enhanced speed, convenience and efficiency to both bank officials and the customers. Electronic Banking is that practice of banking that involves Electronic form of money transmission and in which banking services are fully automated; such that transactions are concluded in a jiffy. The technique of Electronic Banking involves the use of computer work network in dispensing and transfer of funds.

In the pre-electronic banking era, traditional banking services were limited to lending, accepting deposits and handling Documentary Bills for collection. Apart from several other rigorous procedures people had to contend with, bank customers were naturally made to spend several hours in the congested banking halls in the process of either depositing their funds or cashing their checks as the security checks put in place by the old generation commercial banks were cumbersome. The new generation customers, both individuals and corporate are in a hurry to have their transactions effected, there arises the need to provide facilities which will reduce the waiting time at the counter. This Electronic

Banking enhances speed, convenience and efficiency. A traditional Banking service which Electronic Banking has been facilitating is money transfer facility. Hitherto, funds were transferred locally through bank checks and bankers payments, and outside clearing areas through Bank Draft, Mail transfer or Telegraphic transfer. But with the introduction of Electronic Funds transfer, funds is being transferred within minutes upon receiving the instruction across the country.

It is known fact that banks must innovate and survive or be complacent and be consumed by rapid technological changes. Presently, banks try to outwit one another in a highly competitive operational environment, new products that would meet the needs of customers had to be developed. Banks in the 21st Century have had to introduce expensive Electronic banking products and techniques because the modern bank customers are highly educated and sophisticated in matters of finance and banking, now have choice and can no longer afford the long hours waiting of the past. It is quite difficult to say exactly when Electronic Banking started in the world but with the help of past records its origin and concepts can be traced back to the late seventies. Precisely, therefore it can be said that Electronic Banking evolved in the world during the 1975 – 1980. Electronic Banking was introduced to Nigerian Banking Sector in the eighties but its progress, acceptance and acknowledgement was a gradual one.

The first Electronic Banking facility that was introduced in the banking sector was the counting machine, this eradicated the long queues in the banking hall because

it made the job of the bank cashier easy. This note counting machine helped reduce the waiting time of customers in their banking hall, accuracy and lighter work for the cashier. In 1988, Nigeria International Bank Limited pioneered the concept of integrated On-Line Banking systems. This is a system where all the accounts held by customers of the bank at any of its locations in the country are updated in the memory of the main – frame computer. Any branch of the bank can have access to the accounts of any customer and process transactions on the account irrespective of the branch where the account was opened. Several other New generation banks such as Citizens Bank, Diamond Bank, Ecobank. Equatorial Trust Bank, Guaranty Trust Bank and FSB International Bank have acquired capabilities for this system of banking.

In May, 1997 Diamond Bank Limited launched its Electronic Pay card which is also referred to as "Electronic Purse" or "Smart Card". The value on this smart card can be reloaded anytime it is depleted, by the bank. The plastic card is embossed with the name of the owner as well as the serial number, the customer has to enter a Personal Identification Number (PIN) which is chosen by him during card customisation; at pointy of usage. This smart card can only be used at a retail outlet where such cards are accepted and eliminates the need for the holder to carry cash.

Magnetic Ink Character Recognition (MICR) processors have the ability to automatically encode on documents, read encoded characters, sort documents by various codes, list documents sorted or unsorted; proof and reconcile debits and

credits; capture all data, read endorse and sequence; microfilm documents and can produce computer tapes for subsequent computer processing and print reports. The implementation of MICR system in Nigeria took place in five phases. The objective is to replace the manual cheque clearing process supervised by the Central Bank of Nigeria.

- Replacement of conventional CBN checks with MICR checks by June 1990.
- The Head office branches of the "Big three" banks, First bank of Nigeria Plc, Union Bank of Nigeria Plc, and United Bank of Africa Plc, to comply by the same date.
- All commercial banks in the Lagos Clearing House Area are to have completed arrangements for MICR cheque issuance in July, 1992.
- All commercial banks to pt all their branches across the country in a position to issue MICR checks in January, 1993.
- Automation of the Clearinghouse scheduled for 1st June, 1993.

The phases indicate the time frame when MICR checks shall be issued to all current account holders and when all clearing instrument that shall be presented by the banks for collection to other paying banks are to be fully encoded. It is pertinent to note however that these lofty ideas have not been fully implemented to date.

Electronic Funds Transfer is a form of Electronic Banking which involves the movement of funds from one account to another, without requiring every time, a corresponding piece of paper to authorise or prove that the transfer occurred. Electronic Funds Transfer Services are based on the principles of preparing and

storing pre-defined financial messages on Computer systems and Data Communication. Electronic Funds Transfer services are available in different forms to virtually all categories of banks and financial service customers in Nigeria. Another form of Electronic Funds Transfer is Home and Office banking; a device through which a customer can engage in bank transactions from office or hoe through the use of telephone connected to the computer with a modem to facilitate distance banking. It was introduced into the Nigerian Banking industry by Universal Trust Bank of Nigeria, it is now being operated by several other financial institutions.

Cash Management has existed in business since the initial use of money as a medium of exchange. Cash management attempts to tract and control the flow of funds through the corporation, the primary objective is to influence the availability of receipts while delaying the outflow of funds, thus minimising working capital shortages. The corporation's objective is a bit difficult to follow, because firms lose overall perspective of the objective through concentrated involvement in on specific area of cash management.

The underlying motive for the introduction of Electronic banking in cash management is so that it can enable Cash Managers to have an effective control of disbursements and maximum acceleration of receipts so as to have maximum availability of funds. In Cash Management consulting, bank representatives wok closely with corporate Treasurers and cash managers to define receivables and payables patterns. These Electronic Banking consultants will propose/suggest

alternative methods of operations to accelerate receivables and increase control over disbursements.

Cash Management is the planning, organising and controlling of corporate funds, it has evolved because most companies that deal in the supply of goods and services have branches in almost every state capital and major cities. Also, the treasury functions are centralised in the Head office so funds collected are to be transferred o the head office quickly.

All these motives behind Cash Management concept have been the reason why cash managers need Electronic Banking services to enable them have maximum cash available. So in this work the term "Electronic Banking as a Cash Management Tool" simply elucidates that Electronic Banking can help Cash Management in achieving its objectives. The way this is done is the subject of this study. The need for Electronic Banking facilities to enhance Cash Management can be directly traced to the origin of Electronic Banking services in Nigeria.

It is difficult to say when Cash Management started in Nigeria, but we are aware of the fact that it has existed in Business since the initial use of money as a medium of exchange. In Nigeria, Cash Managers started using Electronic Banking services to enhance Cash Management in the late eighties. In essence the use of Cash Management facilities is a direct consequence of the evolvement of Electronic Banking Services to enhance Cash Management in an organisation.

2.5.1 ELECTRONIC BANKING PRODUCTS

At this stage of the study, we need to examine a variety of Electronic Banking products currently in use world-wide and settle down to more critical analysis of those that are available in Nigeria in later chapters.

- **CURRENCY COUNTING MACHINE**

It is one of the most common and popular machine in banks all over the world. The main function which this machine performs is the counting of cash in the bank, it is a time saving device for cashiers and customers. It also provides accuracy in the volume of money being counted. Before the introduction of currency counting machines in Nigeria, the prevalent practice was that both cashiers and customers had to undergo the vigorous and time consuming process of counting with the finger tips one leaf after the other, any money being paid in or out of the bank. Apart from the fact that it is time consuming, it is also boring and prone to inaccuracy.

With the currency counting machine being used extensively by both paying and receiving cashiers in the counters of virtually all commercial banks in the world, today, the long hours of waiting in the banking halls by bank customers has been reduced to the barest minimum.

- **SQL IMAGE MACHINE**

This is a photographic and signature verification system, that permits the bank to automatically store both photographs and signatures. Often times delay at the

counters of a bank by cashiers are caused by authorised verifiers who have to verify the signature(s) on checks drawn by its account holders against specimen signature cards in the banks' records. This new machine makes it possible for transaction to be concluded in a jiffy and the waiting time of customers consequently reduced.

MAGNETIC INK CHARACTER RECOGNITION SYSTEM (MICR) CHEQUE

It is an optical recognition device which has the ability to automatically encode characters on documents sorted or unsorted; proof and reconcile credits and debits; capture all data and read, endorse and sequence documents computer processing and print reports.

Prior to the advent of Electronic Banking in Nigeria, the financial system depended on extensive documentation which created bottlenecks in the nation's financial clearing and settlement systems resulting in slow and inaccurate accounts update. There was much difficulties in the ability of the system to match the growing public banking habits due to the medical accounting systems. This inhibited the publics' expansion despite the emergence of new banks and financial houses.

It has been realised that the strength of any financial system rests on the speed and efficiency of its documentation, Fund Transfer and the account systems update.

The MICR is a system that provides for encoding checks and documents with characters in magnetic ink so that, they can be electronically read and processed for computer application. The MICR system is a American Bankers Association programme, it is widely used in the United Kingdom, United States of America, Europe, Asia and Africa. Under the MICR scheme, Nigerian Security Printing and Minting Commission (NSPMC) is the only eligible printing 'orgánisation from which all banks obtain the checks for issuance to its customers and installation of the machine.

With the implementation of MICR cheque there would be automatic sorting as well as listing of checks; banks and branch will be automated, therefore the function is performed at a faster rate and result will be more accurate. Each MICR cheque will be coded by the bank which first receives it so as to make automatic handling through regular Clearing easy. With the introduction of this machine into the banking industry the hitherto manual operations in the banks Clearing departments and CBN Clearing house, which were time consuming will be taken over by this device which will now make Clearing process less cumbersome and less prone to mistakes. In future, it would be possible for banks head office to exchange instruments among themselves instead of going through the clearing house. Also, there would be reduction of clearing transit period provided improved communications infrastructure is in place and reduction of the incidence of fraud.

- **AUTOMATED TELLER MACHINES**

It represents a significant change in the banking industry because they offer a method of delivering bank services to customers without the need for contact

between customers and staff of the bank. in the 1960's United Kingdom banks began to provide customers with cash dispensers using plastic cards with information about customers recorded in a magnetic strip. These dispensers came to be known as Automated Teller Machines because they took over many of the roles of a teller or a bank cashier. Automated Teller Machine offers the following services:

- Making Cash withdrawals (usually up to a pr-set limit determined for each individual customer).
- Checking the balance of the account
- Ordering statement
- Ordering a new check book
- Changing the Personal Identification of Number (PIN) used to operate the card.
- Depositing Cheque
- Making payment of bills (to pre-arrange payees – standing order).

Automated Teller Machines are presently in use in selected branches of First Bank of Nigeria Plc, in Lagos and are packaged as a product under the name FIRSTCASH.

The purpose of Automate Teller Machine is to reduce clerical work for the bank provide 24-hours customer access to their funds. The Automated Teller Machines are usually free-standing, remote banking units. These units provide customers with the ability to draw cash or transfer funds from one account to another or to

pay loans and bills by account debiting. Automated Teller Machines are often attractive to retail outlets such as supermarkets, which traditionally cash large volumes of checks, and which suffer significant bad cheque losses.

- **HOME AND OFFICE BANKING**

It is a device through which a customer can engage in bank transaction from home or office through the use of telephone to speed up distance banking. The First bank to offer a home banking service on a national scale in the United Kingdom was the Bank of Scotland. The system which they devised required a small home compute linked to television screen and use of telephone lines to carry messages.

The main facilities available were checking balances and carrying out transfers between Accounts. This home and office banking device is another form of Electronic Funds Transfer system, it offers services such as ordinary statements; checking balances, carrying out transfers between accounts and paying bills (to pre-arranged payees).

With home banking device, customers are able to talk direct to computers (which are in voice response systems) holding their account details at Giro Bank's and National and provisional data centres, using nothing more than ordinary telephone. Office banking on the other hand is that device which is utilised by the small and medium or large Business Customers.

- **ELECTRONIC CARD PRODUCTS**

There are variants of debit and charge cards ion the European American and Nigerian Markets.

Smart Cards: This Electronic card started in the eighties and was originally designed to reduce heavy reliance on cheque and increase security against fraud. Japan is at the forefront of card technology but France is reported to be the current biggest user of smart cards.

The smart card is in a plastic form which can be reloaded when its value which was previously embedded on it is depleted. The card is embossed with the name of the owner, the serial number and personal identification number (PIN) of the customer. The smart card can only be used at a point of sale terminal (POS). (POS) are minicomputer based transaction devices that are multinational in nature. They are either unit in nature, that is they operate strictly within the confines of the corporations structure, or locally interfaced with on-line verification lines. POS can:

- Update multiple Accounting records, including inventory stocks.
- Provide credit and verification
- Accept and process credit card and debit card or cash transactions
- Provide for immediate "Paperless" transfer of funds from customer's account to corporation's Account.
- Store data for later analysis and descriptive bill preparation.

Pass Card: This is the French equivalent of Electronic Funds Transfer at point of sales. Carr four of France, a French hypermarket group, pioneered it. "Pass" is processed on an IBM equipment either by debiting the users bank account or by taken credit from the store.

ELECTRONIC FUNDS TRANSFER

As Cash Managers are becoming more adroit at the skills of managing cash flows, there are forces taking shape in the market place that significantly affects the management of cash at the corporate and retail level. The most notable of these forces is Electronic Funds Transfer systems. Electronic Funds Transfer systems can be defined as any system that replaces paper-based processes with electronic impulses. The growing interest in Electronic Funds Transfer systems has expanded recently because of the increasing availability of electronic equipment capable of handling multifaceted transactions without any paper work required,. The system allows a customer's account to be operated electronically 24 – hours where in Nigeria. The advantage of this medium is secured and it saves time. With Electronic Fund Transfer process, paper fork is reduced to the bearest minimum while bank counters are decongested.

- **AUTOMATED WIRE TRANSFERS**

A corporate Cash Manager effects funds transfer from a terminal located in the corporate office. This transfer information is entered on a data base of a third-party vendor and then accessed by the bank to generate the transfer or it is entered directly into the bank's computer-controlled wire transfer system. The benefits by the Cash Manager and other utilising this system are:

i. Reduction in the time to make wires, thus increasing transfer flexibility.

ii. Provision of an in-office hard copy verification of funds transferred by the bank on a same day basis.

iii. Reduction of bank-caused transfer errors trough direct input of instructions by customers

Many banks offering this service charge reduce wire transfer rates provided the customer directly inputs the data.

- **ON-LINE INFORMATION SERVICES**

It is a competitive Electronic Funds Transfer system related information services involves providing terminal access to bank controlled data. The common services offered in this Electronic Funds Transfer system category are deposit and bank balance reporting services, the major benefit of these services include the ability to consolidate multi-bank information in a central information depository and that access to other services, such as wire transfers and foreign exchange quotation services.

Almost all the Electronic Banking products that are in use world-wide are being used in Nigerian Banking industry except for Automated Clearing House. These Electronic Banking procedures especially Electronic Funds Transfer (E.F.T) has greatly enhanced Cash Management services in the firm and industry. They are highly recommended at the end of this research work.

CHAPTER THREE

THEORY OF CASH MANAGEMENT

3.1 INTRODUCTION OF CASH MANAGEMENT

Cash Management is a bank service which was introduced in the United Kingdom in 1982 to provide Corporate Treasures with a means by which they can speedily obtain from a single source the details of their company's bank accounts in the United Kingdom and World-wide. Cash Management has existed in business since the initial use of money as a medium of exchange. Cash in being evaluated as an asset and a scarce resource which must be conserved and earn a reasonable return for the company, this is also the view of corporate cash management.

The service consist of computer – based modules, available through the customer's own terminal, linked by telephone to the world-wide time sharing Network of Automatic Data Processing Network Services. The balance-reporting module collects, consolidates and reports the data of a customer's bank account in any location or currency. Transaction reporting shows details of all transactions passing through the account, balance history reports are also available to give a trend of the account activity.

Controlling the investment in current assets starts with cash management. Before delving further into the subject of current assets, an understanding of what cash really means to a firm and the reasons why firms/individuals hold on to cash is required. Cash consists of the firms/individuals holding of currency and demand deposits, demand deposits which is the most important for firms. A wider use of

the word cash includes those things which can readily be turned into cash such as negotiable instruments.

Cash Management attempts to track and control the flow of funds through the corporation, the primary objective is to influence the availability of receipts while delaying the outflow of funds, thus minimising working capital. The objective is a bit difficult to follow, because firms loose overall perspective of the objective through concentrated involvement in one specific area of Cash Management.

In Cash Management consulting bank representatives work closely with Corporate Treasurers and Cash Managers to define receivables and payable patterns. These bank management consultants propose alternative methods of operations to accelerate receivables and increase control over disbursements.

The TRANSACTION MOTIVE for holding cash is the need for cash o meet payments arising in the ordinary course of business. The payments entail purchases, sales, labour, taxes and dividends. The PRECAUTIONARY MOTIVE for holding cash has to do with maintaining a cushion or buffer to meet unexpected contingencies.

It relates primarily to the predictability of cash inflow and outflows, thus the more predictable the cash flows of the business, the fewer precautionary balances are needed. The precautionary motive for holding cash is actually satisfied by holding near-money assets (short term Government Securities) and ability to borrow

additional cash on short notice also influences this motive. The SPECULATIVE MOTIVE for holding cash is to take advantage of profit-making opportunities such as expected changes in Security prices. When interest rates are expected to fall, cash may e invested in securities, the firm will benefit by any subsequent fall in interest rates and rise in security prices.

Cash is held primarily for Transactions purposes; the other traditional motives for holding cash are met largely by reserve borrowing power and by holding of short-term marketable securities.

3.2, FUNCTION OF CASH MANAGEMENT IN A FIRM

The firm needs systematic information on cash as well as some kind of control systems, the information is computer based. It is necessary to obtain frequent reports on cash balances and on the marketable securities position of the firm. An increasing number of banks provide this information via computer printouts over telephone lines.

Cash Management also provide useful information on major anticipated cash receipts and cash disbursements (cash budget) over various intervals of time. this information is essential if a firm is to manage its cash in an efficient manner. This information helps the financial manager in a firm to determine better the future cash needs of the firm, plan for the financing of these needs and exercise control over the cash and liquidity of the firm. Cash management helps the firm accelerate receivables; get their customers to pay their bills at a certain time and at the same

time, slowing their disbursements, but paying their bills at the right time to meet discounts (as is consistent with maintaining the firms credit standing with suppliers).

3.3 MANAGING COLLECTIONS

Acceleration of receivables is an integral factor Cash Management programs. The objective is to speed the receipts and processing of receivables and effect a quick conversion to cash. Acceleration of collection means the reducing the delay between the time customers pay their bills and the time the checks are collected and become useable for the firm.

The main purpose why firms accelerate receivables is for them to have enough Working Capital at their disposal to meet daily business obligations. In the event when a firm does not have enough Working Capital at its disposal due to late collections it might have to borrow money from bank with Interest Charges.

A number of methods are designed to speed up the collection process of receivables such as speed the mailing time of payments from customers to the firm.

- Reduce the time during which payments received by the remain uncollected funds.
- Speed the movement of funds to disbursement banks.

FLOAT is the basis of Cash Management, it is very important to the financial manager because a company usually can not make withdrawals on a deposit until the checks in that deposit are collected. The function of the financial manager would be to reduce the float as much as possible. Float occurs because the CBN has established time frames for collection of funds presented by member banks, the length of time varies from four to twelve days. Float results because the CBN credits a bank (customer) with collected funds based on a published availability schedule, although it may actually take the CBN longer to collect the funds.

Float has three aspects. MAIL FLOAT refers to the portion of the collection process where incoming funds are trapped in the postal system. IN-HOUSE PROCESSING FLOAT is the amount of time taken by the receiver of the payment to process the payment and deposit it into the bank for credit to the receiver's account. It is the time it takes the Company/ Individual to process checks internally. COLLECTION FLOAT involves the tie consumed in physically clearing the cheque through the banking system utilising the CBN Clearing House.

3.3.1 CONCENTRATION BANKING

It is a means of accelerating the flow of funds by establishing strategic collection centres. The primary purpose is to mobilise funds from decentralised receiving locations whether they banks or company operational facilities. Acceleration of Receivables becomes a reality, because instead of a single collection centre located at the company's headquarters, multiple collection centres are established.

The purpose of Concentration Banking is to shorten the period between the time when customers mail in their payments and the time when the company has use of funds. Customers in a particular geographic area are instructed to remit their payments to a collection centre in that area. Usually location of the collection centre is based on the geographic area served and the volume of billing in an area.

When payments are received, they are deposited in the collection centres local bank account, surplus funds are then transferred from these local bank accounts to a concentration bank. The means of making this transfer makes use of electronic banking, otherwise the collections centres will have to resort to bank drafts or mail transfer. Essential to concentration banking as a cash management technique is the ability to effectively move the locally collected funds to the concentration cash pool bank. A bank of concentration is one with which the company has a major account.

As a consequence of concentration banking, i.e. time required to collect checks is reduced because remittances deposited in the collection centres local bank usually are drawn on bans in that general area. Also, the time required for mailing is reduced, this is because when customers pay their bills, the mailing time to the next collection centre is shorter than the time required for the fact that a collection centre bill customers in its area, these customers usually receive their bills earlier than if they were mailed from the Head Office.

3.3.2 LOCK BOX SYSTEM

Lock-box services are centrally located collection post office boxes for the purpose of intercepting Corporate Receivables. It is initiated by Corporate

customers mailing their remittances to a post-office box rather remitting it to the company. The location of the post-office box is very important since it affects the mail time required for in-mail payments to reach the post-office. The main purpose of a lock box arrangement is to eliminate the time between the receipt of remittances by the company and their deposit in the bank.

A lock-box arrangement usually is on a regional basis, the company choosing regional banks according to its billing patterns. The company rents out a local post-office box and authorises its banks in each of these cities to pick up remittances in the box. Customers are billed with instruction to mail their remittances to the lock-box. Several times a day, the bank collects the lock-box receipts from the post-office and deposits the checks in the company's account. The checks are recorded and cleared for collection, the bank begins the clearing process, the bank notifies the firm that a cheque has been received and sends the company a deposit slip.

Lock-box services are efficient in accelerating funds collection and in reducing Clerical work for the corporation. It frees the company from handling and depositing the checks. The main advantage of a lock-box system is that the checks are deposited in the banks sooner and become collected balances sooner than if they were processed by the company prior to deposit. This means the lag between the time checks are received by the company and the time they are actually deposited at he bank is eliminated.

Conclusively, traditionally many companies use the postmark date on the envelope to determine whether a payment qualifies for a discount. This requires considerable manual verification, to eliminate such verification and speed up collections, some firms usually instigate the time of actual receipt as the benchmark for discount qualification. This technique of speeding up collection is not used in Nigeria because of the experience with the postal system.

3.4 CONTROL OF DISBURSEMENT

Early disbursements can be as wasteful and uneconomical for a corporation and as can late payments that result in loss of discounts or penalty charges. Delayed payment can also be costly to a cash management –minded firm if it results in loss of cash discounts.

Credit term is the major reason why financial managers tend to delay payments to the customers (of their bills). This is so that they can earn interest on the given amount and also ensure that they pay their bills on or before the due date of payment so that they can earn cash discounts. Credit terms express the amount of the cash discount and the date of its expiration, as well as the final due date. An example of credit term is "2/10, net 30" means that a 2% discount is given if the bill is paid before the tenth day after the date of invoice; payment is due by the thirtieth day. The credit period is 30 days.

A combination of accelerating collections and disbursement control gives optimisation of the cash position. Maintaining control over cash is accomplished

both through acceleration of receivables collections and delay of payments in order to earn income or provide cash liquidity. One way of maximising cash availability is "playing the float". The objective of playing the float is to track disbursements through Central Bank Accounts and not through Company Banks. Float is the difference between the balance shown in a company/individuals chequebook balance and the balance on the bank's books. If the size of float can be estimated accurately, bank balances can e reduced and the funds invested to earn a positive return.

3.4.1 CENTRALISING PAYABLES

Centralising payables into a single account, presumably at the company's headquarters helps in tightly controlling disbursement. Centralisation of payables allows the cash manager to evaluate the timing of payments coming due for the entire corporation and schedule payments based on system-wide needs.

Operating procedures for disbursements should be well established, so that disbursements can be made at the precise time they are desired. If cash discounts are taken on accounts payable, procedures time they are desired. If cash discounts are taken on accounts payable, procedures should aim towards eliminating or minimising the loss of discounts due to clerical inefficiencies. Worthy of note is the fact that timing of payments is important, for maximum use of cash, payments should be made on the due date and not before.

Centralised disbursement activity permits more efficient monitoring of account balances and current positions. It allows the cash managers to take the optimal

economic time in settlement of obligations. It is accomplished by evaluating the terms of the purchasing agreement or industry standard and disbursing only as required to optimise the financial benefits to the company. Through the use of centralised account payable, corporations are better able to control and execute the corporate philosophy regarding funds payment. The responsibility for centralising payables is centred in one accountable person – the Cash Manager.

3.4.2 DELAYED POSTMARKS

It is important because discounts are based on postmarked date, not the actual date received. A Company could postmark a payable on Friday, have it mailed on Monday and gain three days float on the funds as well as gaining the cash discount. Mailing funds from remote areas can also help to maximise the length of time it takes payments to reach, it provides additional mail system supplied for cash utilisation.

Today, many Cash Management techniques that rely on float for their existence will be reduced or eliminated, the loss of float control is direct result of Electronic debiting of accounts. The current practice of concentrating funds by depositing transfer cheque into a central control account will be significantly reduced as pre-authorised payments are pre-processed so same day crediting of accounts occur, since pre-authorised debits can be distributed to the receiving ban prior to the due date. Consequently, funds are immediately settle.

There will be a reduction of controlled disbursement when a mature stage of Electronic Funds Transfer system is realised. pre-processing of debit and credit for

business-to-business payments will take place same day after it has been delivered from the originating bank. The reduction of disbursement float forecasting by corporations will be dramatically reduced under the expansion of Electronic Funds Transfer system –based services, this is through the corporate use of direct services for business payments less than N1,000, the need to forecast clearings will be reduced.

Immediate availability of funds to the cash manager on all Electronic Banking generated entries will result n more accurate funds possible. Through Electronic Banking utilisation, a high percentage of each day's receipts can be known with certainty in advance because of established payments patterns (aids forecasting). Consequently, the Cash Manager can plain in advance what use to make of funds to cover low-naira disbursements, which will clear with similar certainty. Penalties imposed for being overdrawn because of inaccurate cash forecasts and lost opportunity costs will be reduced. Better control and planning ability arising from Electronic Banking applications will result in better levels of cash optimisation.

Increased earnings can result to Cash Managers from expanded use of Automatic funds transfer capabilities that will be available in the Electronic Banking environment. All balances in one of the few central corporate control accounts except for minimum maintenance balances would be transferred to an interest bearing account. Although these interest bearing accounts would not earn as much as other available investments, they would assure some base level of return on under-utilised funds.

Increased earnings will provide motivations for consideration of Electronic banking services just as they will provide the potential for cost savings, also reduced corporate expenses related to EFT's use can be realised within the corporation.

Lock-box use will eventually be significantly reduced by Electronic Banking pre-authorised payments. To the consumer, savings will be reflected in the elimination of postage and cheque preparation and cheque processing charges. Since there is no collection process time required, the need to reduce mail and collection float, which is the prime reason for lock-box use, is eliminated for these transactions. Consequently, bankers and Cash Managers alike can look forward to the decline of Lock-boxes as a major Cash Management technique as Electronic Banking applications increase in acceptance.

As extensive use of cheque verification and guarantee cards spread retail merchant losses will be reduced. For some industries, this will provide a major motivation to move actively into the use of Electronic Funds Transfer verification facilities.

Corporations that are presently MICR-encoding their own cheques for deposit to realise a lower processing charge may be able to reduce manpower and machines associated with this process, banks can also benefit from this process. Banks will also profit to the extent that peak –and-valley, labour-intensive workload processes will be smoothened, thus reducing overhead. Corporations will; enjoy

increased funds availability to support non-credit services and loans as a result of Electronic Funds Transfer system processing.

As cheques are replaced by Electronic Funds Transfer system entries or business – to-business and business-to-individual payments, the need for account reconcilement services provided by banks will be dramatically reduced. Because a typical corporation can easily issue thousands of cheques monthly, the use of an automated account reconcilement package is almost mandatory. With the advent of Electronic Funds Transfer system pre-authorised debit transactions, various types of disbursement accounts will be eliminated such as controlled disbursing, but the number of cheques issued will be reduced.

As funds are available on the specified settlement date, the use of wire transfer will increase to take advantage of excess funds. While the increase in wire transfer is highly probable, the transfer cost per wire transfer will be cost justified based on high interest rates, thus reducing break-even transfer amounts. The increase in wire utilisation, coupled with direct debit and credit, Electronic banking application will significantly change the bank and corporate cash management relationship.

Perhaps one of the most significant effects of increased use of Electronic Funds Transfer system service will be the acceleration in the unbundling of bank services. Credit and non-credit services will be made available to corporations on a fee basis because reduced processing expenses will make banks more aware of the need to be profitable in a standalone service basis. The overall effect to banks

will be lower balances for services performed under Electronic Funds Transfer system because per transaction cost to corporations will be reduced. It will benefit banks if they take advantage of the unique opportunity to reduce operating expenses disproportional profit levels that have been lost in prior years because of disproportionate processing cost increases.

CHAPTER FOUR

USE OF ELECTRONIC BANKING IN CASH MANAGEMENT

4.1 INTRODUCTION

In the management of collections by Finance Managers, one or all of the following measures are taken.

- Speed the mailing time of payments from customers to the firm.
- Reduce the time during which payments received by the firm remain uncollected funds.
- Speed the movement of funds to disbursement banks.

Effective control of disbursements can also result in more availability of cash. Whereas the underlying objective of collections is maximum acceleration, objective in disbursement is to slow them down as much as possible. The combination of fast collections and slow disbursements will result in maximum availability of funds. The above is the underlying motive for the introduction of Electronic Banking systems in Cash Management.

4.1.1 COLLECTION SERVICES AND DISBURSEMENTS

Most companies who deal in the supply of goods and services have branches ion almost every state capital and other major cities. Because Treasury functions are centralised in the Head office, funds collected are required to be delivered to the head office very quickly. Disbursements or payments by the company to its suppliers all over the country also originate from the head office and need to be made as late as possible to retain float and still take cash discounts offered.

Certain banks in Nigeria have computerised their operations and have linked their branches nation-wide to the computer network through the use of public telecommunication systems (Radio, telephone and satellite). In managing its collection process, a company may select two or three banks that have representation at the locations where the company operates branches. The company then opens collection accounts in one of the branches of its bankers at each location where it operates. Because of the electronic banking facilities in use at the bank, funds deposited into any of the collection accounts at any branch of the bank can be transferred to the main account almost instantaneously. If a company opens these collections accounts in remote upcountry branches of banks and a main account in the head office, the collection process can be reduced to simple steps like those below.

- Company A supplies goods to customer B with payment to be effected according to trade credit terms already in place.
- The company A, sends an invoice to its customer B.
- The bank would have supplied customised pay – in-slips to company A which in turn passes them to its customer B.
- Customer B now completes the pay – in- slip and deposits cash or checks into the collection account of company A at the bank's branch nearest to customer B.
- Company A can then instruct the bank to transfer these funds from its collection account at the branch to its main account in the head office. The funds transfer which will b by electronic means takes only a few minutes.

This process achieves marked improvement in the time it would usually take to collect funds from remote locations. Several combination of arrangement can be put in place, for instance the customer B, can also open an account with the same branch of the bank as B. in this case, customer B only needs to instruct the bank to effect transfer of funds from its account to that of company A.

In the case where company B deposits a cheque drawn on another bank, into the collections account of company A, the bank will clear the cheque through the local clearing house and transfer the collected proceeds to the account of company A. this eliminates the need to send the cheque to the head office of company A by mail with the attendant risk of loss. Even if the cheque is not lost, when received at company A head office, it is lodged into its bank account where it will be collected through the clearing house as an upcountry cheque. This of course, means that the funds will not be available for use until the laps of the period established for collecting such checks.

One way of maximising cash availability is "playing the float". For disbursements, float is the difference between the total Naira amount of checks drawn on a bank account and the balance shown on the bank's books. It is possible of course, for a company to have a negative balance on its books and a positive bank balance, because checks outstanding have not been collected from the account on which they are drawn. If the size of float can be estimated accurately, bank balances can be reduced and the funds invested to earn a positive return.

If Cash discounts are taken on accounts payable, procedures should aim at eliminating or minimising the loss of discounts due to clerical inefficiencies. The timing of payments is important. For maximum use of cash, payments should be made on the due dates, not before.

A means of delaying disbursement is through the use of drafts or checks. The idea is to locate disbursing banks and draw checks on them that will maximise the time a cheque will remain outstanding. One firm's gain however, is another firm's loss. Maximising disbursement float means that suppliers may simply raise prices to compensate; others may let service slip because the buyer is no longer a favoured customer. Electronic banking provides mans of slowing down disbursements, while making sure that the funds are available to the supplier on due date. This is accompanied by Electronic funds transfer systems. With Electronic funds transfer, float is eliminated. Unlike paper transfer, there are no uncollected funds, for one party's account is debited at the instant another is credited. The company forwards instructions to its bank to make payments to a named beneficiary at a named location and the bank obliges by processing the transaction as instructed.

4.1.2 PRODUCT INQUIRY SERVICES

To enhance its cash management capabilities, a company has to have access to its account records in the bank at will and be able to know the position of activities in its account with the bank. this information enables the finance manager to make decisions quickly and instruct movement of funds very quickly. Most banks with

computerised accounting systems in Nigeria offer an account or product inquiry service. The two types are:

- Updated account Inquiry service
- Real-Time, On-line account Inquiry Service

With both types of services, the customer acquires a Micro-Computer running a communications software and a Modem for connection to a telephone line. An electronic data exchange service agreement is signed by the bank and the company before the latter is given access rights to the banks computer.

At the beginning of an inquiry session, the user in the company dials into a telephone line connected to the banks computer system by using Modem. When connection is established, some internal communications "Handshaking" takes place between both computers and they agree on the protocol for data exchange. The user is then prompted to type in a user-id and password before gaining access to the information in the computer.

If an incorrect user-id or password is typed in by the user, access is denied and no information can be seen. However, upon successful logon, the computer releases information based on the type of service being accessed. Updated accounts inquiry services operate an information pool, which is separate from the main database, accessed by staff of the bank. The information pool is only used by customers who dial-in for inquiries and is updated at certain intervals automatically. If for example, the update interval is daily, customers dialing into such service can oly

see details as at close of business on the previous working day. This is different from the On-Line/real time service, where customers are allowed to access the same database as staff of the bank. information displayed on the customer's terminal will reflect the current status of the account at any point in time.

Some information available on product inquiry services are;

- ACCOUNT BALANCE: Displays a summary screen showing balances of all the customer's accounts in the currency of the account.
- ACCOUNT STATEMENT: Displays account history for a period depending on the sophistication of the service. it lists the opening balance at the beginning of the period and details of transactions that took place in between the closing balance is also shown.
- CASH SUMMARY PROJECTIONS: The service provides a cash availability projection for the next five days or more, showing the customer the amount of useable funds on each day.

Using this information, the Finance Manager knows what the bank balances are on each collection account and the main account and can additionally instruct transfer of funds between accounts as required. Post dated cheques can as well as be written to coincide with availability of funds in the account as reported by the service through its cash summary projections.

4.1.3 TRANSACTION INITIATION SERVICE

While a company profits by taking discounts on its accounts payables, this profit can be eroded by cost incurred as loss of float by not delaying payment to the last possible date. Companies usually loose float to banks by sending in their payment instructions much earlier than the last date of payment. This is due to the fact that the company has no knowledge of Electronic Banking or its ability to manage the disbursement process with this facility.

Transaction initiation programs can be used by companies to initiate Electronic Funds Transfer instructions to its bank which can automatically respond to such instructions. For transaction initiation (TI) from the customers terminal or personal computer to work, there has to be a transaction initiation software installed in the Customer's office and a server in the bank. The server is a computer which will receive the electronic instruction from the customer's computer and automatically pass it into the bank's accounting system, debiting and crediting accounts according to instruction from the customer's computer.

There are three steps in the use of the transaction initiation program:

1. DATA ENTRY; The program will present a data entry template to the user to be completed and saved (see format below).

1. Ref. Number:.....	2. Date: .....
3. Debit A/C:.....	4. Branch:.....
5. Credit A/C:.....	6. Branch:.....
7. Amount:	

- Reference Number – Is the reference number of the transaction
- Date – date of the transaction
- Debit Account – The customer's account to be debited
- Branch – The branch of the bank where the Account in (3) above, is domiciled
- Credit Account: The account of the beneficiary to be credited
- Branch: The branch of the bank where the beneficiary's account domiciled.
- .Amount: The amount of money to be transferred

The above information is entered and saved by the data entry staff.

2. AUTHORISATION: A supervisor will now call up the transaction initiation program and verify that the instruction has been entered correctly. He can then approve the transaction at this stage.
3. MESSAGE TRANSMISSION: The instruction is finally transmitted to the bank via a telephone line.

Upon receipt of the message in the bank, the server first verifies the integrity of the message by means of testwords confirmation before processing. Thus funds can be transferred electronically within minutes of the instruction reaching the bank.

Another application of Electronic Banking in Cash Management is the use of Electronic "smart cards" by merchants and retailers. The "Smart Card" has a

computer chip embedded in its plastic body that allows immediate interface with the retailer. The players in the "Smart card" business are:

1. The bank
2. The Merchant or retailer
3. The Customer

Instead of writing checks in payment for goods and services, the customer can go to a bank and acquire a "Smart Card". The two types of smart cards are reloadable and non-reloadable smart cards. With the non-reloadable card, value is loaded on electrical wiring which gets burnt out as the card is used. The card is thrown away when it is completely used up as it cannot be reloaded. The present cards issued by Nigeria Telecommunications Plc (NITEL) are non-reloadable, telephone users slot the card into a card reader attached to the telephone set during calls. The value stored in the electrical circuitry system of the card which gets burnt while it is in use.

NITEL sells its cards to subscribers through its bankers, users buy the cards and make payments up-front. The cost is debited to the customer's account and credit is passed to the account of NITEL in the bank. Payment for phone calls can therefore be automated by the use of cards and payments will be collected up-front instead of the long rigorous process of sending bills to customers and chasing them to make payments. Occasionally, payments are even made with dud checks prompting NITEL to spend wasteful man hours disconnecting telephone lines of defaulters and reconnecting after payment.

Reloadable "smarts cards" on the other hand, can actually have value reloaded any time it is depleted. This kind of card is also referred to as the "electronic Purse". Sometime in May 1997, Diamond bank Limited launched its Electronic PAYCARD, a "smart card" issued by Diamond Bank which is also re-loadable. The bank will issue the cards to interested customers who may or may not operate current accounts with the bank. customers are required to fill out an application and submit to the bank for consideration, successful applicants will be issued cards with zero balanced. A necessary step during card issuance is embossing and customisation during which the plastics card is embossed with the name of the owner as well as a serial number. The card is then loaded with the value of cash provided by the owner either through issuance of instruction to debit his current account with the bank or by cash deposit across the bank's counters.

Operating Agreements are signed between the bank and Merchants and owners of sales outlets who have agreed to accept the cards in settlements for goods sold to card owners. Merchants need not have current accounts with the bank but need to acquire Point Of Sale (POS) Terminals. Point Of Sales are machines and contain a removable shuttle-card which itself is a "Smart Card". The shuttle-card accumulates the values deducted from those stored in customers "Smart Cards" and stores this in its own memory chip. After making purchases, a smart card holder will feed his card into the POS and the sales clerk will key – in the value of items purchased. In order for the POS to read the value stored in the customer's card, deduct the cost of the purchases from the card and add it to its own shuttle-

card, the customer must enter a Personal Identification Number (PIN). The (PIN) is chosen by the customer during customisation of the "Smart Card" and is only known to the owner of the card. At the end of its sales cycle, say weekly, the merchant takes its shuttle-card are read into a computer and the total value is credited to the Merchant's Account. Cash payment may also be made to Merchants who do not have accounts with the bank.

Diamond's PAYCARD, like most others in foreign countries are issued with a purse reader as an accessory. The Purse Reader has a built-in receptacle for the plastic card and tells the holder the amount of money held in the card at any time. this is particularly useful before purchases and it also displays the date and amount of the last five transactions for audit trail. Successful use of the "Smart Card" will eliminate the need to carry cash around for transactions. At the same time, merchants are assured of getting good value for goods sold without the risk of receiving dud checks and counterfeit money.

In fact, there exists the capability of connecting Point Of Sales Terminals to the Main-Frame Computer in the bank. as the value of the customer's purchase is read and deducted from his "Smart Card", the account of the Merchant with the bank is credited. Although this is not being offered by any bank in Nigeria today, chances are hat with the introduction of the PAYCARD, high user population may be achieved in a short time and Merchants will not longer be satisfied with the settlement process. There will then be requests for on-line Point Of Sales systems linked to the bank's accounting computer by telephone, capable of effecting funds transfer immediately.

4.2 ELECTRONIC BANKING RISKS & SECURITY CONSIDERATIONS

With the conventional money transfer methods, used in Nigeria over the last three decades, security of funds in transit is almost guaranteed. This is because the manual process involves checking and rechecking the origin of funds and the identity of the parties in the transfer transaction. The Electronic Funds Transfer on the other hand is carried out on the high speed electronic highway where only "0's" and "1's" representing data and ON/OFF representing electronic signals make any sense to the computers. In the earlier days of Electronic Banking in Europe and America, Operators took a lot of losses resulting from fraud. The most common type is by computer "hackers" – very intelligent computer professionals and whiz kids who break into the computer system by electronic means and transfer funds illegally from the customers accounts. The other type of fraud comes from use of forged or stolen "Smart Card" to transact business.

In Nigeria, we have a peculiar problem with electronic banking which is not related to fraud. Successful implementation of Electronic Banking relies heavily on functional communications facilities which unfortunately is not the case in Nigeria. Banks which have on-lin links between their head office and branches only for as long as the communications link between both branches is functional. Most banks make use of leased telephone circuits provided by NITEL for data communication between its Head Office and branches. Whenever NITEL facilities are not functional, the branches are almost paralysed as they have not access to

customers account records which reside in the central computer in the Head Office.

This presents obvious operational problems since the branch managers will not have a handful of customers who would wan to transact business but cannot. Banks go round this by dispatching a printout of customers account balances to branches at the close of business each day. In very urgent cases, the balances are sent by fax or by hand through a secure means. The risk inherent in this is that when a branch of a bank is operating with a download of previous day's balances, fraudulent transactions may be allowed to pass through, the most common being unauthorised overdrafts.

Product Inquiry systems present no risk at all except where unauthorised disclosure of customer's account information will compromise the operation of the account. Access to product Inquiry Systems is by user –id and password, both of which are assigned by the bank. Even if a user dials into the service, access is denied unless you enter the correct user-id and password.

Most systems permit only three attempts before raising a status message to warn the system administrator of a possible unauthorised attempt to access information on the computer. For some computer systems, when a remote computer dials in for exchange of information, it will store the telephone number used to make the call in its memory. This way, if the user is not an authorised user, he can at least be traced to the telephone line where the call originated.

Criminals mostly target transaction initiation systems. These criminals once they find out the dial-in telephone number for the computer, can connect to the computer and break the access codes. Funds are fraudulently transferred from customers accounts to those of known associates who could withdraw the money for them. To prevent this, Transaction Initiation services use a test word arrangement to authenticate funds transfer instructions received from customers via the computer system. The testword is a sequence of random numbers, which are generated by the customer's computer and attached to the message/transfer instruction received by the main – frame.

By agreement, the mainframe computer knows all the testword strings that can originate from the customers end. In fact, the mainframe knows the sequence in which the testword will be used, so far every message from the customer, the main-frame expects a particular testword and flags an error if anything different shows up.

Encryption and Decryption technology is also used to protect the integrity of electronic funds transfer instructions. Encryptors use special algorithms (formula) to encode the original message before sending it through the public telephone line to the main – frame computer. As the mainframe computer receives the message, just before processing, a decryptor will use similar algorithm (formula) to restore the message to its original form. This is a compulsory feature of every transaction initiation system.

Smart cards sometimes get stolen and if there is still some value held in it, can be used by the criminals to make purchases. New "Smart Cards" can have the signature and picture of the owner stored in its electronic circuitry. When the holder makes purchases and surrenders his smart card to the sales clerk to slot into the point of sales terminal, the terminal displays the photograph of the original owner and his signature. These are then used to verify the identity of the person using the card to make purchases, if the picture displayed does not match that of the person using the card to make purchases, the sales clerk will get suspicious and refuse to accept the card.

A similar action can be taken if the signature stored in the card and displayed on then point of sale terminal, does not match that signed by the person using the card to make purchases, the sales clerk can also refuse to accept the card and report this to the bank. what this implies therefore, is that holders of such smart cards will use it to make purchases in person and cannot hand it over to somebody else to avoid any embarrassment.

CHAPTER FIVE

SUMMARY AND CONCLUSION

5.1 SUMMARY OF FINDINGS

This project work has attempted research on the developments in Electronic Banking procedures with particular reference to how it has enhanced high quality services and cash management in a firm.

An overview of Electronic Funds Transfer systems and its related applications as applied to Cash Management was presented. The need for Electronic Banking projects is in keeping with the pace of development in the world.

There is the need to automate the routine operations of the bank so as to reduce the waiting time of customers; reduce errors, and the inconvenience of leaving the home or office for the bank branch. Electronic Banking though it is still in its developmental nature, it will in the next five years have implications on cash management.

During the course of this research work, it was revealed that some companies choose their bankers products offered based on the perceived financial strength of the bank taking into consideration the level of distress and failure in the banking industry in Nigeria whereby a large sums of money was lost by a large number of companies.

Nigeria is largely an import economy and because of import regulations, companies and individuals often need to depend on the Federal Government through the Autonomous Foreign Exchange Market (AFEM). Some banks also

regularly have large stock of foreign exchange obtained from approved sources outside the CBN controlled AFEM and sell these to their customers. A company can decide to use the services of a bank because it can readily provide foreign exchange for imports and not necessarily because the bank offers superior products that facilitates better Cash Management or high quality services.

Cash manager's perspective is that most important detriment to Electronic Funds Transfer system is the loss of float experienced in the payment application. Cash Managers can be expected to foster the use of Electronic Funds Transfer systems for receipts of funds to reduce collection float and increase the accuracy of cash flow forecasting.

Cash Managers will be slow at implementing processes that deteriorate float control and will only be willing to use Electronic Banking services in relation to the cost and benefit analysis that can demonstrate overall profitability. In addition, cash mangers will expect and anticipate lower bank charges for electronic banking (EFTS) services and look for methods or way of minimising the loss of float control through changes in discount practices, alteration in prices or other service charges.

Credit facilities are only available from the banks. Companies who so wishes has the tendency to transfer their banking business to those banks that are willing to offer them credit facilities with good repayment terms. Such terms of repayment requires that a company's account should maintained a minimum balance in order for the company to bank with them.

Despite the knowledge of Cash Managers of companies about the Cash Management services offered by Electronic Banking, and the attraction of the enormous power to manage their current assets, other consideration influence the choice of banks by the company. Due to the cost and the technology to offer the Electronic Banking services is expensive, users are made to pay a premium charge for such service offered, thus most companies do not utilise the full cash management advantage offered by Electronic Banking.

Financial Managers of Corporate organisations should prepare strategies and plans for the coming widespread use of Electronic Funds Transfer system so that corporations may plan changes to meet the processing requirements of Electronic Transfer System provided by banks. Recognition of the evolutionary status of EFTS and its effect on the corporate financial structure provides the best defensive foundation for financial EFTS decisions.

5.2 RECOMMENDATIONS

It is obvious from the topics so far covered that vast improvement in a company's Cash management capability is offered by Electronic banking services provided by some banks in Nigeria. Consider the delays that arise from Mail and Telegraphic Transfers and the float created for the banks through the cheques clearing system and compare it with the instantaneous transfer of funds offered by Electronic Banking with the total elimination of float.

A company collects its receivables from customers immediately the customer remits payment to the bank irrespective of which part of the country the customer is based. It can also delay its payables to the very last day and still issue instructions to its bank, which is capable of transferring funds to the beneficiary on the same day. These are very attractive propositions offered by today's computerised banks to every Finance Manager and which is strongly recommended to be used to full advantage.

Product inquiry Electronic Banking services provide timely information to Finance managers while databases integration of all the branches of a bank facilitates collections and disbursements. Transaction initiation services on the other hand are a perfect tool for the control of disbursement by the company.

Basic enactment of regulatory and legislative measures is necessary to a maturing growth environment so the current ambiguities can be resolved. Basic to a general use of Electronic Funds Transfer system services is the elimination of much of our paper-based processing with electronic record keeping as acceptable proof documents. Once a legal statement of alternative proof of payment is disseminated, the sacrosanct aura of security associated with cheques will diminish and the convenience of cheque truncation systems will be spread as descriptive credit card statements are replacing physical return of credit cards receipts.

The general acceptance of Electronic banking applications needs to be attached with a marketing package that will offer additional benefit package in conjunction with the sponsoring bank. of major importance to corporations will be the general public acceptance of pre-authorised debits because it will signal the public's readiness to forego float for the convenience of automatic payment.

Another public factor indicating changes in acceptance, level attitudes is the implementation and use of debit cards. The important factor is public willingness to use a debit card transaction in lieu of cheque. Participation of supermarket chains will be a critical indicator of public acceptance of electronic funds transfer system. Because of the large volume of cheques cashed by supermarkets and their historic collection problems, which are sometimes 5% of their profit. The retail supermarket can play a pivotal role in the widespread acceptance of Electronic Funds Transfer systems, already supermarkets in some areas of the country – Lagos, are now using smart cards.

Companies who are tied to a particular bank should adopt the "Split banking" approach. Split Banking is where a company uses several banks and gives business to each bank based on its assessment of the banks capacity to deliver such service. loan facilities can be obtained from banks willing to let the company have it even at interest rates considered high in the market. The collections of receivables and disbursement of payables should be handled by a bank with capacity for Electronic Funds Transfers. This is because the gains of being able to make payments late and still take discounts on payables and collecting receivables

very quickly will certainly compensate for a little interest rate differential on loans.

With the introduction of plethora of automated equipment into banking operations, efficiency is guaranteed. The introduction of Automated Teller Machine Service is very quick so various outlets for banking services can be provided in a wide choice of locations not necessarily branch sites. This ATM is not widely used in the Nigerian banking industry as observed during the course of this research work. Its use is highly recommended.

It is recommended that electronic banking should b restricted to the cities where the sophisticated elite reside. This is a challenge that banks will have to face in the 21st century unless the drive for "education for all by the year 2000" is logically concluded. This suggests that literacy rate must be improved upon. Computer fraud is common all over the world and has a negative impact on the 21st century banking. To prevent drastic effect of it, internal control and discipline must begin so that "Fraud syndicates" are not allowed o develop.

Consequently, efforts must be made to get a standby generator as an alternative in case of light failure and transactions would take place manually making use of the ledger accounts when the communication network is interrupted.

Automated clearinghouse is an important consideration for corporate cash mangers because they can take advantage of lower-cost clearance facilities

through the use of ACH's and pre-authorised payments, more accurate controls over cash flows are achievable. Also, mail and collection float is eliminated through the use of ACH's.

Automated Teller machine devices are an important consideration to cash managers because the amount of cash required to service customers in outlets mat be reduced if an ATM is installed. When an ATM is installed there would be easy access to funds 24 hours a day via plastic cards and this can result in increasing a firm's potential cash flow and sales. The ATM's if installed can eliminate collection float on cheques cashed and reduce item-processing charges levied by banks for cheques deposited.

Cash mangers are keenly interested in monitoring the Automated clearinghouse development because they alone are a guidepost to when the payment system will offer the possibility of faster receipts. Business-to-business payments might be implemented so that outflows of cash and inflows may be accelerated. The float problem is the major consideration for corporations today in using automated clearinghouse entries for payments.

Tho Automated clearinghouse and Automated Teller Machine are highly recommended to the Nigerian Banking industry because they go along way in improving on the quality services being rendered by Electronic Banking to Cash managers in a firm.

An electronic mail system, which would largely eliminate the need for telex and fax communications between locations, is highly recommended to banks so as to improve on their internal communications system and reduce over-dependence on NITEL PLC cable line. NEPAPLC and NITEL PLC has been an obstacle in the way of electronic banking particularly in Nigeria where public utilities are not reliable most of the electronic banking products depend wholly on efficient and uninterrupted power supply and good communication net work.

5.3 **Conclusion:**

The banking industries are now offering cash management services based on electronic banking system to improved their quality of services. As we approach the 21st century, the level of awareness on computers are great, this will increase its uses and services and will reduce the cost and encourage banks to pool resources together and set up an intercity money transfer company that will handle settlement of inter bank transactions involving different bank in different cities or towns.

Electronic banking reduces the limitations of today's cash management services since banks would be able to make disbursement very quickly to beneficiary outside their area of operation, and even through the beneficiaries own local bank. Money can at the same time, be collected from the accounts of company's customers who maintain relationship with other bank's who subscribe to the services. Collection and disbursement services offered by banks is greatly hampered by their net work of branches. Banks who are fully computerised lack the necessary presence in all nooks and corners to effectively collect and disburse funds through its branches. Older banks have a larger presence and maintain large branch net work but lack the technology to link up these branches with one another. For the finance and cash managers, nothing other than a bank with branches all over the nation linked

up by computer communication that integrate accounting system will ensure total satisfaction

The CBN has not taken a specific position on its involvement on the direct development of electronic banking services. The degree of appropriate involvement of CBN has been of concern from the on set in the development of electronic banking. But, it has however, become involved in producing and developing guide lines for handling and operating electronic funds transfer system based entries due to its growing importance.

The resolution of the degree of competion versus co-operation in the designs, development and operation of electronic banking between banks will be cancel to the sustained acceptance of electronic banking. So also, the price of product differentiation resulting from competition in all these areas would preclude effective development. Electronic banking services, which tend to be generic and not differentiated to any major degree from one bank to another should not have any reasons to alter a approach from credit services currently performed. It is the marketing of the product or delivery services in banking that often differentiate the product rather than the physical or features of the products.

The growth of electronic banking largely depend on the government policy. Cash and finance manager should monitored the direct and indirect participation of the government in electronic banking program. The government being a price mover in the control of resources will impact development in electronic banking through pre-authorised transactions its action as a regulatory agency dealing with both aspect of infrastructure and monetary policy. These regulatory areas directly affect cash managers, both for the cos of services offered to corporations as well as for the basic cost of money.

The growth of electronic banking services was also affected by the attitudes of individuals and the

business community and their willingness to accepts changes in their historical behavior pattern to adopt to electronic funds transfer based products (EFTS). The acceptance of EFTS transaction by consumer is the key to the acceleration of its growth. The attitude of Nigeria business also need to be considered as a factor in the growth of EFTS-based services. The major concerns of businesses are:-

. The extent to which providing EFTS will after the basic customer relationship with the company is direct debit environment.

. The degree too which the company is willing to sacrifice its float in the payment of obligation and loan the trade-off cost are evaluated.

A major concern o the company is the loss of image in the eyes of the customers and maintaining the current customer relationship is another major factor of consideration for a business where a large proportion of EFTS are implemented. Cash managers decision are directly affected by the willingness of the business to sacrifice disbursement float to use EFTS services and this will remain the primary impediment to overcome in the use of EFTS services.

The potential accessibility to personal or corporate records also affect the growth of EFTS, privacy and freedom of choice are thus limited to business and individuals. Also business and individuals may be limited in the choice of payment services available as a result of strong government interaction in the development of payment services. Personal privacy of records will be a problem for both business and individual since electronic banking if widely used, will make government agencies to have possible and feasible technical access to most financial information. Due to the availability of data and advance of technically based auditing capabilities, many more audits will be possible annually and thereby increase direct government control over the actions of corporation and individuals through

the use of auditing as psychological threat.

Science and Technology has its positive and negative aspect. A good example is the automated teller machine (ATM), with the use of this machine there is a lose of personal contact with customers which may make selling other sources more difficult. Acquisition Of complex and sophisticated machines have its merits and demerits rewards, but if careful and necessary precautions are taken a good inherent of the system would be the result.

At present there is no statutory framework of customer protection law covering electronic banking. Banks and other financial institutions have filed the gap by imposing customers payment card terms and condition which are one-sided and which leave the customer at risk of by chance something went wrong.

The fact to note is that the law on negotiable instrument for instance is inadequate because most electronics fund transfers are credit transfers, since payer initiate transfersof funds by giving written instructions to his bank where as the collection of a cheque is basically a debit transfer.

As changes and development in technology increases however, there will be the need for clear rules in respect of the right to withdraw a transfer instruction once the payment message is released by the paying bank, in a transaction made on-line, high-value EFTs network such as CHIPS, SWIFT or CHAPS. This legislation is needed as we enter the new century despite the fact that CHIPS transfer becomes irrevocable once released.

A pertinent issue is whether payment made electronically can be countermanded or revoked, if so at what stage can the transaction be revolved and what reason can be adduced for it? Can signature be verified under EFTS? And is there a way alternation to genuine message can be detected by the banks. Cost justification to operate the on-line service and difficulties in obtaining the required

information from many reporting banks are the major corporate problems involved in offering the on-line information services. Many banks offering this service charge reduced wire transfer rates provided the customer directly inputs the date. These are easily controlled by the cash managers and cost justified, the anticipated problem on the use of MICR cheque is with regards to its being folded or mutilated by the holder through smearing, and this problems can be curbed by an intensive public awareness campaign .Because of the present day computer innovation and due to its increasing use, computer fraud is becoming more sophisticated and it has started to move away from a technological variety of book-keeping fraud to more sophisticated scams.

"Electronic system enable institutions to develop a business relationship with a greater range of customers. The available task for credit risk and other decision making has been shortened by the effective and efficient bank's electronic settlement system. How then will the bank be sure of the motive transaction?" The increasing rate of criminal peneteration of the computer network system to alter payment authorisation is alarming. The real danger is that, as these computer criminal become more expert and adopt at penetrating computer network and as more and more non-bank participants join in money transmission network, fraud could rock both the local and international monetary system. So many ways are being used to reduce these activities, an example is the new technology for identification of card holders-personal identification number (PIN) More efforts continues until a very effective way of abating electronic technology fraud emerge.

High rate of unemployment exist due to the ultimate displacement of personal by machines. Labour unions did not at one time agree with this development. The introduction of the cash dispensers and automatic tellers was not agreed by the Danish Trade Union. Despite all these, there is a great advantage in the use of technology in banking for effective and efficient cash management services.

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