TITLE PAGE

IMPACT OF COMPUTER APPLICATION ON THE PERFORMANCE OF KEYSTONE BANK PLC, KADUNA

BY

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BEING A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF BUSINESS ADMINISTRATION,

IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF HIGHER NATIONAL DIPLOMA IN BUSINESS ADMINISTRATION AND MANAGEMENT KADUNA POLYTECHNIC, KADUNA

DECLARATION

I hereby declare	that this	project	work	has bee	en written	by me	under	the
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Administration. I	have neith	er copied	l someo	ne's wo	ork nor has	someone	e else d	one
it for me. All refer	rences mad	le to publ	ish liter	ature ha	ve been du	ly ackno	wledge	d.

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APPROVAL PAGE

This is to certify that this project report entitled "Impact of Computer Application on the Performance of Keystone Bank Plc, Kaduna" by **Adepoju Temitope Nafisa KPT/CBMS/19/54014** meets the regulations governing the preparation and presentation of project report for the award of Higher National Diploma in Business Administration and Management in Kaduna Polytechnic and it is hereby approved for its contribution to knowledge and literary presentation.

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DEDICATION

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ABSTRACT

The research project is concerned with The Impact of Computer Application on the Performance of Keystone Bank Plc, Kaduna. One of the objectives of the study is to examine the impact of Automated Teller Machine (ATM) transaction on the performance of Keystone Bank. Questionnaires and 36 data were collected by the respondents using the likert 5 point scale. Therefore finding of the study revealed that the application of computer in Keystone bank has transformed commercial banking operation from armchair banking to a modernized or automated banking system through the use of information technology such as internet with facilities efficiently, accuracy, speed in the transfer and exchange of information. The study concluded that with the vast expansion and transformation that the banking sector is currently going through, the bank can hardly maintain its markets share currently or into the long run without adequate commitment of manpower development in the area of cybernetic. Finally, it was recommended among others that as internet marketing is currently gaining ground in Nigerians, new method should be adopted to reach out to numerous customers through the internet by setting up a marketing websites to facilitate marketing operations.

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

In the 1990s when information and communication technology (ICT) was not in existence, banks experienced many hardships and restrictions. Customers had to visit their various branch banks to withdraw money (Steinumueller, 2018). There were no computers, internet etc., rather information and activities were handled manually and this made banking work cumbersome (Steinumueller, 2018). There were long queues at the banks on some days when the bank staff could not handle the workload. There was no cashless economy. People carried cash around with them and so on (Abdulsalam, 2016). But now the use ICT in banks changed all these things and also improved banks performance in the whole world (Johnson, 2019).

In this 21st century, information communication technology has vastly developed and has led to development in the whole world. Banks have always been at the fore front of controlling and making use of technology to improve their performance and services to their customers (Nzotta and Okereke, 2019). Today banks operate in a complicated and competitive environment due to the nature of our highly unpredictable economy

(Abdulsalam, 2016). The use of ICT in banks brought competition, flexibility, efficiency etc. to the banking industry and has also played a very important role in improving service delivery standards in the banking industry. For example, the use of Automated Teller Machine (ATM) now allows customers to carry out their various banking transactions beyond banking hours. It allows customers to withdraw money without going inside the bank.

In addition, the use of mobile banking allows the customer to do any transaction and check their balances without stress. This has created a cashless economy where there is no need for carrying cash around; transactions are done through the internet (Abdulsalam, 2016). The use of computers and internets made bank works faster and easier. We also have point of sales, smartcards, etc. The use of ICT has helped the banking industry in improving their performance. With ICT, customers and employees have access to information in a way that is controlled and safe. ICT infrastructure evolved to become a critical factor driving productivity and growth in global economies with varying implications among developed and developing nations (Steinumueller, 2018).

It is important for developing nations not to isolate themselves from the changes occurring due to the development in the ICT globally (Gwashi &

Alkali, 2019). This is partially because ICT is transforming the global economy and creating new network that crosses cultures as well as minimizes distances. However, it is important to note that increased investments in ICT without the involvement of other socioeconomic factors may not improve growth in developing nations (Mbaerikaetal, 2017). Researches by Grigorian and Vlad, (2016); Nzotta and Okereke, (2019); Thiel, (2018) has shown that globalization has caused intense competition in the banking industry, worldwide. The world is seen as a global village which turned the markets and economies in like manner(Nzotta&Okereke, 2019). The phenomenon called globalization has significantly intensified competition in three particular aspects in the way competition had evolved giving it a new dimension;

- (i) Banks faces pressures from a wide and diverse range of competitors.
- (ii) The regulatory environment has become less protective of the banking sector and;
- (iii) Competition has become global in nature (Abdulsalam, 2016).

The universal banking system was introduced in Nigeria in the early 1990s and rest of the world as an offshoot of globalization. Under this new system, banks were no longer specialized in either merchant banking or commercial banking; rather they are allowed to provide banking and other financial

services to their customers under the new universal banking license (Mbaerikaetal, 2017). Banks could therefore provide commercial banking, stock broking, insurance business, and asset and trustee management services under the new banking regulation. It also prompted a rapid and significant branch office expansion program with its attendant significant increases in the volume of customers' transactions in banking industry for survival and profitability (Johnson, 2019). The increased demand for ICT in banking sector became imminent and unavoidable in the world at large and Nigeria in particular. Invariably, the future lies in the ICT driven banking systems and services. Banks have embarked on deployment of ICT based banking products and services such as automated teller machine (ATM), internet banking, mobile banking solutions, point of sale terminals, computerized financial accounting and reporting, human resources solution among others (Ovia, 2018). Linked to this, was the banking license liberalization of the early 1990s in Nigeria. The landmark period witnessed the birth of the new generation banks (i.e. Guarantee Trust Bank, Zenith Bank, among others) that commenced operations with the state-of-the-art technology, which exposed the sluggishness and inefficiency of the older banks (i.e. the three Giants; First Bank, UBA and Union Bank (Mbaerikaetal, 2017). Some researchers had shown that the then "reengineering" fever, compelled the old generation banks to change. It was further stated that the trend actually took selected commercial banks some time to follow suit because the issues were much more than designing algorithms and chewing seminal computing papers from first class journals. Based on the above, this study is focused on investigating the impact of ICT deployments on banks performance. In measuring performance of a bank, there are financial performance and non-financial performance. Hence, it is on this basis that the researcher investigates the impact of computer application on the performance of Deposit Money Banks (DMB) in Nigeria.

1.2 Statement of the Problem

The Deposit Money Banks has in recent times, engaged in series of reformations aimed at both making the Nigerian financial system formidable and also enhancing the overall economic performance of Nigeria, so as to place it on the right path in tune with global trends. Even though Central Bank of Nigeria (CBN) in one of its major reforms is the Cashless Policy; the cashless policy aimed at regulating cash based transactions stipulates a 'cash handling charge' on daily cash withdrawals or cash deposits that exceed N500,000.00 (Five Hundred Thousand Naira) for Individuals and N3,000,000.00 (Three Million Naira) for Corporate bodies. The policy aims at reducing not eliminating the amount of physical cash circulating in the

economy, and encouraging more electronic-based transactions in Nigeria (Aduda and Kingoo, 2012).

Yegon (2012) studied the effect on firm performance as affected by ICT investments at the Kenya Commercial Bank Group Limited. The study asserted that the relationship was deemed not quite strong. A price tag of 1.25% of the cost of every transaction done through POS terminals will be charged by the operators of the terminals (Chibueze, Maxwell and Osondu, 2013). This may be considered over-burdensome on the banking public given that this will not obviate nor lessen the normal commission on turnover charged by banks on withdrawals. Apart from being an additional charge on bank customers, the charges appear to be too high. Normal bank commission on turnover is N5.00 for every N1000.00 representing 0.05% of the amount of such transactions, compared to the CBN approved charges of 1.25% which would implyN12.50 for every N1000.00.in light of the foregoing, there is need therefore to ascertain the relationship between ebanking and operations and performance of DMBs in Nigeria.

Also there is in crescent system break down and inconsistence services on the on-line connectivity. This has affected banks effectiveness and efficiency of operation with its attendant negative impact on their productivity and overall profitability. Similarly, banks are often faced with system redundancy due to rapid technological changes resulting to excessive costs hence, lower profitability.

Again, the issue of insecurity and lack of privacy occasioned by the activities of hackers is another problem militating against the banks from milking the full benefit offered by e-banking. These could lead to financial and capital losses due to inaccurate processing of transactions, data privacy and confidentiality, unauthorized access or intrusion to financial institutions' systems and transaction, which will in turn, take a heavy toll on their profitability and overall performance. Therefore, it is on this basis that the researcher tries to examine the impact of computer application on the performance of DMBs in Nigeria.

1.3 Objectives of the Study

The purpose of this study is to determine the impact of computer application on the performance of deposit money banks in Nigeria.

Specifically, the study intends:

- i. To examine the impact of Automated Teller Machine (ATM) transaction on the performance of Keystone Bank.
- ii. To investigate the impact of Electronic Mobile Banking (EMB) transaction on the performance of Keystone Bank.

iii. To examine the impact of internet banking transaction (IBT) on the performance of Keystone Bank.

1.4 Research Questions

To guide the conduct of this research the following questions will be adopted.

- i. What is the impact of Automated Teller Machine (ATM) transaction on the performance of Keystone Bank, Kaduna?
- ii. To what extent does Electronic Mobile Banking (EMB) transaction impact the performance of Keystone Bank, Kaduna?
- iii. How does internet banking transaction (IBT) impact the performance of Keystone Bank, Kaduna?

1.5 Significance of the Study

The outcome of this study is essential for organizations and businesses to tap and evaluate opportunities for improvement as well as exploit the potentials for optimum utilization of database management system, tools and other resources and better manage the scarce resources by implementing an effective management controls which in turn minimize costs and gain higher returns.

Secondly, the results of this study will provide benefits the human resource department and teams in developing and change its present system that will

integrate in full capacity the ICT in evaluating and appraising its human resource and build a viable policy incorporating the importance of integrating the ICT that will help organizations achieve performance, improved operational processes and an efficient and effective utilization of resources. Lastly, many researchers around the world may gain benefits on the findings of the study by increasing its knowledge and learning experiences through utilizing this study as input to their studies and a ready reference for relating it to their plan or already started projects where this result would be best used as reference. Hence, studies that provide clear guidelines on determining the relationship between the ICT use and organizational performance, this result would give clear evidence on establishing its relationship in the light of this research, also as a requirement for the award of Higher National Diploma in Business Administration.

1.6 Scope of the Study

The study is restricted to the impact of computer application on the performance of Keystone Bank Plc between 2019 – 2022.

1.7 Limitations of the Study

The research faced a lot of obstacles, which hindered a clear analytic research. It is the desire of the researcher to conduct on In-depth and wider

scope of the study regarding this topic. However, the researcher was constrained by the following factors:

Inadequate Research Materials: The research materials on this subject matter were very few. The much relied library is filled up with outdated books, which are of little relevance to current research. Moreover, the cost of new and updated materials is exorbitant, which makes them not readily available.

Lack of Cooperation of Subject: Sourcing for information from the respondent was not an easy task; there is problem of not having easy access to some vital documents which would have helped facilitate the research work as a result of their confidential or classified status. The degree of the cooperation of staff of the organization was very minimal.

Low Return of Questionnaire: In the process of gathering data, it was discovered that not all the questionnaire issued out were returned. Some of them were also wrongly filled, which means a great deal of relevant information was held back and which could have enhanced the quality of this study.

1.8 Definition of Terms

Bank: This is financial institution charged with the responsibility of safe keeping of people's valuable.

Computer: This is an electronic device that is capable of accepting data, process such data and display them as information.

Marketing: This is the process of identification of customer's wants and designs an appropriate means towards satisfying those needs.

Electronic Banking: Is the use of computers and telecommunications to enable banking transactions to be done by telephone or computer rather than through human transaction. It features includes electronic funds transfer for retail purchase, automated teller machines (ATMs), and automatic payroll deposit and bill payment.

Deposit Money Bank: They are resident depositary corporations and quasicorporation which have any liability in the form of deposit payables on demand, transferable by cheques or otherwise usable for making payments.

Performance: the achievement of specific responsibilities graded against a preset standard of accuracy.

Organization: An entity that involves one or more people coming together to accomplish a common goal or objectives.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The aim of this chapter is to present a critical review of the current literature on computer application on the performance of Keystone Bank plc. This review works of various current literatures under the following headings; Concept of Computer, Computer as an aid in service delivery, Computerization and staffing in banks, Pitfalls in the use of compute among others

2.2 Concept of Computer

Computer is indispensable device used for personal and commercial purposes. It has been defined in the following ways. Serma (2018) defined computer as an accurate device used in solving a data processing problem or a task. Okwudili (2017) defines computer as an electronic device capable of accepting data and instruction, processing the data based on the instruction, generate result or output in such manner that is yet to be equated by any other machine to mankind. French (2017) also defines computer as a universal tool of collections, analysis and processing of data into useful information for decision making and management control especially when

the scope of task involved would otherwise exceed the ordinary human capacity and the desire result is to be timely enough and equally precise and accurate.

Computer application in marketing of commercial banks provides facilities like Electronic Funds Transfer (ETF), Facsimile Transmission (FAX), creating, transmitting, and responding to messages electronically by sending messages through one computer termination to another.

Electronic Data Interchange (EDI) another form of e-mail has advantages of direct communication between computers of transfer a specialized applicant of EDI enables a computer user to send electronic messages to is bank to give instructions to transfer fund (credit or debit).

Facsimile is an on-line photocopying facility that scans document, transmits a facsimile of the original document over a network to a distant location by the commercial banks. A combination of systems in order to share resources and information among system is a network. It works by connecting one computer with another using cable. An organization to link two or more computers to a local network in the banking sector. When the courage involves states or nation, this connection is done using general telecommunication network to widen the scope. Area network interest is a

global network of networks consisting information with sound and video pictures can be accessed.

Teleconferencing on the other hand is the means of which people from different locations are brought together to discuss issues with sound and picture available without coming together physically: the two parties can see and hear each other in meeting presentation negotiation etc.

2.3 Uses of Computer in Industry

2.3.1 Electronic Banking (E-banking)

Electronic banking involves electronic form of money transmission by use of computer network in dispensing cash and transfer of funds. This replaces labour intensive operations, reducing the waiting time of customers to the barest minimum. In addition, automated teller machine and electronic fond. Transfers are the other that can be included in the electronic devices.

2.3.2 Automated Teller Machine (ATM)

Automated Teller Machine: Is a cash dispenser designed to enable customer access this bank facilities without any contact with easier (Bank teller). The machine performs tradition/functions reserved for tellers and other counter staff. Electrically operated, it responds to customer's requests instantly.

ATM is a user friendly electronic banking system it welcomes one guides on through programmed instruction on what one should do.

Through personal identification number, the case holder inserts the personal identification number (PIN): the plastic card contains magnetic strips with which the customer is identified. The pin is personal to the holder who is instructed not to disclose information contained in it to any other person, the card too is meant to secured and not mutilated.

When the information contained in the magnetic strip agrees with PIN, the customer can then selection services needed the machine dispenses cash in particular denomination e.g. 1000, 5000 and N200 respectively.

2.3.3 Automatic Cheque Souter

The machine with the introduction of magnetic ink character recognition (MICR) by the Central Bank facilities the sorting of cheques by banks with the numerous banks and bank branches and the volume of transactions it would be rather difficult to sort out cheques. MICR cheques are coded to make automatic sorting easy.

To sort and transmit fast, the machine in equipped with a "Cheque scanner" such cheques come with magnetic code across the bottom for the purpose:

users of such cheque are world not to fold them or to sign across the code number.

2.3.4 Electronic Fund Transfer (EFT)

Introduced by one of the commercial banks, the system allows customers account to be credited electronically within twenty four hours. Full use is yet to be made of available electronic banking devices at the point of purchase. ATM card holder can have his account debited electronically and constantly with the cost of purchase in an outlet this facility is referred to as electronic fund transfer of the point of sale.

The other are electronic card product which are debit card (pass card and smart-card) that operate through IBM machine (pass card) and smart card whose microchips certain additional information on bio-data a financial position or standing. Finally, the home link service operate with customers who have television in their home and with home deck console to the bank the customer can settle his purchase through-an electronic instruction to both bank.

2.4 Importance of Computer in Banking Sector

There are many different import factors of having a computer within the banking sector. It makes life a lot quicker and easier and there will no longer

have to be manual imports of data on paper and within records. It can also be taken care of by the computer and be stored sent on accordingly. Previous transactions of certain customers can found in seconds as opposed to waiting for a long period of time. You can also see the importance of the computer within the banking sector as you now make transaction from your home with the technology and keep an eye on what you have within your account when you are waiting for a statement to come through or want to buy something online.

Electronic banking is now more popular than ever and this is due to the introduction of computers within the banking sector. Being able to communicate with different banks from all over the world is also possible due to the new injection of technology and there are much less problem with data import and exports now that everything can be done by a few clicks of a button. Easier for people who within the banking sector and for those of us who use our banks on a daily regular basis. Computers have definitely changed the world of banking and are very important in all of the different processes marketing a bank's services on the internet has also become an important part of advertising campaigns. Since so many people spend their time on the web. Instead of watching television, Marketing for

communication devices. Such as the Ipad or net books is becoming the norm for almost every financial institution.

Banking has changed immeasurable in the last few decades; before client were forced to wait in long line-up at banks to get cash. Make deposits and check their bank account balance. Now all of those services are generally available through ATMs and other information and communication devices. Most customers love the flexibility of online banking and other modern services however; there may be some who prefer to never expose their banking information online, as they fear hacker's phishing scams, and other violations of their privacy.

2.5 Characteristics of Computer

Okwudili (2017) contented that the computer has characteristics distinguishing one from the others known to mankind. Some of the characteristics features include:

2.5.1 Accuracy Results

The computer operates error free and therefore it is entrusted to provide an accurate result. That is to say its precise in its operations and cannot produce an accurate results in processing a given piece of data except if the error originated from the feeding of data or the instruction given to it by the

operator. It is emphasized that the computer usually will refuse accepting data or instruction from you when it has a fault until you, rectify the anomaly, unlike other systems or machine whereby they are faulty will give you wrong result.

2.5.2 Speed in Operation

The computer speed is measured in nano-second or one billion of a second. Hence, the computer can sort one billion names given to it in a matter of second (100m lips).

2.5.3 Reliability in Performance

The computer is highly reliable and can be used to perform several functions of a long time with consistent result provided the enabling environment and made available that is to say. The computer is not liable to fatigue like the human being which may result in reduction productivity.

2.5.4 Versatility in Application

Today there is hardly an area of human endeavor where the computer does not have an application. Hence it is the most versatile machine known to mankind. The above characteristic put together share made the computer to be very versatile in many applications such as scientific researches, weather forecasting, engineering design, payroll, billing, sales analysis, inventory, office automation etc.

2.5.5 Areas of Computer Application

This computer has found application in virtually all different spheres of human endeavor, hence, we have found ourselves today in a period known as computer age m of area of computer application includes:

- ❖ Medical and Health Care Services: Computers are used in the hospital for record keeping, sensory devices, it can be used to read changes in temperature, heart beat rate etc. medical diagnostic test are now conducted using computers.
- ❖ **Hypothesis:** Computer education assists us in the development of theory or hypothesis. A researcher is often confirmed with the computer he can examine as main hypothesis as possible on the data.
- ❖ Stock: The use of computer in stock control enables the store manage to know quicker and as possible when a stock is used up so that fresh order could be planned.
- ❖ Statistics: Statistic analysis of data device from experiment can be very tedious and cumbersome especially when the quantity of data twelve is very large.

- ❖ Military Application: Computer rand telecommunication technology have been employed for military purpose ever since their beginning – calculations of ballistics of artillery shells and the transmission and decoding of messages are among the best recorded user of these technologies. The automated battle field concept include: missiles, which find pre-programmed targets with very high occupancy, for example allow commanders to keep close over remote battle operations.
- ❖ Internet: This is vital provided by any network of computers or a web in different network with multi use it is an international computer network living different types of user-academic industries, government, individual and health institutions "(hospitals) or the purpose of sharing information with this technology, it is possible to transact business with many people, without spending a kobo on transportation and extracting very vital information from across the world. Finance (banking) and commerce. Every money transaction is also an information transaction.

A record need to be made (formally or informally) about the amount the purpose, the parties involved, the data previously recorded on paper and processed by hand or by means of slow electrical, mechanical equipment. This provide useful inadequate in the face of explosive growth transaction Aronu (2016) noted that information technology has provided us with good

method of transacting business. An example is he Western Union Money

Transfer operated by First Bank of Nigeria and in retailing business operated

by supermarkets, departmental stores using point of sale (PS) terminals.

2.6 Computer Revolution

In an effort to trace the trends of development of computer a mention has to be made of or debt to the past.

The need for efficient and accurate counting has been with us from the beginning of the first civilized man. Originally, man used his fingers of counting but as his needs become more complex, this method was soon replaced by a variety of increasingly more sophisticated devices. The development of a computer started as early as 300BC with the introduction of counting devices. The first of such devices was the ABACUS development by the ancient Greeks.

John Napier (1916: the investor of 10 ageratum) produced a device known as Napier bones, which used the principle of logarithm. The French man, Braise Pascal (1964) invented the first digital calculator i.e. mechanical adding and subtracting machine (calculator) which he used in his fathers' business accounting Fottfried Letbrit improved on the work of Braise Pascal

producing a machine that could multiply and divide along with the adding and subtracting capacity.

More and more people have since contributed to the development of what we called computer today by inventing different devices. It as in the year 1930, that John Atana soft made the first attempt to build a computer using vacuum to be at town state university. This was followed by the design of the Mark T computer. Ion 1937 at Harvard University USA John Vori Neuman (1949) de-used what is called the store program concepts used by all today's computer. Hence, program is read into memory for processing Neuman propose electronic discrete valuable automatic computer (EDVAC).

The EDVAC proposed by Neuman led to the design of Universal Automated Computer (UNIVAC) between 1946-1948. This is a representative of computer of the first generation, they are categorized by cathode and ray tube.

The second generating computer 1948 – 1964 replaced the use of vacuum with discrete transistor. PAPI IBM 709 are notable machines of this generation.

The third generation computer uses small scale arid medium scale integrated circuit technology. They are capable of processing sophisticated software. It

was invented 1964 – 1978. Typical machines were the IBM/360/379, PAP computers.

A very large scale integrated circuit technology was used between 1978 – 1990 to build fourth generation computers. These systems are more users friendly. Home computers popularly known as micro-computer were manufacturing tonays micro-processors.

The fifth generation computer is influenced by the advent of the industrial Reberts, artificial intelligence and expert system. The aim is at making computer do things, speak o think like human beings. The computer is gradually turning the whole world into a computer village. Since no country can exist in isolation, any organization or country wishing to boost her economy and promote international trade must educate her population on the use of computer to meet up with global demand.

According to Born (2015) the first task facing the banking industries is to breakdown the overall work into activities over which it is desired to exercise control in this ways the advantages of a compute rare first seen. The further emphasized that in order to obtain clear facts about the customers and its accounts it is to be computerized since the introduction of a

computer, large volume of information can be rapidly edited and sorted to any desired form.

Furthermore, Adaba (2016) commented that is taking place in modern data processing has greatly facilitated the replacement of instruction and experience by scientific methods as an approach to I, modern banking problem. However, the collection retention and manipulation of the large volumes of data involved has not until recent years been feasible, that is to say nowadays, computers are able to process data quickly and to detect and analyze relationship variables. They are well suitable to detect error in banking services.

The computer provides a basis for adjustment to commercial banking programs. The computer perform three (3) scientific rotes, the first is acting as 'C' "Liberian" information relating to the banking program and its performance is stored and retrieval is made very simple. Secondly, the computers act as an analysis through its ability to determine statistical relationship, this bank manager is able to ask for specific statistic relationship to be produced by the computer contact as a "model bank" providing predications seen decision. In 2015, Sander in his study for the impact of computer in the banking sector found out that computer provides hundreds of thousands new jobs like:

- i. Data processing manager
- ii. Programmers, that writes instructions of computer usage.
- iii. Computer techniques: those that repair all faulty hardware's on computer.
- iv. System analysis: those who conduct data processing survey's carryout feasibility studies, project management and design work system etc.

Actually, the importance of computer is not limited to commercial banks alone but other sectors. However, this job creation by the use of computer has help so many individual to specialize on part of computer work with help of computer, the problem of remoteness has been solved in most of American States for example, the licensing is alone with the help of computers, people do not have to go to the state movement office in persons.

2.7 Pitfalls in the Use of Computers in Commercial Banks

Despite the foregoing importance and positive application of computer potentials for commercial banks as brought forward by various writer both in books and journals with what some writers mentioned below, some business set up has faced a lot of draw back as a result of applying the techniques of computer in banking decision.

Robinson (2019) noted that computer breakdown frequency today at every high cost and when breakdown it takes time to repair. The computer files have to be reconstructed and updated even after it might have been repaired. As computer breakdown there is tendency for users to revert to the use of manual methods, this makes most banks to lose their good will because activities will tend to be slower.

Researchers have been carried out on the negative effect of computers on human beings and the following results came out. It was discovered in America and Australia that the VDC radiant energy cause eye cataract and discovered that the female office worker who used VDC for more than 20hrs a week in the first there month of pregnancy has miscarriages.

In America about 1,585 women attending obstetric clinic studies in United States increase birth defect to about 45% in the year 1983 and it was due to using VDUS for more than five hours a week because of electronic magnetic radiation emitted by computer screen.

2.8 Application of Computer in Marketing Financial Services.

E-Business describes the use of electronic means and platform to conduct a company business. The advert of the internets has greatly increased the ability of companies to conduct their business faster more accurately, over a

wider range of time and space at reduce cost and with the ability to customize and personalize customer offering.

Financial services have set up websites to inform and promote their products and services they have created internet to facilitate employees communicating with one another and to facilitate down loading and uploading information to and from the company's computers. Financial services have also set up extranets to facilitate exchange, orders, transaction and payment exchange, orders, transaction and payments.

2.8.1 Accounting

Accounting without computers presents a high risk for human error. Accounting software allows business to simple input their financial data and instantly see gains and losses all necessary tax reports are available the data entered using computer for invoicing, managing expenses and calculating payroll is vital for ensuring financial data is as accurate as possible.

2.8.2 Storage

Instead of filling cabinet financial industries are able to store millions of files using computers and serves. Data can be store centrally for easy access from multiple computers or stored locally for individual use, computerized storage saves space and provides a far more efficient organization strategy with encryption, password and replace keys, and data remain secure.

2.8.3 Documents and reports

Most of financial industries have some sort of productivity software which typically includes a word processor and spreadsheet application. These two programs allow financial services to create reports, memos, tutorial and even colourful ads for company events spread sheet applications gives industries the change to organize, manage and calculate both numeric and alphabetic data.

2.8.4 Market research

Market research is the collection of data concerning the current state of a market, consumer preferences and competitors. Administering surveys to customers, one of the most common ways that industrial conduct their market research.

2.8.5 Distribution

The methods that a company uses to distribute products and services to customers are a core component of its overall marketing strategy. Computer

allows financial services to distribute their products and services to remote users via the internet without the need in a physical attend.

2.8.6 Creating Advertisements for other Media

While the internet allows companies to use computers for promotion research find distribution, computer is also used to help prepare advertisements for other media.

2.8.7 Financial services

Financial services are the economic services provided by the finance industry, which encompasses a broad range of businesses that manage money, including credit unions, bank, credit card companies, brokerages, investment fund and some government sponsored enterprises.

2.8.8 Banks

Commercial banking services: A commercial bank is what is commonly referred to as simply a bank. The term "commercial" is used to distinguish it from an "investment bank" a type of financial services entity which, instead of lending money directly to a business helps businesses raise money from other firms in form of bonds (debt) or stock (equity).

The primary operations of bank include:

- Keeping money safe also allowing withdrawals when needed.
- Issuance of cheque books so that bills can be paid and other kinds of payments can be delivery by post.
- Provide personal loans, commercial loans, and mortgage loans.
- Issuance of debit cards for use as a substitute for cheques.
- Allow financial transactions at branches or by using automatic teller machine (ATMs).
- Provide overdraft agreements for the temporary advancement of the banks own money to meet monthly spending commitments of a customer in their current account.
- Provide internet banking system to facilitate the customers to view and operates their respective accounts through internet.
- Provide charge and advances of the bank's own money for customers wishing to settle credit advance monthly.
- Accepting the deposits from customer and provide the credit faculties to them.

2.9 Impact of Computer Application in the Marketing of Financial Institutions

The need for marketing in financial institutions cannot be over emphasized because it is a vital arm of any sector. Competition within and outside the shores of the country brought about by globalization and an improvement in customer awareness have made bank to use marketing as important tool to increase returns, improve on efficiency of the Nigerian banking system and compete efficiently.

The need of computer for marketing in liquidity the economy and to attract customers so as to sell loans to them and buy deposits from them. Marketing is a very useful tool for the financial sector in attracting customers for their various products. Old days are gone for banking where in the customer had to walk into bank and ask for services. Due to increased competition, it has become imperative for banks to use computer as a marketing tools to increase their market share by providing awareness of their products to their prospective customers by using computer application.

Marketing function extends across the customer entire purchase process including research, engagement, purchase and post-purchase (Cohen, 2018). Barile (2017) defines marketing as the means by which an organization communicates to, connects with and engages its target audience to convey the value of and ultimately sell its products and services while Kotler (2016) says marketing as a concept holds that the organization's task is to determine

the needs, wants and of interest of target markets and to deliver the deliver the desired satisfaction more effectively and efficiently than competitors in any way that preserves or enhances the consumer's and the society's wellbeing.

A service is any intangible value which one offers to another but does not lead to the ownership of something the two main characteristics of services is their nature and the fact that customers consume the services while it is produced and are here after involved in the service's production process.

Allen (2017) posited that the types of bank customers are private customer, commercial customers, industrial customers, government customers and international customers. The consumers, government customers and international customer. The consumer marketing and the industrial marketing are methods that can be used to satisfy the five categories of customers. The bank analyses and interprets data from different sources about a particular market before marketing its products.

According Okonkwo (2018) the reasons why there is need for marketing of financial services and products in the banking industry include amongst others the nature of the products and competition in the industry has become intense. Unless aggressive marketing techniques are employed the bank

suffers to consequences. The manner at which new product emerge in the financial services industry is alarming and this is due to an effort to keep up with the development of advance technology.

A bank is a financial institution which accepts deposits from customers and invest it, and also borrows it out when required and gain profits in the process. Deryk (2016) defines bank marketing as identifying the most profitable market now and in the future, assessing present and future needs of the customer, setting business development goals and marketing plans to meet them and managing the various services and promoting them to achieve plans.

2.10 Empirical Review of Related Studies

John, (2021). This study investigates the relationship between information communication technology and performance of deposit money Banks. The study identified how some of the challenges confronting implementation of ICT in organizations. However, the sample size is 48 which are too low for the research of this nature. Therefore, there is the need to increase the robustness of the sample which the present study intends to carry out.

Peace, Philip and Abomeh (2018). Examined the impact of information communication technology on the performance of deposit money banks

between the periods of 2006 to 2015. However the sample size was 30 which was too low for the research of that nature therefore there is the need for replication of similar study to allow generality and applicability of the study.

Agboola (2019) studied the impact of computer automation on the banking services in Lagos and discovered that electronic banking has tremendously improved the services of some banks to their customers in Lagos. The study was however restricted to the commercial nerve center of Nigeria and concentrated on only six banks. He made a comparative analysis between the old and new generation banks and discovered variation in the rate of adoption of the automated devices.

Aragba-Akpore (2018) investigated on the application of information technology in Nigerian banks and pointed out that IT is becoming the backbone of banks' services regeneration in Nigeria. He cited the Diamond Integrated Banking Services (DIBS) of the Diamond Bank Limited and electronic smart card accounts (ESCA) of All States Bank Limited as efforts geared towards creating sophistication in the banking sector. Ovia (2018) discovered that banking in Nigeria has increasingly depended on the deployment of information technology and that the IT budget for banking is by far larger than that of any other industry in Nigeria. He contended that the

on-line system has facilitated internet banking in Nigeria as evidenced in some of them launching websites. He found also that banks now offer customers the flexibility of operating an account in any branch irrespective of which branch the account is domiciled.

2.11 Theoretical Framework

The study will rely on theoretical models to determine the impact of information technology on organization performance. The study will therefore rely on; model of the organization (Leavitt, 1965) and the technology acceptance model (Davis, 2019)

2.11.1 The technology Acceptance Model

Emerging information technology cannot deliver improved organizational effectiveness if it is not accepted and used by potential users. Technology acceptance model (TAM) is one of the most successful measurements for computer usage effective among practitioners and academicians (Davis.2019). TAM is consistent with (Rogers, 1983) theory on diffusion of innovation where technology adoption is a function of a variety of factors including; relative advantage and ease of use.

Two particular believes are addressed through TAM, perceived usefulness and perceived ease of use. Perceived usefulness is defined as being the

degree to which a person believers that the use of a system will improve his performance. Perceived ease of use is referred to the degree to which a person believes that the use of a system will be effortless. TAM attempts not only for prediction but also for explanation to help researchers and practitioners identify why a particular system may be unacceptable and pursue appropriate steps.

2.11.2 Model of the Organization

The research theoretical framework to be applied in this study is based on the model of the organization (Leavitt, 1965). He suggested that in an organization consist of four inter-related components, structure, task (strategy) people and Technology. Organization's structure refers to the systems of communication, systems of authority and system of work flow. Organization's strategy can be defined as the establishment of the basic long term objectives of an enterprise and the adoption and commitment of resources to a course intended to obtain these corporate objectives (Chandler, 1962); People refers to individuals working in the organization and technology can be defined as the tools; technology and actions used to transform organizational input into output (Daft, 1995). Leavitt, (1965) reported that if any of the four components changes, the other three must

also change. It is the interaction between these four components that determines the fate of an organization.

2.12 Summary of the Chapter

This chapter reviewed and analyzed the views, opinions, ideas, and perception different who authors, writers and scholars who have in one way or the other made adequate contributions to the subject matter. The chapter starts with an introduction, concept of computer, uses of computer in industry, importance of computer in banking sector, characteristics of computer, computer revolution, pitfalls in the use of computer in deposit money banks, application of computer in marketing financial services, impact of computer in marketing of financial institution, empirical review of related studies, theoretical framework and concludes with the summary of the chapter.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

In this chapter, the research design used is described; it also includes the population, the sampling procedure and the instrument used. This chapter ends with the description of the validity and reliability of the instrument. This is followed by the description data collections procedure and the method of data analysis. The chapter starts with research design, population of the study, sampling and sampling techniques, research instrument, validity of the instrument, reliability of the instrument and data analysis.

3.2 Research Design

Research design simply connotes the process and method used to generate the needed data for the study (Born, 2015). In order to achieve high degree of reliability and validity survey research design in considered appropriate for this research exploration. This method has an important advantage of leading researcher to collect current data in the phenomena being

investigated (Born, 2015). These basic instruments namely, observation. Personal interview and questionnaire are important instrument known for this research design.

3.3 Area of the Study

This study focused on Deposit Money Banks in Nigeria with Keystone Bank Plc. Kano Road, Kaduna North Local Government Area.

3.4 Population of the Study

Population can be defined as the elements that possess the characteristics the researcher is studying Smith (2013). It can also be referred to the sources of all the possible value of variable under study Smith (2013).

The population for this study consists of 40 staff of Keystone Bank Nigeria Plc in Kano Road Kaduna. The number of staff was obtained from the branch manager (2021).

3.5 Sample Size and Sampling Techniques

The sample is described as part of a population selected for a study with sampling described as the process of sample selection (Cooper & Schindler, 2008). Sampling was done to secure a population presentation for the study. However several approach has been suggested in determining the sample

size of a population (e.g. Yamane 1976,krejcie and morgan 1970, sekara and Bougie 2010)

Therefore, this study adopts the Yamane (1976) method of calculating sample size of a population. According to Yamane (1976) the standard formula for calculating sampling of a given population is as follows

$$n = \underline{N}$$

$$1 + N(e)^2$$

Where:

N = Population of study

e = Margin error = 0.05

Therefore;

$$n = \frac{40}{1 + 40(0.05)^2}$$

$$n = \frac{40}{1 + 40(0.0025)}$$

$$n = 40$$
 $1+0.01$

$$n = 40$$
1.1

3.6 Instrument of Data Collection

The research instruments are tools used in getting of gathering of data. The research instrument to be used for the purpose of this study is questionnaire. The questionnaire was designed with 5 point Likert rating scale with responses as (1) Strong Agree (2) Agree (3) Undecided (4) Disagree and (5) Strongly Disagree.

3.7 Validity of the Instrument

Validation by others is an effective method for content validation of research instrument. Consequently, the questionnaire was validated by the supervisor Mal. Usman M. Kandi in the Department of Business Administration Kaduna Polytechnic. He shall judge the appropriateness comprehensives and clarity of items on questionnaire. The contributions inform of suggestion will be used in the final draft.

3.8 Reliability of the Instrument

For the reliability of the instrument, the researcher test-rested reliability method, this was carefully and meticulous done by administering the questionnaire to respondent on interval base to see if they can stand on their responses or alter it with the second filing of the instrument regarding impact of Computer Application on the performance of Deposit Money 3

3.9 Method of Data Collection

The researcher distribute the questionnaires directly to the intended respondents and enough time was given them to fill the questionnaires appropriately.

3.10 Method of Data Analysis

The researcher adopt the mean statistics as the statistical tool for analyzing data collected. The decision rule is based on a cut-off point of 3.00, A mean of 3.00 and above is regarded as accepted, while points below a mean average of 3.5 are regarded as rejected or disagreed.

The mean accepted point is calculated as follows

GRADE	SA	A	UD	D	SD
POINT					
RANGE	4.5-5.0	3.5-4.4	2.5-3.4	1.5-2.4	0.5-1.4

$$X = \underbrace{\sum fx}_{N} \quad \text{or} \quad \underbrace{\sum fx}_{f}$$

$$\frac{5+4+3+2+1}{5} = \frac{15}{5}$$

Therefore, X = 3

The five point Likert Scale is used in the options for the questionnaire in the range of SA, A, UD, D and SD

SA = Strongly Agreed

A = Agreed

UD = Undecided

D = Disagreed

SD = Strongly Disagreed

And it will follow the following rating.

SA = 5

A = 4

UD = 3

D = 2

SD = 1

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This chapter presents and analyzes the data collected in through various sources in relation to the impact of computer application on marketing of financial services in Keystone Bank Plc. from the presentation and analysis of data, findings are stated, and discussion of the finding is drawn based on the findings as appropriate.

A total of 36 copies of questionnaires were distributed to the participants in the study to be appropriately filled and returned. 35 copies of the questionnaires distributed were eventually retrieved out of which 1 was rejected as invalid on the ground that they were not properly completed and some were badly damaged. This means that a response rate of 97.2 percent was achieved.

4.2 Respondents Characteristics and Classifications

Table 4.2.1: Sex of the Respondents.

Variable	Response	Percentage (%)
Male	21	60%
Female	14	40%
Total	35	100%

Source: Field Survey, 2022.

The table above shows that 21 respondents representing 60% are male while 14 respondents representing 40% are female. This means that the majority of the respondents are male.

Table 4.2.2: Age of the Respondents.

Variable	Response	Percentage (%)
15 – 25	7	20%
26 – 35	21	60%

36 and above	7	20%
Total	35	100%

The above table shows that 7 respondents representing 20% are between the age of 15-25 years, 21 respondents representing 60% are between the age of 26-35 years while 7 respondents representing 20% are from 36 years and above.

Table 4.2.3: Education of the Respondents

Variable	Response	Percentage (%)
MSc/Bsc	15	42.9%
PGD/HND	15	42.9%
ND/NCE	5	14.2%
Total	35	100%

Source: Field Survey, 2022

Table shows that 42.9% of the respondents are MSc/BSc holders, 15 respondents representing 42.9% are PGD/HND holders 15, while 5 respondents representing 14.2% of the respondents are ND/NCE holders.

Table 4.2.4: How long have you been working with Keystone Bank Plc?

Variable	Response	Percentage (%)
1-5 years	8	22.9%
6 – 10 years	15	42.9%
11 years and above	12	34.2%
Total	35	100%

Source: Field Survey, 2022

The table above shows the analysis of length of service of the respondents of the organization. And it therefore reveals that, 8 (22.9%) respondents are below 5 years of service in the organization, 15 (42.9%) of respondents below 10 years, while 12 (34.2%) are 11 years and above in the organization.

4.3 Data Presentation and Analysis

The questionnaires received were presented and analyze using table and mean score as shown below:

Table 4.3.1: Are you aware of the existence of electronic marketing system in the financial services of Keystone Bank Plc.?

	SA	A	UD	D	SD	Total	Mean	Remark
F	25	7	3	0	0	35		

X	5	4	3	2	1			
fx	125	28	9	0	0	162	4.6	Strongly Agreed

Source: Field Survey, 2022

Mean score
$$= \frac{\sum fx}{\sum f}$$
$$= \frac{162}{35} = 4.6$$

Analysis of data on the table 4.3.1 above indicates that there is awareness of the existence of electronic marketing system in the financial services of Keystone Bank Plc.

Table 4.3.2: There are various types of e-marketing services that customers can subscribe to.

	SA	A	UD	D	SD	Total	Mean	Remark
F	15	8	7	2	3	35		
X	5	4	3	2	1			
fx	75	32	21	4	3	135	3.9	Agreed

Source: Field Survey, 2022

Analysis of data on the table 4.3.2 above, indicates that respondents agree that there are various types of e-marketing services that customers can subscribe to with a grand mean score of 3.9.

Table 4.3.3: The application of computer in the marketing (e-marketing) of financial services of Keystone Bank Plc. can reduce the risks and inconvenience associated with carrying physical cash.

	SA	A	UD	D	SD	Total	Mean	Remark
F	18	8	7	0	2	35		
X	5	4	3	2	1			
fx	90	32	21	0	2	145	4.1	Agreed

Source: Field Survey, 2022.

Analysis of data on the table 4.3.3 above indicates that respondents are in agreement that application of computer in the marketing (e-marketing) of financial services of Keystone Bank Plc. can reduce the risks and inconvenience associated with carrying physical cash. This is with a grand mean score of 4.1.

Table 4.3.4: The electronic marketing system had brought about positive change in the delivery of financial service by your bank.

F	10	10	10	5	0	35		
X	5	4	3	2	1			
FX	50	40	30	10	0	130	3.7	Agreed

Source: Field Survey, 2022

Analysis of data on the table 4.3.4 above indicates that with the reasons, the electronic marketing system had brought about positive change in the delivery of financial service by Keystone Bank Plc.

Table 4.3.5: The introduction of electronic marketing system has reduced the human efforts in the financial services of the bank by reducing the queue and time spent in the banking hall.

F	20	7	5	0	3	35		
X	5	4	3	2	1			
FX	100	28	15	0	3	146	4.2	Agreed

Source: Field Survey, 2022

Analysis of data on the table 4.3.5 above indicates that to a very large extent, the introduction of electronic marketing system has drastically reduced the human efforts in the financial services of the bank.

Table 4.3.6: Data and information availability has significant effect on the financial service delivery of Keystone Bank Plc.

F	30	0	5	0	0	35		
X	5	4	3	2	1			Strongly
FX	150	0	15	0	0	165	4.7	Agreed
171	130	U	13	O	O	103	,	

Analysis of data on the table 4.3.6 above indicates that the Data and information availability has significant effect on the financial service delivery of Keystone Bank Plc.

Table 4.3.7: You would rely on e-marketing services for your usual financial and business transaction.

F	17	8	5	5	0	35		
X	5	4	3	2	1			
FX	85	32	15	10	0	142	4.1	Agreed

Source: Field Survey, 2022

Analysis of data on the table 4.3.7 above, indicates that someone can rely on e-marketing services for financial and business transaction.

Table 4.3.8: E-marketing system has made significant impact on both customer satisfaction and effective financial service delivery of Keystone Bank Plc.

F	26	0	0	5	4	35		
X	5	4	3	2	1			
FX	130	0	0	10	4	144	4.1	Agreed

Analysis of data on the table 4.3.8 above, with the mean score of 4.1 indicates that e-marketing system has made significant impact on both customer satisfaction and effective financial service delivery of Keystone Bank Plc.

Table 4.3.9: Computer application in the operating system of Keystone Bank Plc. can help to ease its financial services.

F	15	15	5	0	0	35		
X	5	4	3	2	1			
FX	75	60	15	0	0	150	4.3	Agreed

Source: Field Survey, 2022.

Table 4.3.10: The use of computer in the marketing of financial services of Keystone Bank Plc. reduces the number of services rendered by its staff.

F	13	20	0	2	0	35		
X	5	4	3	2	1			
FX	65	80	0	4	0	149	4.3	Agreed

Analysis of data on the table above, with the mean score 4.4 indicates that the respondent agreed that the use of computer in the marketing of financial services of Keystone Bank Plc. reduces the number of services rendered by its staff.

4.4 Research Finding

From the research work carried out in Keystone Bank Plc. with regard to impact of computer application on the performance of Keystone Bank Plc, Kaduna, the researcher was able to put down the following findings:

1. The application of computer in listed deposit money banks has transformed commercial banking operation from armchair banking to a modernized or automated banking system through the use of information

- technology such as internet with facilities efficiently, accuracy, speed in the transfer and exchange of information.
- 2. Computer application also results in speed of operations. This enabled bank to serve its customers faster without necessarily allowing the customers to wait for too long before being served at customer center and any other place within the banking hall.
- 3. It was also discovered that the cost of computer in banking system is expensive when compare with the manual or armchair banking.
- 4. Computer application in listed deposit money banks also enhanced growth and profitability of Keystone Bank Plc. this was revealed in their annual financial report of the year ended 2016 where it was stated that the bank started operation on 2nd April, 2007 with Nine (9) branches in Lagos and presently having Thirty two (32) branches nationwide.
- 5. It was also discovered that computer banking enhances and facilitate fraud through manipulation of data, masquerading etc.
- 6. Computer application cause eye cataract due to the VDU rays (Visual Display Unit).
- 7. Some researches in United State of America discovered that, the female workers who used computer for more than Twenty hours (20 hours) a

- week in the first three months of pregnancy has miscarriage due to rays from VDU.
- 8. The researcher discovers that computer application on the performance of listed deposit money banks brings about improvement in the productivity of Keystone Bank Plc.
- 9. The present economic environment in Nigeria calls for the effectives and efficient utilization of both Human and Material Resources to achieve organizational desired goal. This can be attained through computer application.
- 10. The researcher discovers that the resultant of computer application or one of the product of its implementation improved staff working conditions, increased salaries and also the promotion of healthy relationship between organizations.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This is the final chapter where the summary, conclusion and recommendations will be made on the entire study. This is possible after a critical assessment, presentation and analysis of various data collected for the study.

5.2 Summary

The evaluation of computer date back to 300BC upon the invention of device called Abacus by the ancient Greek. In 1916, John Napier invented the 10 ageratum known as Napier bones. Other generations follows according with their distinctive characteristics.

Computer has been defined as an electronic device capable of accepting data, process data, store data and or display the processed data as information which can be used to defining electronic devices towards the achievement of set goals. Computer application is characterize by accuracy, speed in operations, and reliability of result etc.

Computers impact in banking sectors involves the introduction of automatic teller machine, electronic banking, automatic cheque Souter and electronic funds transfer.

Areas of computer application are medical and health services, hypothesis, stock, statistics and internet etc.

5.3 Conclusion

Base on the findings of this research project computer application inevitable in globalize banking industry. It makes the bank operations much easier,

reliable, faster and accurate. With the vast expansion and transformation that the banking sector is currently going through the bank can hardly maintain its markets share currently or into the long run without adequate commitment of manpower development in the area of cybernetic. Although, there are threats in commercial bank in Nigeria today due to the development in information technology, one of the major threats is system insecurity that fraudster capitalized upon to defraud of millions of naira and thus fraudulent practices are very rampant and alarming that liquidity problem and failure may be on the increase if urgent measure are not put in place.

After careful observation of data on the subject matter, it can be said that computer application in the marketing of financial services of Keystone Bank is effective as it has the propensity of increase in profitability of the concerned.

5.4 Recommendations

In the light of important and significant contribution of computer to banking operations the following recommendations are presented.

i. Urgent step must be taken to develop skill computer operators on system security to forestall the rising system fraud on the banking sector.

- ii. As internet marketing is currently gaining ground in Nigerians, new method should be adopted to reach out to numerous customers through the internet by setting up a marketing websites to facilitate marketing operations.
- iii. New product development is an inevitable marketing strategy that ban must pursue to secure its present market leadership in Nigeria.
- iv. Management should provide a screen protection that will protect the eyes from visual display unit rays that cause eyes cataract in using computer.
- v. Management must make sure that, they employed qualified staff management need to employ or their professionals who have technical knowledge on the identified areas that can bring benefit to the organization.
- vi. It was highlighted that computer application in commercial banking operation, is very expensive therefore, the work to be done should be carefully planned and appraised. Management should also ensure that they have alternatives.
- vii. Management should ensure there is rotation of job and responsibilities so as to avoid redundancy of staff. Staff could be assigned other job and keep busy to eliminate boredom. Also no single person should be allowed to oversee everything i.e. from beginning to the end of processing.

- viii. The management of the bank should also ensure that not all personnel have access to security code number because of the corporate spies and agent to computer fraud who can easily sabotage the effort of the management. The security number code should therefore be change regularly or kept in restricted areas.
 - ix. Customer waiting time can be further reduce if management would take an active part in ensuring that they monitor the staff constantly within the bank hall.
 - x. The management should ensure there is constant and adequate power supply. The availability of power supply avoids failure in information processing.
- xi. The management of Keystone Bank Plc. should ensure that female staff that are pregnant are not using computer for more than five (5) hours a week because of the electronic magnetic rays emitted by the screen that lead to miscarriage and birth defect.
- xii. The company should establish a maintenance department specifically created to take care of repairs and servi cing or hiring or invitations of outsiders which will incur additional cost.

xiii. Management should provide better seat and favourable working environment that can ease stress or job boredom associated with the office routine including the use of computer.

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APPENDIX I

Department of Business Administration

College of Business and Management Studies

Kaduna Polytechnic

PMB 2021, Kaduna.

The Manager,

Keystone Bank Plc.,

Kaduna.

Dear Sir/Madam

RESPONDENTS QUESTIONNAIRES

I am a final year student of Business Administration in the above institution conducting a research study: Impact of Computer Application on the Performance of Keystone Bank Nigeria Plc.

You have been chosen as a respondent to this exercise. Please kindly feel free to provide answer to the questions.

All information provided with be treated with utmost confidentiality.

Thank you for your cooperation.

Yours faithfully,

ADEPOJU TEMITOPE NAFISA

Researcher

APPENDIX II

SECTION A

Instruction: Please tick ($\sqrt{\ }$) appropriately

a.	Male	[-]
b.	Female	[-	1

- 2. Age of the respondents
 - a. 15 25 years

[]

b. 26-35 years

[]

c. 36 and above

- []
- 3. Education of the respondents
 - a. MSc/Bsc.

[]

b. PGD/HND

Г 1

c. ND/NCE

[]

- 4. Working experience
 - a. 1-5 years

[]

b. 6-10 years

Γ 1

c. 11 years and above

[]

SECTION B

Management Staff

Please tick ($\sqrt{\ }$) as appropriate in the box provided to satisfy agreement with the statement as expressed in the questionnaire.

S/N	VARIABLES	SA	A	UD	D	SD

How long have you been working with Keystone					
Bank Plc.?					
Are you aware of the existence of electronic					
marketing system in the financial services of					
Keystone Bank Plc.					
There are various types of e-marketing services					
that customer can subscribe to.					
The application of computer in the marketing (e-					
marketing) of financial services of Keystone Bank					
Plc. can reduce the risks and inconvenience					
associated with carrying physical cash.					
The electronic marketing system had brought about					
positive change in the delivery of financial					
servicesby your bank.					
The introduction of electronic marketing system					
has reduced the human efforts in the services of the					
bank by reducing the queue and time spent in the					
banking hall.					
Data and information availability has significant					
effort on the financial service delivery of Keystone					
	Bank Plc.? Are you aware of the existence of electronic marketing system in the financial services of Keystone Bank Plc. There are various types of e-marketing services that customer can subscribe to. The application of computer in the marketing (e-marketing) of financial services of Keystone Bank Plc. can reduce the risks and inconvenience associated with carrying physical cash. The electronic marketing system had brought about positive change in the delivery of financial services by your bank. The introduction of electronic marketing system has reduced the human efforts in the services of the bank by reducing the queue and time spent in the banking hall. Data and information availability has significant	Bank Plc.? Are you aware of the existence of electronic marketing system in the financial services of Keystone Bank Plc. There are various types of e-marketing services that customer can subscribe to. The application of computer in the marketing (e-marketing) of financial services of Keystone Bank Plc. can reduce the risks and inconvenience associated with carrying physical cash. The electronic marketing system had brought about positive change in the delivery of financial services by your bank. The introduction of electronic marketing system has reduced the human efforts in the services of the bank by reducing the queue and time spent in the banking hall. Data and information availability has significant	Bank Plc.? Are you aware of the existence of electronic marketing system in the financial services of Keystone Bank Plc. There are various types of e-marketing services that customer can subscribe to. The application of computer in the marketing (e-marketing) of financial services of Keystone Bank Plc. can reduce the risks and inconvenience associated with carrying physical cash. The electronic marketing system had brought about positive change in the delivery of financial services by your bank. The introduction of electronic marketing system has reduced the human efforts in the services of the bank by reducing the queue and time spent in the banking hall. Data and information availability has significant	Bank Plc.? Are you aware of the existence of electronic marketing system in the financial services of Keystone Bank Plc. There are various types of e-marketing services that customer can subscribe to. The application of computer in the marketing (e-marketing) of financial services of Keystone Bank Plc. can reduce the risks and inconvenience associated with carrying physical cash. The electronic marketing system had brought about positive change in the delivery of financial services by your bank. The introduction of electronic marketing system has reduced the human efforts in the services of the bank by reducing the queue and time spent in the banking hall. Data and information availability has significant	Bank Plc.? Are you aware of the existence of electronic marketing system in the financial services of Keystone Bank Plc. There are various types of e-marketing services that customer can subscribe to. The application of computer in the marketing (e-marketing) of financial services of Keystone Bank Plc. can reduce the risks and inconvenience associated with carrying physical cash. The electronic marketing system had brought about positive change in the delivery of financial services by your bank. The introduction of electronic marketing system has reduced the human efforts in the services of the bank by reducing the queue and time spent in the banking hall. Data and information availability has significant

	Bank Plc.			
8.	You would rely on e-marketing services for your			
	usual financial and business transaction.			
9.	e-marketing system has made significant impact on			
	both customer satisfaction and effective financial			
	service delivery of Keystone Bank Plc.			
10.	Computer application in the operating system of			
	Keystone Bank Plc. can help to ease its financial			
	services.			
11.	The use of computer in the marketing of financial			
	services of Keystone Bank Plc. reduces the number			
	of service rendered by its staff.			