

The Impacts of Electronic Banking on Customer Service Delivery in Taraba State, Nigeria

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Abstract—Nowadays, the banking industry has witnessed a high profile business process reengineering and restructuring which has enabled it to stand out in the economies of world banking system with consequent radical changes in the mode of operations. The greater aspect of this revolution is that caused by information technology which has swept across the entire world faster than any other revolution. It is a fact undisputable that most of the basic transactions in the bank today are done online. The study attempts to study the impact of electronic banking on customer service in Taraba state with specific emphasis on Guarantee Trust Bank PLC. This study used both primary and secondary data. Primary data was gathered from questionnaire and secondary data was obtained through textbooks, journals, magazines, newspapers, information circulars, reports and internet. The study used descriptive statistics in the form of tables and percentages. The outcome from the findings shows that amid the numerous problems of electronic banking, technical unemployment tops the list. The study also reveals that electronic banking truly impacts on the customer's service delivery. This research recommends that Guarantee Trust Bank as a matter of fact and priority should improve in the provision of diversified information and communication technology infrastructure in Jalingo metropolis. The study also recommends that the Banks should train their workers from time to time to keep them abreast of the innovation in the use of ICT.

Keywords— *Electronic, Banking, Electronic Banking, Customer, Service, Customer Service Delivery.*

I. INTRODUCTION

The entire Nigerian economy has witnessed a tremendous change ushered in by revolution in information technology which has a landmark impacts than any other revolution that has occurred the world ever. This does not exclude happenings in the banking industry, which is clearly reflected in the increased volume and complexity of bank operations, increased innovations and varieties in products and service delivery. This has gone a long way to influence customer service delivery and product quality.

Information technology, the foundation of modern electronic banking through the use of desktop computers and terminals that provide tools for delivery of new products and innovations characteristics by Automated Teller Machines

(ATM'S) cash dispensers, credit and cash card. Information technology through electronic banking is radically changing how banking is transacted all over the world. The volume and speed of banking activities has improved tremendously as a result of electronic banking that has created a lot of changes, particularly what was often called electronic data processing has now been transformed into electronic banking through the advent of information technology. The changing in nomenclature reflects an equivalent transformation of the use of the computer from automation of paper flow to reduction in unit cost, the replacement of manual with computer processing to today's focus on electronic product and service delivery which has become the underlying ethics and philosophies in the millennium banking with a swift in adopting to customers market. Electronic banking through information technology has created an unparallel wired economy. The transfer of money from one point to another has resulted in turning the actual money into bits and bytes through satellite, fiber optic, cable or regular telephone lines (Aladesulu, 1998).

II. STATEMENT OF THE PROBLEM

The inception of information technology and the impact in banking industry especially in the area of service delivery has been a welcome development however; this is associated with high cost of electronic gadgets that interplay to render banking services on-line. This go a long way to increase the level of expenses incurred during the period which ultimately reduces profit. In another dimension, the services rendered by Guarantee Trust Bank PLC is still characterized by excess of paper work, red tapism and bureaucracy leading to some delay in decision making. Electronic banking which supposes to have replaced in totality the customer's file regime did allow the manual file to provide the basis for daily banking activities. This has negatively impacted on the customer's service which ought to have been promptly, adequately and accurate.

Moreover, another area in which the adoption of information technology has negatively affected the banking sector is the threat it poses for the employees in the sector. According to Jaffer (1968), he ascertained that "unemployment is cyclical phenomenon; technological progress may make for short-run problems of unemployment, which require time for

adjustment because of immobility of capital and labour". According to an official of National Union of Banks, Insurance Financial Institution Employees (NUBIFIE) , one of the greatest achievements of the group before the adoption of Information Technology in banks was the security and guarantee of employment for its members. In the words of Ibrahim (1998), he stated that ICT was adopted in bank without any notice, without any plan for the future existence of the displaced employees, without adequate rehabilitation plan and benefits. As firms embrace ICT some employees in companies tend to be understandably nervous about the implications. They assume that if their company chooses to restructure itself around web technologies, their jobs may disappear. In the area of Unemployment aforementioned, ICT has reduced the number of available jobs. Since most things are electronically done, there will be need to relief some people of their jobs thereby saving cost and increasing unemployment rate. The work that can be done by fifty (50) staff in a week can be done through ICT just in one day thus resulting to technical unemployment. In addition, When there is lapses in the use of these machines, it becomes a problem, for instance, the use of ATM cards which scammers use to break into people's Account there by, carting away with people's money.(Blurt it(2009) On the list of reported problems there are access problems to internet banking services, credit and debit cards not functioning at ATMs or pay points, accounts showing zero balance, money transfers not being delivered between one Bank and other banks, businesses not being able to send or receive payments, contra dictionary messages and instructions from the systems and many other similar problems. All these has caused the banks customer services being flooded with angry, frightened and confused customers. Computer specialists have also reported potential security holes in the internet banking system, mainly due to use of new, untested technology solutions. There are also rumors of the Internet system collecting many kinds of unnecessary information being relayed to third party companies. (Saariko(2008)

III. OBJECTIVES OF THE STUDY

The main objective of this research work is evaluation of the impact of electronic banking on customer's service delivery in Guarantee Trust Bank PLC. The specific objectives are as under below.

- Identify the ICT infrastructures in use by Guarantee Trust Bank PLC.
- Evaluate the problems associated with electronic banking in Nigeria.
- Assess the impacts of electronic banking (ICT) on service delivery of the banks.

A. Research questions

- What are the ICT infrastructures used by Guarantee Trust Bank PLC?
- What are the problems associated with electronic banking in Nigeria?
- What are the impacts of electronic banking on service delivery of the banks?

B. Research hypotheses

1) H_{0I} : Guarantee Trust Bank PLC does not use ICT infrastructures in its operation.

2) H_{0II} : The problems associated with electronic banking in Nigeria do not militate significantly against the service delivery of the bank.

3) H_{0III} : Electronic Banking does not make any significant impact on service delivery of the Banks.

C. Significance of the study

This research work is of great benefit to many individuals and groups such as banks, researchers, students, entrepreneurs, government agencies and prospective investors. This project work has broadened the researchers understanding on the field of study. This work is equally intended to be of enormous help to other students as reference materials and it will also go a long way to be bank customer's manual since it will go a long way to remind them of the programmers available in the banks to deliver effective and efficient service to them. This work will also enable the appropriate government agencies in making favorable fiscal policies that will bust the capacities and efficiencies of banks in Nigeria. When favorable climate for the sustainability of banks are laid down, prospective investors will be lured to invest in our dear country through the banks and its infrastructures which assist in smooth running of banking activities worldwide and help to make the best of the available opportunities which will have a multiplier effect on the economic growth of Nigeria as a nation.

D. Scope and Limitation of the study

This research work covers the impacts of electronic banking on customer's service delivery from the period 1991 to 2012. The study dwells on Guarantee Trust Bank PLC, Jalingo branch of Taraba State. The choice of Taraba state is basically because of proximity to allow for quick and fast response to information need in the course of this work. The period under consideration is both important and significant because it marks the period of operation of Guarantee Trust bank and the time when relevant information about the bank is readily available.

The researcher encountered some problem in sourcing for data for the purpose of this study and this include nonchalant attitude of respondents, the idea of secrecy in business and the time frame. However, efforts and time were adequately deployed and the research is a huge success.

E. Operational definition of terms

The following terms are defined on the basis at which they are used in this write up. They are as follows.

1) *Information Technology, also called Information Communication Technology*: Information Technology (IT) is the automation of processes, controls, and information production using computers, telecommunications, software and ancillary equipment such as automated teller machine and debit cards. It is a term that generally covers the harnessing of electronic technology for the information needs of a business at all levels.

2) *Electronic Banking*: This is the delivery of banking services and products through the use of electronic means irrespective of place, time and distance.

3) *Automated Teller Machine*: This is an instrument through which electronic banking is carried out. It is a technological innovation in the banking system to enhance the growth of payment system to ensure that the customer withdraws his cash any moment he intends to do so.

4) *Electronic Credit Cards*: This is a financial instrument that provides unparalleled opportunities to automate a large proportion of transactions to enhance operational efficiency and cost effectiveness and ultimately seen to be able to compete with notes and coins as medium of exchange.

IV. CONCEPTUAL FRAMEWORK

Technology can be referred to as the application of knowledge for the execution of a given task. It entails skills and processes necessary for carrying out activities (works) in a given context. While Information and Communication Technology (ICT) encompasses computer systems, telecommunication, networks, and multimedia applications (Frenzel, 1996). It came into use in the late 1980's replacing earlier terms like Electronic Data Processing (EDP), Management Information System (MIS), although the latter terms are still in use (Frenzel, op. cit). ICT has transcended the role of support services or only electronic data processing; its fields of applications are somewhat global and unlimited. Its devices especially the Internet through the World Wide Web (www) and modern computer email facilities have further strengthened early innovations like the telephone and fax. Other ICT devices include data recognition equipment, factory automation hardware and services, tele-computing and teleconferences using real time and online system (Adeoti, 2005). It is a concept that is having a remarkable effect on almost entire aspects of the human endeavours. This connotes that it involves the application of principles to engage physical component in achieving an intended goal.

The convergence of computer and telecommunication after about four decades of applying computers to routine data processing, mainly in information storage and retrieval, has created a new development where information has become the engine of growth around the world. This development has created catch-up opportunities for developing countries such as Nigeria to attain desired levels of development without necessarily 'reinventing the wheels' of economic growth. This new technology has brought far-reaching revolution in societies, which has tremendously transformed most business (banking) scenes (Ovia, 2005).

With respects to the banks in Nigeria, the first bank was established in 1892 (then African Banking Corporation). However, there was no banking legislation until 1952 when three foreign banks (Bank of British West Africa, Barclays Bank, and British and French Bank) and two indigenous banks (National Bank of Nigeria and African Continental Bank) were established, with a total number of 40 branches (Iganiga, 1998). As at 1988, the Nigerian banking system consisted of the CBN, 42 commercial banks and 24 merchant banks (Iganiga, 1998; Adam, 2005). From 1970, the banking sector grew significantly in terms of number and coverage as a result of increase in economic activities. However, between 1970 and 1985, the growth of the sector was relatively slow due to

predominant government regulations but the period 1986-2000 witnessed a phenomenal growth of the sector as a result of the financial deregulation policy, that is the Structural Adjustment Program-SAP of 1986 (Iganiga, 1998). This brought about the liberalization of bank license leading to a rapid change in the sector. Some of the banks were characterized by paper oriented methods, rather than technological based systems and this resulted to slow pace of their operations vis-à-vis their employees' productivity cum general performance. The use of computers and other ICT gadgets in their operations were limited. This was one of the reasons adduced by Ojo (2007) as factors responsible for the Nigerian financial sector malaise.

To mitigate the shocks experienced in the system, the Federal Government of Nigeria came up with the financial sector reforms through the CBN. The bank reforms entail other issues but this paper is dwelling manly on the bank consolidation that was initiated in 2004. The policy thrust on bank reforms encompasses the sum of the variations that occur in the direction of a comprehensive banking system. The bank reforms agenda, among others, specified a minimum capital base of 25 billion naira for the commercial banks that took effect in December, 2005 (Diamond Bank, 2005; CBN, 2006). This has reduced the number of commercial banks in Nigeria from 89 to 25, which was done via the processes of mergers, acquisition and the stock market (CBN, 2006; Ige, 2007). The major aim was to make Nigerian banks vibrant and resilient, clothed with efficiency and financial strength to absorb possible shocks, thereby instilling public confidence as well as global relevance (Soludo, 2004).

A. *Information and Communication Technology infrastructures used by the Banks*

Commercial Banks in Nigeria utilize the following ICT infrastructures in their operations.

1) *Internet Access*: An important indicator of the general uptake of Information and Communication Technology (ICT) in the Banking Industry relates to the use and availability of Internet. Internet access is a precondition for e-Business, as this is the main channel for e-banking. The general availability of Internet allows for the analysis of overall ICT- readiness in the Banking Industry. ICT awareness about competitive products introduced by some the so called "new generation banks". Virtually all other banks also braced up to satisfy their customers and there was general improvement in the services and products of Banking Industry.

2) *Use of Internal Network*: The application of networks is a vital part of an effective ICT-enabled system, which is especially true in the case of banks with a branch network. Local Area Network (LAN) may also be seen as a basic indicator of the minimum infrastructure required to enable companies to conduct e-banking at a substantial level. Wire-based LAN is currently the dominating technology. The fact that LAN is a relatively low-tech and easily attainable ICT solution, would to some extent explain the wide coverage of this technology from year 2000 to 2008. Wireless LAN is a relatively new technology in the Banking Industry, and is used to permit bank employees to access network resources from nearly any convenient location. The fact that, wireless LAN is

relatively new technology accounts for its low percentage uptake in Banking Industry.

3) *Use of SMS alert:* Instant notification of transactions made was another innovation brought by ICT through the use of smart phone in conjunction with the internet facility in the Banking Industry. Virtually all banks studied in Nigeria use SMS- Alert, except some of the Micro-finance Banks. It was an ICT infrastructure that recorded no patronage between year 2000 and 2002.

4) *Substitution of postal mail:* The Banking Industry is currently being renewed in many areas. One of these areas relate to the digitalization of formerly paper- based processes. Electronic mail is increasingly being applied for especially non-legal correspondence like account statements, marketing and sales.

5) *ICT security measures:* The security issue is of special concern in the Banking Industry, as banking is highly based on trust from its customers. Hence, the risk of hackers, denial of service attacks, technological failures, breach of privacy of customer information, and opportunities for fraud created by the anonymity of the parties to electronic transactions all have to be managed. Depending upon its nature and scope, a breach in security can seriously damage public confidence in the stability of a financial institution or of a nation's entire banking system. Hence, by introducing the appropriate security measures and putting security concerns at ease, the BI might be able to attract the segments among consumers who previously were not inclined to use e-banking. Furthermore, it is also in the banks' own interest to improve security, as digital fraud can be costly both in financial losses, and in terms of the damage it does to the brand of the bank in question.

6) *Authentication:* The common concern among users of e-banking is related to the authentication of users and data connections. The use of digital signatures is not as common as PIN codes or encryption, and reason is the fact that digital signature is relatively new technology.

7) *Automated Payment System:* Devices used in Automated Payment Systems include Automatic Teller Machine (ATM) and Electronic Funds Transfer. ATM still ranked higher in its spread than Electronic Funds Transfer, Low rate of spread of this technology might be due to cost, fear of fraudulent practices and lack of facilities necessary for their operation. But generally speaking, the adoption of Automated Payment System increased dramatically.

Agboola (2001) 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 (1998) wrote on the application of information technology in Nigerian banks and pointed out that IT is becoming the backbone of banks' services regeneration in Nigeria.

B. *The problems associated with electronic banking in Nigeria*

Though the advantages and opportunities that ICT offers are very great to the extent of transforming banking industry, but this is not without some challenges. There are issues relating to ICT fraud, irregularities and error from the staff of the banks and also on the part of crackers, or as a result of collusion circumventing internal control system that is predicated on separation of duties. Fraud is expensive. Banks lose a lot of money from fraud and online crime. Adeosun (2006) affirm that Fraud can likely occur more seriously in financial industry (banking) since large amount may be easier to perpetrate electronically than the manual operation. Fraudster can beat various security codes. Though fraud can be greatly minimized, but there could still be some element of dishonest act. Moreover, another area in which the adoption of information technology has negatively affected the banking sector is the threat it poses for the employees in the sector. According to Jaffer (1968), he ascertained that "unemployment is cyclical phenomenon; technological progress may make for short-run problems of unemployment, which require time for adjustment because of immobility of capital and labour". According to an official of National Union of Banks, Insurance Financial Institution Employees (NUBIFIE) , one of the greatest achievements of the group before the adoption of Information Technology in banks was the security and guarantee of employment for it members. In the words of Ibrahim (1998), he stated that ICT was adopted in bank without any notice, without any plan for the future existence of the displaced employees, without adequate rehabilitation plan and benefits. As firms embrace ICT some employees in companies tend to be understandably nervous about the implications. They assume that if their company chooses to restructure itself around web technologies, their jobs may disappear.

In the area of Unemployment aforementioned, ICT has reduced the number of available jobs. Since most things are electronically done, there will be need to relief some people of their jobs thereby saving cost and increasing unemployment rate. The work that can be done by 50 staff in a week can be done through ICT just in one day thus resulting to technical unemployment. In addition, When there is lapses in the use of these machines, it becomes a problem when the use of ATM cards which scammers use to break into people's Account there by, carting away with people's money.(Blurt it(2009) On the list of reported problems there are access problems to internet banking services, credit and debit cards not functioning at ATMs or pay points, accounts showing zero balance, money transfers not being delivered between one Bank and other banks, businesses not being able to send or receive payments, contra dictionary messages and instructions from the systems and many other. All this has caused the banks customer services being flooded with angry, frightened and confused customers. Computer specialists have also reported potential security holes in the internet banking system, mainly due to use of new, untested technology solutions. There are also rumors of the Internet system collecting many kinds of unnecessary information being relayed to third party companies. (Saariko (2008))

The use of ICT in the banks has resulted to less Customer contact and so it is harder to build personal relationships with their customers, the more the interpersonal relationship, and the more customer patronage consequently increasing the

profitability of the banks. It is harder to sell other services to customers that may be on offer. When you see a customer in person, you can say, 'have you thought about this insurance / bank loan / service' there is high cost of ICT implementation as Banks have to employ specialist web developers and expensive computers to run the site. If the web site goes down then customers cannot access their accounts (www.teach-ict.com).

C. The Impacts of Information and Communication Technology (Electronic Banking) on customers

Banking industry is on the move, and information and communications technologies (ICT) are a powerful tool to boost economic growth and poverty reduction. ICT increase efficiency, provide access to new markets or services, create new opportunities for income generation and improving governance and give poor people a voice. Taking into account Nigeria's complexity and diversity, specific interventions are required rather than "one-size-fits-all" approaches. Isolated investment in ICT does not permit leapfrogging to higher growth rates. However, as a key part of a development strategy, main-streaming ICT in the productive sectors is a matter of economic survival. Maximum mobilization of private investment around the globe is vital. In the words of Adeosun (2006) ICT has become a major tool for rendering or providing competitive advantages for companies most especially banking industries, in terms of the number of computers in use and the level of telecommunications infrastructure. Through ICT it is now possible for countries to trade without border restriction. Therefore, as a result of anchoring their operations on ICT based delivery system, the banks with IT services have become more profitable.

According to ICT Regulation Toolkit as cited by Fenell (2009) ICT is a website dedicated to information and communication technology, over a million people use Internet banking. ICT protects people who use online banking from falling prey to computer hackers. Services provided through Internet banking vary by bank. Some tasks you may be able to accomplish with online banking include checking account balances, transferring funds between accounts, paying bills, viewing transactions from your checking and savings accounts, viewing outstanding credit card balances, receiving online statements, viewing a history of your mortgage and checking the status of your account. Internet banking gives you access to banking 24 hours a day, seven days a week. Online banking also eliminates time and distance as barriers to banking. Banks can combat computer viruses, which make your personal information vulnerable to hackers, by using a firewall. The use of usernames and passwords in online banking helps to prevent against identity fraud. The use of Internet banking helps to keep operating costs down for banks, resulting in cheaper transaction costs for customers.

More interestingly, almost all the banks in Nigeria have internet and on-line real time banking facilities which has improved the scope of Nigerian banking¹. It has aided transfer of funds from one location to another without any involvement of facial transactions thereby reducing the incidence of loss of funds to stealing and the likes. Another recent one is the telephone banking technology that allows customers to have transactions on their accounts by calling a particular telephone number, through voice activation, and using a tone pad. All of these improve the comfort of banking transactions.

Agboola (2001) 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 (1998) wrote 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 Diamond Bank Limited and Electronic Smart Card Account (ESCA) of All States Bank Limited as efforts geared towards creating sophistication in the banking sector.

Ovia (2000) 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 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.

Woherem (1997) discovered that Nigeria banks since 1980s have performed better in their investment profile and use of ICT systems, than the rest of industrial sector of the economy. An analysis of the study carried out by African Development Consulting Group Ltd. (ADCG) on IT diffusion in Nigeria shows that banks have invested more on IT, have more IT personnel, more installed base for PCs, LANs, and WANs and a better linkage to the Internet than other sectors of the Nigerian economy. The study, however pointed out that whilst most of the banks in the west and other parts of the world have at least one PC per staff, Nigerian banks are lagging seriously behind, with only a PC per capital ratio of 0.18 (Woherem, 2000). This study carried out a more comprehensive evaluation of the response of Nigerian banks to the adoption of ICT. Three categories of variables that relate to the adoption and implementation of information technology devices were used for the study. These are: (i) Nature and Degree of adoption of innovative technologies (ii) Degree of utilization of the identified technologies; (iii) Impact of the adoption of IT devices on banks operation the first variable refers to how banks have made new products and services available to customers. These services include computerized credit ratings, programs that determine when cheques should be made available to customers and daily calculation of accounting balances. It also involves how various types of information technology devices are made available in each of the studied banks.

The impact analysis model developed by Agarwal and Tanniru (1992) was used to assess the effects of ICT on both the process generated (task performed) and the process dimensions. Both local and global impact criteria were considered. The impact is global when the resource used or released by a process impact other processes outside the main decision, but local if it affects only the generation of the product or task performed (Ugwu et al., 1999). Direct impacts of IT on local criteria such as time saving, error rate reduction, enhanced management decision making, and improved speed of service delivery as perceived by the bank workers and

customers were examined. The impact on global criteria such as competitive advantage, market segmentations, high revenue and forecasting were also assessed.

The impact assessment model looks at the performance (effectiveness and efficiency) and effect which the applications of systems have within an organization. The performance assessment helps to determine whether to readjust or put more resources to improve performance of the system while applications assessment helps to determine how the implementation and use of introduced systems affects the organization (Senn, 1982) Automated Teller Machine, Smart Cards and Telephone Banking were not available between 1990 and 1996 in any of the studied banks. Only one bank claimed to have Electronic Home and Office Banking within the same period. However striking exceptions were noticeable in the adoption of the MICR and LAN technologies where most of the banks had adopted the use before 1998. The reason for the early adoption of MICR technology was due to the mandatory stand of the apex bank (CBN) on a phased implementation of automation of clearing house scheduled to take place between 1990 and 1993. Since MICR cheques were central to the implementation of this policy most banks were forced to adopt its use. Early adoption of Local Area Network in the early 1990's was influenced by the advent of Micro Computers in the fourth generation which made connectivity feasible. Rate of adoption increased progressively in all the studied banks between 1990 and 2004 because of the crucial roles it plays in the operations of banks. This agrees with Laudon, and Laudon, (1991) who contend that managers cannot ignore Information System because they play a critical role in contemporary organization.

V. METHODOLOGY

Taraba state was created on 21st August, 1991, it covers a land area of 59400 sq km, comprised sixteen local government area and lies roughly between latitude 6.3N and 9.66N and longitude 9.10E and 11.50E. It is bounded by Bauchi and Gombe states in the North East and Adamawa on the East, by Plateau state in the North West. The state is further bounded to the West by both Nasarawa and Benue states, while it shares international boundary with Republic of Cameroun to the South and South East. According to the 2006 Census figures released by the National Population Commission (NPC, 2007) Taraba state has about 2,300,736 populations.

Jalingo, the capital city of Taraba state lies on latitude 8o61"N and longitude 11o25"E. The city shares common boundaries with Law and Yorro LGAs in the North and Ardokola LGA in the South. The major ethnic groups in Jalingo metropolis are Jukun, Fulani, Kona, Mumuye, Wurkun and Kuteb. Guarantee Trust PLC is one of the numerous Banks located along Mayo-gwoi ward, Jalingo and it is ranked among the first generation banks.

This research work utilizes survey designed to evaluate the impact of electronic banking on customer's service delivery in Guarantee Trust Bank PLC. This method was employed because explorative survey is a very good method available to a social scientist interesting in collecting original data for describing a population too large to observe directly". In the same vein Adefila, (2008) opined that survey research focuses on populations or the universe. Data are collected from the population for intensive study and analysis. This type of

research is based on information gathered through questionnaires, interviews, and observation. The population for this study is made up of fifty two (52) staff of Guarantee Trust Bank PLC, Jalingo branch. Sampling was used because it saves cost, guarantee greater speed and scope and more accurate because the data can be very easy to manage (Osuala, 2007, Ogboru, 2007). For the purpose of this very research, fifty two (52) questionnaires which formed the sample size were administered in the following orders.

TABLE I. SAMPLING FRAME

Staff/ Department	Customer Care / service	Marketing dept.	Transaction service	Total
Senior	2	8	6	16
Junior	4	18	14	36
Total	6	26	20	52

^a. Source: Field survey, 2016.

A. Sources of Data

This study used primary data as well as Secondary data so that information needed for the purpose of this research can be adequately obtained and used. Secondary data was used to support primary data so that the result can be reliable and adequate.

B. Methods of Data Collection

Primary data for this research work was obtained through questionnaire while the secondary data was collected through sources such as text books, Federal Inland Revenue Publications, newspapers, magazine, journals and internet.

C. Methods of Data Analysis

For the purpose of this research work, descriptive statistic was employed to analyze the data collected to meet the desired objectives of the study. It is noteworthy that the descriptive statistics used consist mainly of tables, percentages and statistics used to analyze the data collected and hypothesis formulated.

D. Data Presentation and Analysis

This chapter deals with the presentation of data obtained through questionnaire and analysis of hypothesis through descriptive statistics. The presentation is dichotomized into demographic and topical data accordingly.

1) *Demographic Data*: This discusses the composition of the population that was adopted for this study which includes statistics regarding age, gender, marital status, education and years of experience of the respondents.

Table II shows clearly that 15.39% of the respondents are between the ages of 25, 55.77% an overwhelming majority are between the ages of 26-30, 19.23% are between the ages of 31 - 40 and the least 9.62% are between the ages of 41 and above. This indicates the dominance of 26-30 years in the service of Guarantee Trust Bank PLC in Jalingo branch. This is a clear case of robust and energetic working class.

TABLE II. AGE DISTRIBUTION

Staff / dept	Customer care	Marketing department	Transaction service	Frequency	Percentage
0-25	1	3	4	8	15.39
26-30	3	16	10	29	55.77
31- 40	1	4	5	10	19.23
41 and above	1	3	1	5	9.62
Total	6	26	20	52	100

^b Source: Field survey, 2016.

TABLE III. GENDER DISTRIBUTION

Sex	Customer care	Marketing department	Transaction service	Frequency	Percentage
Male	3	12	12	27	51.92
Female	3	14	8	25	48.08
Total	6	26	20	52	100

^c Source: Field survey, 2016.

Table III, reveals that the majority of the respondents of 64.66% are male while 48.08% are female. This indicate clearly that the number of male staff in the staff strength of

Guarantee Trust Bank PLC, Jalingo branch is more than their female counterpart with about 3.84% difference which is minimal.

TABLE IV. MARITAL STATUS

Marital Status	Customer care	Marketing department	Transaction service	Frequency	Percentage
Single	2	13	11	26	50.00
Married	3	12	8	23	44.23
Divorced	1	1	1	3	1.77
Widowed					
Total	6	26	20	52	100

^d Source: Field survey, 2016.

TABLE V. EDUCATION

Level of Education	Customer care	Marketing dept	Transaction service	Frequency	Percentage
Primary education	0	1	0	1	1.92
Secondary Education	1	3	1	5	9.62
OND/NCE	2	9	7	18	34.62
Degree and above	3	13	12	28	53.85
total	6	26	20	52	100

^e Source: Field survey, 2016.

From the foregoing, Table IV reveals that the majority of 50.00% of the respondents are single, 44.23% are single whereas 1.77% are either divorced or widowed.

Table V reveals clearly that 1.92% of the respondents holds primary first school leaving certificate, 9.62% holds secondary

education certificate, 34.62% holds OND/NCE and an overwhelming majority of 53.85% of the respondents holds degree and above. This signifies that their responds to the questionnaire was actually from learned individuals who have a foresight on the subject matter under discussion.

TABLE VI. YEARS OF WORKING EXPERIENCE

Years	Customer care	Marketing department	Transaction service	Frequency	Percentage
0 -15	2	13	13	28	53.85

16 – 25	2	6	4	12	23.08
26 – 35	2	6	2	10	19.23
36 and above	0	1	1	2	3.85
Total	6	26	20	52	100

^f Source: Field survey, 2016.

Table VI shows clearly that greatest proportion of the respondents of 53.85% have 0-15 years working experience, 23.08% have 16-25 years' experience, 19.23 have 26-35 years' experience and 3.85% have 36 years and above banking working experience. With the level of experience possess by

the respondents, information provided by them that relates to electronic banking in Nigeria should be reliable.

2) *Topical Data:* Topical data relate directly to the issue under consideration which is ICT and customer service delivery in the Banks.

TABLE VII. RESPONDENTS DISTRIBUTION IN THE BANK

Staff / dept	Customer care	Marketing dept	Transaction service	Frequency	Percentage
Senior	2	8	6	16	30.77
Junior	4	18	14	36	69.23
Frequency	6	26	20	52	100
Percentage	11.54	50	38.46	100	

^g Source: Field survey, 2016.

From Table VII a, it can be seen that 11.54% of the respondents were from customer care department, 50% were from marketing department and 38.46% were from transaction service department. The domination of the marketing department over other department could be linked to the fact

that as a service enterprise, there is need for adequate personnel that could go round to inform the government and the general public on the diversities of services available in Guarantee Trust bank PLC which make it unique from other banks in the same competitive environment.

TABLE VIII. ICT INFRASTRUCTURES USED IN THE BANKS

	Responses	SA	A	UND	SD	D	Frequency	Percentage
A	Internet network	2	2	0	0	0	4	8.00
B	SMS alert	10	5	2	0	0	17	32.69
C	Automated payment system	7	10	2	1	0	20	38.46
D	Telephone banking	2	1	1	0	1	5	9.62
E	Electronic mail	3	2	0	0	1	6	11.54
	Frequency	24	20	5	1	2	52	100
	Percentage	46.15	38.46	9.62	1.92	3.85	100	

^h Source: Field survey, 2016.

Table VIII reveals that 46.15% of the respondents strongly agreed that Guarantee Trust Bank Uses ICT infrastructure, 38.46% of the respondents also accepts the fact guarantee Trust Bank employs ICT Facilities in its banking operations, while

9.62% were undecided, 1.92% strongly disagreed and 3.85% disagreed that ICT facilities are not adequately utilized and employed in Guarantee Trust Bank, Jalingo branch.

TABLE IX. HOW ICT PROBLEMS MILITATE AGAINST EFFICIENT ELECTRONIC BANKING

	Levels of impact	High	Average	Low	Total
A	ICT Fraud	4	3	1	8
B	Technical unemployment	12	10	1	23
C	Access problems	4	3	1	8
D	Undelivered money transfer	2	4	1	7
E	Contra dictionary messages	2	2	2	6
	Frequency	24	22	6	52

	Percentage	46.15	42.31	11.54	100
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ⁱ Source: Field survey, 2016.

Table IX reveals that 46.15% of the respondents accepts that ICT problems has a high effect against the efficient functioning of electronic banking in guarantee Trust Bank, 42.31% agreed that the impact was average while 11.54% accepts that ICT problems militate insignificantly low against

the efficient functioning of electronic banking of the banks. This goes to tell that the aforementioned problems related to ICT militate significantly against the efficient performance of electronic banking system in Nigeria.

TABLE X. THE IMPACTS OF ELECTRONIC BANKING ON CUSTOMERS

	Opinion	SA	A	UND	SD	D	Total
A	Improved efficiency	4	3	1	1	1	10
B	Improved profitability	6	5	0	0	0	10
C	Eliminate time and distance as barriers to banking	4	4	1	0	1	10
D	Improved customer services	5	6	0	0	0	11
E	Enhance management decision making	4	5	1	0	0	10
	Frequency	23	23	3	1	2	52
	Percentage	44.23	44.23	5.77	1.92	3.85	100

^j Source: Field survey, 2016.

From the foregoing, Table X disclosed that 44.23% of the respondents strongly agreed and agreed respectively that electronic banking truly impacts on the customers service delivery, 5.77% were undecided while 1.99% strongly disagreed from the fact that electronic banking has any impact on customers service and 3.85% opined that electronic banking do not have any impact. It is crystal clear that 88.46% unanimously agreed that electronic banking have a significant impact on the banking services to the customers.

study also reveals among the problems militating against the efficient utilization and application of electronic banking which ranked between technical unemployment, access problem, ICT fraud, undelivered money transfer, and contradictory dictionary messages. Finally, the impacts of electronic banking were clearly displayed which include: improved efficiency, improved customer service, improved profitability, enhanced management decision making and elimination of time and distance as barriers to banking.

VI. SUMMARY

This research work was carried out to evaluate the impact of electronic banking on customer’s service delivery in Guarantee Trust Bank PLC. Three department of the bank was considered for collection of adequate data and these are: the customer care department, the marketing department and the transaction department. For the purpose of this study, primary data were collected through questionnaire in which case, fifty two questionnaires were administered and all the questionnaires were retrieved and returned through the assistance of the bank’s administrative officer. This represent 100% response rate which is both adequate and accurate. Secondary data were utilized from textbooks, Journals, prospectus, magazines, bulletins and internet. This Findings reveals beyond reasonable doubt that an overwhelming majority of the respondent 55.77% were youths in productive age of between 26- 30 years, the majority of the respondents of 51.92% were male and 48.08% of the respondents were female which gave a good representation of feminine gender in the bank. While 50% of the populations were single, thus have enough time and concentration to do their work, about 44. 08% of the respondents were married. An overwhelming majority of 53.85% of the respondent holds a good degree and above, only 1.92% of the respondents were only secondary leavers. The personnel both had experience in a giving way which enabled them to respond to the questionnaire in the required pattern which made the information gathered reliable.

This research work also reveals the ICT infrastructures used in the banks to include: internet network, SMS alert, automated payment system, telephone banking and electronic mail. This

CONCLUSION

The increasing use of ICT and its facilities has caused the integration of various economic units in a way that has made banking operations to be highly ICT inclined and to benefit immensely from the gains in technological revolution. From the foregoing, this project work concludes that Guarantee Trust bank PLC has succeeded in employing some ICT infrastructures for enhanced banking services which is conspicuous in increased profitability. The successful application of ICT within the banking sector is not just a question of the technology deployment per se, but rather how effective the banks manage the ICT infrastructure and align it with the business objectives. Despite the effort of the banks to ensure increased customer satisfaction, it has met with some obstacle, barriers and hurdles which militate against the successful implementation of ICT infrastructure aforesaid. In the mist of its problems, Guarantee Trust bank PLC has made its marks, thus, the impacts of electronic banking is not only felt in efficiency and effectiveness of the banking activities and transactions but it has been extended to improving customer care which ultimately resulted to enhanced management decision making and profitability.

RECOMMENDATIONS

Borrowing from the findings, the following recommendations are made.

- Guarantee Trust bank as a matter of fact and priority should improve in the provision of diversified

Information and Communication Technology Infrastructure in Jalingo metropolis

- The study recommends that the banks should train their workers from time to time to keep them abreast of the innovations in the use of ICT.
- In addition, the need for the banks to procure quality ICT gadgets that will enhance efficiency and customers' retention, among others cannot be over-emphasized. This will ensure quality service delivery and productivity which is essential. This is because attention is now on the ability of banks to retain their existing customers and attract prospective ones, which is mainly a function of their efficient service delivery that depends on the use of ICT.
- Finally, the study recommends further empirical research to expound more on the roles of ICT and other forms of technological innovations to other sectors of the nation's economy such as education, agriculture and health among others. This will help to further appreciate the relevant roles modern technologies play in socio-economic advancement.

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