

THEORETICAL UNDERSTANDING OF THE CAUSES OF QUEUES IN BANKS AND AUTOMATED TELLER MACHINE (ATM) DISPENSING POINTS IN NIGERIA



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ABSTRACT

Over the years, delays and queuing problems are most common features of banking operations in Nigeria. It was observed by several scholars that one of the frequent customers complaints are the issue of long queues, delays and congestions in banking halls, and these frequent challenges have led to movement of customers from one bank to another where they can access services without much delay because time is money. The paper therefore, examines the causes of these challenges in order to proffer recommendations for improving the efficiency of banking services. The study employed the use of secondary data and content analysis to assess these causes by reviewing empirical studies carried out by several scholars. The findings revealed that, the unnecessary delays and queues in banking halls and ATM points ranges from inadequate number of ATM dispensing points, insecurity of e-banking services, low speed of most ATM machines, perception of customers towards the use of ATM, banking consolidation with inadequate banking architecture in place and breakdown of computers. The study recommends that banks should installed more ATM at their premises and stock with money 24/7 especially during the month-ends or salary payment. Thus, it would be good for the banks to increase their server point of payment when arrival rate exceeds service rate. Improve their services and work on their staff to be fast and efficient. Moreso, the banks should employed more staff and improve their security where by the customers would patronise the use of mobile banking, internet banking, tele-banking and POS.

Keywords: ATM, banking halls, congestion, delays, queues, insecurity, e-banking services, low speed and computers.

Introduction

Delays and queuing problems are most common features of banking operations in Nigeria. Banking being a major components of financial system that intermediating between the deficit and surplus sector of the economy has always been a centre of attraction to customers who wants carry out transactions and other services provided by the banks. Banking sector has been characterized by intense and ever increasing competition, the operation managers has been experiencing wrenching challenges especially the issue of long queues and congestions. However, it has been a common thing to see a very long waiting of customers in the banking halls to be served by the cashier, even though there are similar waiting lines in places like supermarket, petrol station and hospital. Country wide survey of banks in Nigeria has shown that there is perennials congestion and long queues (Aidajani an Alfares, 2009). It was observed by CBN(2001), that one of the frequent customers complaints were the issue of long queues in banking halls, and these frequent challenges in Nigerian banks are the issues of congestions, this have led to movement of customers from one bank to another where they can access services without much delay because time is money.

The Automatic Teller Machine (ATM) has been a useful point for banks in Nigeria with aims to alleviate or reduce queues within banking halls and increased revenue through induced spending, but that scene is changing even as off-premises opportunities grows larger and the market saturates based on the number of machines within circulation. Modern day electronic machine (ATM) in the banking industry was to provide 24 hour access to service efficiently and effectively to reduce or manage the congestion of customers in the banking halls waiting for services by the cashier at the counter (Agboola, 2006). Automated Teller Machines (ATM) is introduced as a means of satisfying bank customers. The Central Bank of Nigeria objectives toward the introduction of ATM is to decongest the banking halls and reduce the rate at which people withdraw from the counter by the use of teller and to prepare Nigerians for the cashless economy.

ATM is adopted to manage the issue of queues, offer ease both bank and the customer; as to enable customer to transact during and after banking hours conveniently, efficiently, user-friendly by providing adequate number of ATM to facilitate efficient and improve banking service to customers without much delay. Queuing is known with various names like, congestions, traffic, overcrowding and theory of mass service. And it is one of the unpleasant experiences to a customer (Abdulwahab et al., 2000). However, despite the accessibility of ATM, and being in the technology era queues are still persisted

within the banks, and ATM places. There are many customers who still prefer to transact with tellers, withdrawal booklet and cheques in the banking hall and congestion or queues are not the things of past in banks.

It is against this background that this paper examines the causes of queues in the banking halls and ATM dispensing points. The paper made use of secondary data and content analysis to assess these causes by reviewing empirical studies carried out by several scholars. Before reviewing the empirical studies what is Automated Teller Machine(ATM)?

Concept of Automated Teller Machine (ATM)

There is no doubt to the fact that we live in a world where information and communication technology (ICT) is dominating our everyday life choices and decisions. However, one of the greatest concerns of every business organization and financial sector is efficient service delivery. In banking industry, customers mostly are motivated by timely service delivery they receive. This made the banking industry developed but dynamic and ultimately the introduction and invention of the Automated Teller Machine (ATM). Automated Teller Machine is an electronic appliance that gives out or receives cash deposits from account holders. A smart card is used to initiate and complete a transaction with the machine. The smart card or simply put, ATM card as widely called, has electronic chip that identifies each customer with respect to corresponding accounts belonging to the customer (Odewale, 2000) cited in Mohammed, and Dada, (2014)

According to Emenika and Peter (2016) ATM), is known as a Automated Banking Machine (ABM) or Cash Machine and by several other names, is a computerized telecommunications device that provides the clients of a financial institution with access to financial transactions in a public space without the need for a cashier, human clerk or bank teller. And most modern ATMs, the customer is identified by inserting a plastic ATM card with a magnetic stripe or a plastic smart card with a chip that contains a unique card number and some security information such as an expiration date. Authentication is provided by the customer entering a Personal Identification Number (PIN). Using an ATM, customers can access their bank accounts in order to make cash withdrawals, credit card cash advances, and check their account balances as well as purchase prepaid cell phone credit (Emenika, and Peter, 2016).

Thus the idea behind the ATM was to automate the duties of a bank teller which subsequently will remove the “face to face” interaction between the customer and the bank teller (Gabriel et al, 2015). In the service sector such

as banks, the ATM technology is used to standardize services by way of reducing the employee/customer interaction. The ATMs are expected to provide the same service wherever the customer goes. It is also expected that the service provided by the ATM from one customer to the other will be consistent, for example, the speed of the transaction process. There are some numerous services that are carried out on the ATM such as withdrawals, cash deposit, balance enquiries, funds transfer between accounts and payments of utility bills. The original fundamental nature of the ATM was for the use of cash withdrawals which was expected on a 24/7 hour service (Gabriel et al, 2015).

Theoretical framework

In this paper Technology Acceptance Model (TAM) and Modernization Theory(MT) have been reviewed and at the end TAM is adopted to serve as the theoretical guide for the paper.

Technology Acceptance Model (TAM)

The Model (TAM) as presented by Davis (1989) aimed at predicting and explaining ICT usage behavior, that is, what causes potential adopters to accept or reject the use of information technology. Theoretically, TAM is based on the Theory of Reasoned Action (TRA). In TAM, two theoretical constructs, perceived usefulness and perceived ease of use, are the fundamental determinants of system use, and predict attitudes toward the use of the system, that is, the user's willingness to use the system. Perceived usefulness refers to “the degree to which a person believes that using a particular system would enhance his or her job performance”, and perceived ease of use refers to “the degree to which a person believes that using a particular system would be free of effort” (Davis,1989). The paper assert that consumers have positive attitudes towards ATMs based on dominant perceptions of convenience, accessibility and ease of use. This is because the longer a customer stays with a bank the more utility the customer generates. This is as a result of a number of factors relating to the time the customer spends with a bank. Without usage of technology the banking sector cannot provide customers with a satisfactory service

Modernization theory

Modernization is a change process towards, economic, social, political and most importantly technological or technology system that have developed in Western Europe and North America and to the developing countries like Nigeria. Modernization is assumed to be a total social change

process happen in that sector or the country which constitutes a universal pattern. Modernization is seen as goal which the developing societies in Africa, especially Nigeria should pursue as a path way to development. The present situation of the 'advanced' nations is taken as the reference point for the less advanced societies. Through the process of planned development, the developing societies can aspire to attain the conditions enjoyed by the West (Levy 1966; Chodak 1973; Palmer, 1988). The theory argues that, as the developing societies aspire to attain the institutional pattern of the West, the goal is a moving target and thus, modernization is not an unchanging condition. It is often a period of transition in that sector or country during which a society discard its traditional individuality such as particularistic, self-oriented and functionally diffuse and becomes dominated by modern types of institutions and action (Parsons 1971). Diffusion is seen as the process whereby the new nations could change in the appropriate direction, as well as learn from the mistakes of the older nations. For modernization theory, diffusion would occur through the interaction of two major groups and through this appropriate capital, technology, value would be injected into the traditional society. The implication here is that in the developing societies, bank services fashioned along that of the West would help to play the role of modernizing agents. For modernization theory, social mobilization is an essential ingredient in the new development (Emeka and Favour, 2012). Thus, the modernization thesis has been applied to explain changes in the banking sector through information communication technology. The growth of Information Communication and Technology (ICT), in Nigeria has gone through important changes; these changes have transformed the dimensions of financial services that are delivered to their customers. Nowadays in Nigeria, the modern banking has lots of alternative models available for services delivery. These models of services include Automated Teller Machine (ATM), Mobile Money Services or Tele-Banking, Internet Banking and Point of Sale (POS).

From the review it is very clear that there is a symbiotic relationship between modernization and Technology Acceptance Model. The extent to which society progresses depend largely to the development of appropriate technology. In this respect, for banking sector to respond adequately to the demands of customers there is a need for technological development that will cope with the 21st century. Hence, the introduction of e-banking services including the operation of Automated Teller Machine (ATM). The perspective of this paper is that majority of the people visiting banks for transaction have positive perception towards the use of ATM to avoid all the protocols and queues in the banking halls. It is in this light that many bank customers now

prefer ATM instead of going inside the banking halls. This new development brings about large users without corresponding number of ATM dispensing points, hence the importance of TAM as a guide.

Development of banking sector in Nigeria

According to Nnolim (2013) said in 1892 Nigeria First Bank, the African Banking Corporation was established with its first branch in Lagos. The bank experienced some initial setbacks and later transferred its interest to Elder Dempster and co; a shipping firm based in Liverpool in 1893. The Bank was registered in March 1894 in London and that very year, the branch was opened in Lagos. The coming or evolution of banking in Nigeria precedes the nation independence. It began with the activities of Elder Dempster and company limited of Liverpool, United Kingdom in 1892. Some organizations notable in the early times are, the Nigeria Mercantile Limited, Nigeria Farmers and Commercial Bank Limited, British and French Bank which was transformed to be as, (United Bank for Africa), that is, the Era of Agbonmagbe Bank in 1945 and later to WEMA Bank and African Continental Bank.

On promoting innovation in developing countries highlights “the crucial importance to go beyond the formal appearance of laws to examine how laws are applied in practice in taking due account of the more or less informal relations regulating transaction among economics agents”. In other words, weak governance, comprising corruption and bureaucracy, was identified by executive managers in developing banks as the most binding constraints for doing business in the country (Kaufmann, 2004) cited in Nnolim (2013). The Anglo Bank was established by the Royal Niger Company, now is United African Company (UAC) to compete with British Bank of West Africa (BBWA), in 1899. The Bank changes its name as the Bank of Nigeria and its branches were opened in Jebba, Lokoja and Buturu, as result of strict competition and monopoly in the importation of silver from Royal Mint enjoyed by BBWA, then later BBWA in 1912 purchased Anglo African Bank. The Nigeria Banking sector, for the period of 40 years was dominated by the foreign banks, which are: British Banks, British Bank of West African and Barclays Bank (1894-1933). One of the first indigenous banks to survive was the National Bank of Nigeria limited and the Agbonmagbe Bank in 1945 (Nnolim, 2013)

World Bank investigation shows that, the use of ICT has indeed played a very crucial role in advancing economic growth (GICT and DECDG, 2006). In early 1940"s the Nigerian Penny Bank was opened but collapsed in 1946 due to gross mismanagement. Followed by Nigeria Farmers and Commercial

Bank in 1940, these also failed in 1953. However, most of the Banks operated in Nigeria prior to independence and failed is because there is absence of regulatory frame work (Period before 1952 as Era of Free Banking) and were overwhelmed by the incompetent management, competition from foreign competitors and the recession of the 1930s.

However, the period from 1952 to 1971 was the period of legislation and stabilization, with the enactment of banking ordinance of 1952 and the establishment of the CBN 1958 CBN act changed the Bank with responsibilities which include the issuance of legal external reserves to safeguard the external value of the domestic currency, indigenization and branch expansion. The period of 1972 to 1986 Structural Adjustments, the Deregulation Era 1986 to 1994, and the Post-SAP Era 1995. Technological developments particularly in the area of Telecommunications and Information Technology are revolutionizing the way business is done. ICT has impacted banking operations positively on the activities rendered by banks to the customers and boosted the performances of businesses in Nigeria (Nnolim, 2013).

The Internet banking and online banking is on developing. Singh (2002) opined that technology has introduced new ways of delivering banking services and products to the customers, such as ATMs, and internet banking (IB). Hence bank has found themselves at the forefront of technology adoption for the past three decades. The future of the banking activities and consequently its continual competitive ability in the world markets is going along with technology, as one of the most important factors of economic organizations success in general and banks in particular (Nyangosi, 2009). This motivates banks to spend more on technology and information to achieve maximum returns and attract large number of customers.

Syed, (2010), argued that almost every private as well as nationalized bank in Nigeria, are providing IT based products and services to their customers and co-operative banks have in the last decade entered in the IT market. Services and Products like, anywhere Banking, Tele-Banking, Internet Banking, Web Banking, E-Banking, e-commerce, e-business, etc. have become the buzzwords of the day and the banks are trying to cope with the competition by offering innovative and attractive packaged technology-based services to their customers. As a result of the increased demand for customer deposits, Nigeria banks, especially the new generation banks, have realized the imperative of good and prompt service. Also, due to the fact that some customers lost their deposits in the erstwhile technically-insolvent or distressed banks, customers have now become wiser with more discerning

alerts and sophisticated, with regards to choosing where it is safe to put their money, and where they would be served promptly, preferably in a pleasant, courteous and friendly environment. Thus, they have started looking at the level of service and professionalism of the banks before depositing their funds. Proximity to the bank is no longer the issue; safety and the level of service, with regard to quality, speed and efficiency have become the major imperative. On the part of the banks, they have realized that the one way they can provide quality service is through the use of technology. Hence, there is a growing rate of adopting new technologies in Nigerian banking operations. Moreover, there is growing evidence that customers have started associating quality of service in a bank with the bank's possession of an online, real-time system. In fact, possession of such system is now judged to be the perceived as providing high quality service, that bank has to have ICT system which it uses to deliver service to customers in a more timely, friendly and considerate manner, at no extra cost to the customer.

The new generation banks started (and still in the forefront of) the use of technology to provide efficient, online and real-time services. This means that their customers can, for the first time in the history of banking in the country, go to any part of the country where there is a branch of their bank and make withdrawals or conduct an increasing range of other banking business. Before the new era of banking in Nigeria, the industry was characterized by inefficient bureaucracy and a truly frustrating service.

Development of (ATM) transactions in Nigeria

The historical development of ATM in Nigeria can be traced to the earlier Mechanical Cash Dispenser installed by the National Cash Registers (NCR) in 1989 for the defunct Societe Generale Bank of Nigeria (SGBN). The trade name for SGBN's ATM was (Cash Point 24), First Bank of Nigeria Plc., came up with their ATM in December 1991, two years behind SGBN and the trade name was (First Cash) to their ATM. And while that of SGBN was a drive-in-system and that of the First Bank ATM was through-the-wall (Jegede, 2014). Today, the ATM technology now appears as common and generally acceptable among banks' customers in the country (Agboola, 2006). Though, the widely accepted popularity of ATM technology in the country Nigeria can be linked to the banking sector reforms, started in 2004, and the earlier existence of Interswitch network in 2003. The Central Bank of Nigeria (CBN) in 2004, directed the commercial banks to install ATMs in the bank premises and other strategic locations to serve their customers as part of the reform policy to decongest the bank halls, to achieve cashless economy and ensure efficiency of

bank services in the country. Olatokun and Igbiniedion (2009) in Emeka and Favour (2012), says debit card transactions in Nigeria rose to 93% in between January 2005 and March 2006, due to aggressive move out initiatives of the Nigerian banks, powered by Interswitch Network, and the transaction volume grew from N1.6 million in 2006 to over N500 million transactions in 2009. The total number of ATMs has grown remarkably from 500million in 2006 to over 8,000million ATMs in 2009. The number of ATMs as at June 2012 N10, 221million, while the value of ATM transactions increased from N698.19 billion to N937.39 billion, representing an increase of 34.3%, and by the end of the year 2012 it increased to N1.3 trillion from the initial N937.39 billion. And recently, the CBN announced that the value of financial transactions carried out through ATMs as at June, 2014 is at N1.7 trillion, up from the N1.3 trillion it was as at 2012. Similarly, the volume of ATMs deployed in the country rose from N10, 727million in 2012 to 15,000million as at June 2014.

The rapid development recorded over the ATM transactions in Nigeria can however not be unconnected to the huge emphasis and promotions of ATM usage by commercial banks through different ATM promotional schemes in the country. Banks no longer appear to want personal contact with their customers. Some banks have also resulted into penalizing their customers as it were, for not possessing an ATM card by debiting the account of such a customer for withdrawing below a certain amount across the counter (Fabunmi, 2011). Thus, on the 6th November, 2012, the Bankers Committee of the CBN approved the immediate removal of the N100 charge on customers who use a different bank's ATM. This, the apex bank maintained will help in reducing the number of queues in the banking halls to patronizes ATM terminals. Consequently, the removal of this fee aided the patronage of ATM transaction in the country, and the number of times bank customers carry out ATM transactions using other banks' machines increased. For instance, from N33.4 million in January 2013, it rose to N66.8 million as at December 2013.

The recent development, on 1st September 2014, The CBN re-introduced charges on the use of ATMs, and presently, banks in Nigeria now charge customers N65, after the third of such withdrawals within a month. Remote-on-use ATMs withdrawals are withdrawals made from ATMs of other banks not the bank in which the account is domiciled. The CBN maintained that the reintroduction of the fee was necessitated as there is an increase in the rate at which bank customers indiscriminately make use of ATMs and this has declined the profitability of banks and as well increased their over-head costs. Thus, the re-introduction of the fee will help to ameliorate the cost on banks, the apex bank maintained.

The Concept of Queuing in Banking Sector and its causes

Queuing in the Nigerian bank is an approach that involves lining up of customers in bank hall in order to be served by bank personnel at each terminal (server). Delays and queuing problems are most common features not only in our daily-life situations, such as bank or postal office, at a ticketing office, in public transportation or in a traffic jam but also in more technical environments, such as in manufacturing, computer networking and telecommunications. Queuing models provide the analyst with a powerful tool for designing and evaluating the performance of queuing systems. According to Sokefun (2011), Customer service satisfaction is derived largely from the quality and reliability of products and services. However, almost every Nigerian bank encounters similar problems in meeting customer 's expectation of services and customer satisfaction. For example, the issue of money transfer in banks is one major problem that customers of certain banks have been made to experience. In most cases the customer hardly receives the payment of the money transferred into account immediately. The long queues and huge crowds in the banking halls can be highly devastating and discouraging most times, especially when the weekend is near and when salary is paid. Most times, these long queues are as a result of the breakdown of the computers used by the cashiers, sometimes it occurs as a result of the cashiers, pushing duty to one another as to who is to attend to the customers. On the word of Zeithaml (2000), the major problems in measuring the relationship are; the time lags between measuring customer satisfaction and profit improvement, the number of other variables influencing performance such as pricing, convenience, transaction methods and system, customer care and so on should be included in the relationship because they explain the causality between satisfaction and result.

However, the problems faced by banks in delivering effective services to customers include; insufficient legal system, high provisions for non-performing loans, high lending rates, poor management, political instability, high pricing of financial services, higher risks and low profitability. These have in turn affected their quality of service offered. Most times, these negative effects limit the number of prospective customers who patronize banking services. This is because a customer who has once been disappointed by a bank 's services decides to tell others not to use that same service. Gabriel et al (2015), said, once banks have cut waiting lines, such acts cease to be customer services, furthermore, waiting time from the viewpoint of service industry has effect of the number of customers that are willing to patronize a particular bank. In order to build a cordial and lasting relationship with the customers, the

bank must supply the best service to maximize customer satisfaction and increase service efficiency by providing prompt or timely service. Waiting for service is typically a negative consumer experience and cause unhappiness, frustration, and anxiety by consumer. Due to this, there must be ways in which queues must be reduced so as to make consumers patronized banking services.

Olaniyi (2004), in a case study of the First bank of Nigeria, explored the applicability and extent of usage of queuing models in achieving customer satisfaction at the lowest cost. In the study it was observed that a single server is not effective when arrival rate exceeds service rate, while the existing two-server system was not optimally utilized. The use of a four server system, although eliminated waiting but at a higher cost which is not optimal too. The study therefore recommended a three server system for the bank for optimal costs, training of staff on application of queue models, multi-skilling, leveraging use of IT in banking, improving service environment and improvement of staff-customer relationship. According to Osman et al. (2010), despite increased use of internet banking in the world some customers fear that they would lose their money to swindlers and are particularly careful about the high risk expectation during money transfer between accounts. Other risks include financial risk, loss of confidentiality, time risk, performance risk, and psychological risk. The study carried out in Turkey also showed that there is a significant relationship between risk perception and level of income. High income customers have high social, time and security risk perceptions. However with increased use of internet banking time risk perception reduces.

The 2005 Banking Consolidation in Nigeria

Following the 2005 banking consolidation of the Central Bank there are twenty-four (24) operational deposit money banks in Nigeria. As a result of the increased demand for customer deposits, Nigeria banks, especially the new generation banks, have realized the imperative of good and prompt service. Also, due to the fact that some customers lost their deposits in the erstwhile technically-insolvent or distressed banks, customers have now become wiser with more discerning alerts and sophisticated, with regards to choosing where it is safe to put their money, and where they would be served promptly, preferably in a pleasant, courteous and friendly environment. Thus, they have started looking at the level of service and professionalism of the banks before depositing their funds. Proximity to the bank is no longer the issue; safety and the level of service, with regard to quality, speed and efficiency have become the major imperative. On the part of the banks, they have realized that the one way they can provide quality service is through the use of technology. Hence,

there is a growing rate of adopting new technologies in Nigerian banking operations. Moreover, there is growing evidence that customers have started associating quality of service in a bank with the bank's possession of an online, real-time system. In fact, possession of such system is now judged to be the perceived as providing high quality service, that bank has to have ICT system which it uses to deliver service to customers in a more timely, friendly and considerate manner, at no extra cost to the customer.

Service Quality Automated teller machine (ATM)

Organizations are aware that quality of service rendered or provided promulgates strategic competitiveness in dynamic business environment. Literature provides significant relationship between quality of service and firms' performance based on improved productivity, increased market share, enhanced customers' attraction and loyalty, improved staff morale and sustained profitability (Lassar et al, 2000). Use of ATM has become exceedingly admirable and popular among customers as convenient mode of Banking Transactions. This technological innovation has transformed the banking business. Banks in Nigeria and worldwide are aggressively adopting ICT modes of transactions which include ATM. The benefits of using ATM have given new desire in dimensions of quality of service and Banks are offering new choices to customers.

There is a lot of review that indicates different dimensions of ATM service quality. According to Lovelock (2000), service quality depends on:

- i. A secure and convenient location of ATMs
- ii. Adequate number of ATMs
- iii. User-friendly system and
- iv. Functionality of ATMs

Davies and Curry (1996), revealed some of the factors that influence customers' satisfaction and management about ATM service quality include:

- i. Costs involved in the use of ATM by the customer
- ii. Efficient and reliable functioning of ATM.

It was also depicted that the United States customers' perception of ATM service quality by Joseph & Stone, (2003), that Banks should have:

- i. User-friendly ATMs
- ii. Convenient locations of ATMs
- iii. Secure positions of ATMs and
- iv. Adequate number of ATMs installed for essential dimensions of ATM service quality.

In another case study of Botswana relating to ATM service quality, Mobarek, (2007), established speed of operation, and waiting time as the important predictors of ATM service quality.

Customer accessibility to Automated Teller Machines (ATM)

According to Gabriel et al, (2015), one of the key factors in determining viable improvement in such a turbulent banking environment is the method of delivery of banking services/products. Convenient and value driven allocation channels add worth to the service offered. ATMs must provide convenience to the customer. In this regard, ATMs are located at convenient places such as within the bank premises (on site ATMs) and away from the bank premises (off site ATMs) , such as at the airports, super markets, fuel filling stations and shopping malls. According to (Mountinho et al., 1997) in Gabriel et al, (2015), new-age banks operate with minimal number of physical branches and use remote banking for the bulk of their operations. The remote channels are used to provide basic services while more sophisticated services are provided on a face to face basis. Customers have less time to spend on activities such as visiting a bank and therefore want a higher degree of convenience and accessibility (Delvin, 2001). Since attitudes are less beyond the control of banking executives, attitudes are difficult to change. But to understand consumer attitudes toward ATM is extremely important, but managers can help predict the usage rate and evaluates the future growth of the channel. Therefore, it is imperative for managers to understand that attitudes are developed from personal experiences and learning with reality, as well as information from both inside and outside the banking halls and derived could be direct and indirect experiences in life (Gabriel et al, (2015).

Perceptions of Automated teller machine (ATM)

In Baber, et al (1998) cited in Odewale, (2008) Automatic Teller Machines (ATMs) are defined as technology gadgets or devices that are used in public areas. In most parts of the world, bank customers make use of ATMs. These machines are recognized as a basic banking tool saddled with the responsibility of dispensing cash and providing basic information about financial status. This machine (ATM) is perceived as a box whose technology is hidden and mode of operation unthinkable. However, acceptance of ATMs has been a major challenge as most bank customers are not willing to change from the traditional banking methods especially since this has to do with strictly private financial matters. Meanwhile, banks are continuously intensifying efforts in ATM campaign in order to encourage its wide

acceptance and adoption. This has strictly been focused on reliability issues surrounding the ATM Technology (Odewale, 2008).

The advent of ATM has changed the whole world, its arrival and application in banking sector, customers need to queue; write cheque and carry money all about but the application of ICT using the ATM technology has changed the whole process overnight. Banking sector have always been the leader in the use of ICT in any part of the world and Nigeria is not left out. The use of ICT is moving fast in Nigerian banks, though the use of ICT in banking sector started in the late 70s but there are some other sectors in Nigeria that were using it before banks, yet they are still lacking behind in the use of IT. The use of ICT in banking industry is growing fast; there are online banking, Telephone banking, use of ATM, POS etc. Banks in Nigeria now are nearly at the same level in terms of ICT usage with banks in developed countries of the world (Osuji, 1984). In Nigeria, the ATM was introduced in 1989 by the defunct Societe Generale Bank. Since then, ATMs appear to have spread their arms across Nigeria. The banking industry no doubt has witnessed development in technology just like any other sector; the use of the automated teller machine is one of these as it affects banking operations entirely. With the adoption of Self Service technology by the banks, ATMs have continued to service the public; they offer convenience to customers and provide banking services well beyond the traditional service period (Batiz, 2005). It therefore encourages a cashless society. Thus, eliminating the risk of loss of cash through theft or fire as witnessed in the past, creating a win-win scenario for parties concerned. At inception, the few banks that had these machines restricted customers to accessing the machines from their banks alone. This cannot be said today, as technology solutions have been made available to the banks to enable users make withdrawals from ATMs of other banks. However, the usage of ATM in Nigeria is just advancing beyond withdrawals, checking of account balance and purchase of airtime, despite the desire for its multifunctional services (pay bills or make utility/tax payments, calls, stock transaction and purchase of tickets).

Service delivery in banks is personal, customers are either served immediately or join a queue (waiting line) if the system is busy. A queue occurs where facilities are limited and cannot satisfy demand made against them at a particular period. However, most customers are not comfortable with waiting or queuing (Olaniyi, 2004). The danger of keeping customers in a queue is that their waiting time may amount to or could become a cost to them (i.e. bank customers). According to Elegalam (1978), customers are prepared not to spend more cost of waiting / queuing. The time wasted on the queue would

have been judiciously utilized elsewhere (the opportunity cost of time spent in queuing). This researcher has then gone ahead to design a solution which when implemented will minimize the problems of congestion. This work covers the FIFO-Queue method to optimization queues in bank. One week survey conducted by Elegalam (1978) revealed that 59.2% of the 390 persons making withdrawals from their accounts spent between 30 to 60 minutes while 7% spent between 90 and 120 minutes. Baale (1996) while paraphrasing Alamatu and Ariyo (1983) observed that the mean time spent was 53 minutes but customers prefer to spend a maximum of 20 minutes. The study revealed worse service delays in urban centres (average of 64.32 minutes) compared to (average of 22.2 minutes) in rural areas.

To buttress these observations, Juwah (1986) found out that customers spend between 55.27 to 64.56 minutes making withdrawal from their accounts. Efforts in this study are directed towards application of queuing models in capacity planning to reduce customer waiting time and total operating costs. Banks provides financial services to individuals and organizations, Nigeria being an essentially cash based economy, in term of transaction payment system, left the bank with the problem of having to contend with huge volume of transaction which directly translate to long queue for services of banks. It now becomes one of the challenges for banks, to be able to manage the time spent by customers in the banking hall to remain competitive. The foregoing discussion as it relates to customers perception of ATM that facilitates queues is illustrated by the aid of Table 1 below.

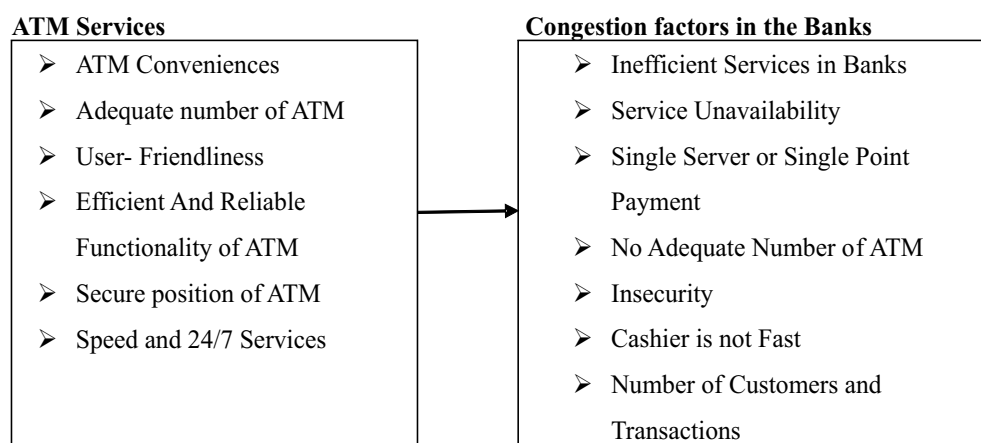
Table 1: Conceptual model of Customers Perception of ATM

<p><u>Problems</u></p> <ul style="list-style-type: none">➤ Waiting time or Long queues➤ Unreliable services➤ Congestion	<ul style="list-style-type: none">➤ Convenience ATM➤ Adequate number of ATM➤ User- friendliness➤ Efficient and reliable functional ATM➤ Secure positions of ATM➤ Speed of ATM	<ul style="list-style-type: none">➤ Reduces waiting time or queues➤ ATM preferable for daily transaction➤ Reliability influences your use of ATM➤ Satisfied with number of ATM➤ ATM influence your visit to banking hall➤ Enjoy the use of ATM service than banking hall
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Source: Developed by the researcher, 2015

Table 1 shows the problem (queues) in the first box, the causes of the queues in the second box and the effects in the third box. For example if the number of ATM are not adequate it can result to unnecessary queues. Similarly, user friendly, functional ATM and speed can also influence customers behaviour either to reduce using ATM and go inside the banking halls for transactions which can result to queues in the banking halls vice versa. The nature of the ATM services also facilitates congestion factors as depicted by Table 2 below.

Table 2: Conceptual model of factors that causes queues in banks and ATM services



Source: Developed by the researcher, 2015

From Table 2 it is clear that the nature of ATM services can facilitates congestion factors. It is therefore very necessary to adequately manage these factors so that it will not influence customers negatively. Olaniyi et al., (2005), further buttress that the new generations banks customers are satisfied with their bank services, it is fast and efficient but not satisfied with their banks number of ATM installed at the bank premises and the number of branches, while customers of old generations banks are satisfied with number of ATM, bank branches, but the services are not fast and efficient as in new banks..

Conclusion

From the foregoing discussions, it is clear that the unnecessary delays and queues in banking halls and ATM points ranges from inadequate number of ATM points, insecurity of e-banking services, low speed of most ATM machines, perception of customers towards the use of ATM, banking

consolidation with inadequate banking architecture in place, breakdown of computers and a host of others.

Recommendations

From the conclusion, the following recommendations are proffered in improving service delivery to avoid unnecessary delays and queues in ATM points and banking halls:

- i. From the paper, customers perspective shows that congestions and the long queues could be reduce if the banks could installed more ATM at their premises and stock with money 24/7 especially during the month-ends or salary payment. Thus, it would be good for the banks to increase their server point of payment when arrival rate exceeds service rate. Improve their services and work on their staff to be fast and efficient.
- ii. The paper shows that insecurity has contributed to long queues and crowd or congestions to the banks; thus, it would be good for the banks to increase the number of their branches and increases the paying point to three servers, especially whenever there are much crowd in the bank waiting for services.
- iii. Moreso, the banks should employed more staff and improve their security where by the customers would patronise the use of mobile banking, internet banking, tele-banking and POS.
- iv. According to Olaniyi et al., (2005) more time is spent in the old generation banks than it is in new generation banks. Based on these, the paper suggest that old banks should improves on time management and services because, quick service delivery could influence choice of banks by customers and new generation banks should sustain their current practice and open more branches across the State.
- v. Furthermore, Banks must continue to provide ATMs at various strategic locations which are safe and convenient to its customers.

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