THE IMPACT OF AUTOMATED TELLER MACHINES ON CUSTOMERS' BUSINESS TRANSACTIONS IN SELECTED BANKS IN MINNA METROPOLIS, NIGER STATE

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Abstract

This study was carried out to determine the emerging impact of Automated Teller Machines an off-shut of ICTs on Customers' Business Transactions in selected banks in Minna metropolis, Niger state. It was a survey research. Four research questions were raised and answered using the results of analysis of the data obtained. The instrument used for data collection for the study was a validated researcher made questionnaire tagged "Emerging Impact of Automated Teller Machines on Customers Transactions Questionnaire (EIATMCTQ)", with a reliability index of 0.68. One hundred and fifty (150) respondents were drawn randomly from the selected banks. Each of the participating banks donated ten (10) staff while twenty (20) customers were also randomly drawn among the investigated banks in the study. The participating banks selected for the study were the First Bank of Nigeria PLC, the Guaranty Trust Bank PLC, the Intercontinental Bank PLC, the Skye Bank PLC and the Unity Bank of Nigeria PLC respectively from the Minna metropolis Based on the observations made, it was concluded that there is significant impact of the automated teller machines (ATM) on customers daily business transactions. The study also revealed that Bank customers now prefer the use of ATM more than the counter –face to face transaction. However, the study also identified certain threats against ATM use in some ways. The study concluded by recommending that the ATM should be fortified with better security arrangements, in future and , that customer should be well acquainted/educated continuously on how best to use the ATM wherever need arises to do so.

Key Words: Automated Teller Machine (ATM), Information Communication Technology (ICT), E-Transaction, E-Banking, Financial Networks.

Introduction and Background of Study

The 21st century has introduced a lot of new inventions, amongst which is Information and Communication Technology (ICT). ICT is an umbrella term that covers all technical means for processing and communicating information, (Guile Bruce R. 1998). While this technically encompasses pre-digital technologies, including paper based writing; it is mostly used to describe digital tech-

nologies including communication protocols, transmission equipment, media, as well as techniques for storing and processing information in all ramifications. As Guile (1998) remarked, the term gained popularity partially due to convergence of information technology.

"ICT allows users to participate in a rapidly changing world in which work and other activities are increasingly transformed by access to varied and developing technologies" (Guile 1998).

One of the sectors immensely affected by ICT is the Nigerian Banking System which has embraced a lot of modern tools in its monetary transaction, amongst which is the Automated Teller Machine (ATM).

The ATM, acronym for Automated Teller Machine is defined by Peterson Kirk (1987) as a computerized telecommunications device that provides clients of a financial institution with access to financial transaction in a public space without need for a cashier, human clerk, or bank teller. On most modern ATM's the customer is identified by inserting a plastic ATM card with a magnetic stripe or plastic smart card with a chip, that contains a unique card number and some security information such as expiration date. Authentication is provided by the customer entering his/her Personal Identification Number (PIN).

Using an ATM card, a customer can access their bank account anywhere at any time convenient to them. In order to make fast withdrawals (credit card cash advances) and check their account balances as well as purchasing mobile cell phone pre-paid credit.

History of the Automated Teller Machine (ATM)

There have been controversies over the invention of the ATM over the years. It has been reported that the first mechanical cash dispensers was developed and built by Luther George Simjian and installed in 1939 in New York City, USA by the city Bank of New York, but removed after 6 months due to the lack of customer acceptance (Schneir Bruce, 2004).

It was another 25years before De la Rue developed the first electronic ATM, which was installed first in Enfield Town in North London, United Kingdom on 27 June 1967 by Barclay's Bank.

According to ATMDepot.com question and answers (www.atmdepot.com), the first ATMs accepted only a single use token or voucher, which was required by the machine. These worked on various principles including radiation and low-coercive magnetism that was wiped by the card reader to make fraud more difficult. The machine dispensed pre-packaged envelope containing ten pounds sterling. The idea of a PIN stored on the card was later developed by the British Engineer James Good Fellow in 1965 and he patented the ATM as we know it around this time.

E-transaction, which is now about five years old in Nigeria, has been leverage from Automated Teller Machines (ATM), electronic money transfer, debit cards, to the newly inaugurated electronic deposit facilities for cash and cheques respectively.

Although most Nigerians have accepted and commended the innovative e-transaction for the elimination of human bureaucracy and management of time, others have continued to distance themselves from the civilization. (allAfrica.com: Nigeria Banks and ATM fraud).

It is noteworthy that based on the huge funds banks are investing in Information and Communication Technology (ICT) core infrastructure for the sector, the nations installed ATM capacity has since grown to over 2,000 machines as at December 2007, even as almost all the 25 recapitalised banks have rolled out ATMs at different times, as add-on of their branches nationwide, in the design to consolidate their positions. (ITREALMS ONLINE: Nigeria Banks push ATM cards on customers).

Literature Review

The review of relevant literature to support this study was organized under the following sub headings:

(i) Concept and Historical evolution of Banking.

(ii) Definition and Functions of Banking.

(iii) Migration from Traditional to Electronic Systems of Banking.

(iv) Emergence of the Automated Teller Machine (ATM) system.

(v) Review of ATM system in Selected Banks.

Financial transactions are very crucial in our everyday life. From our personal lives to business, we often encounter the need for finances, thus the need and reliance on the Banking system.

Concept and Historical Evolution of Banking

The bank can be defined as a financial institution that carries on the safe guarding of money and other valuables. (Zotti, Ed 1999)

According to Hillier, David (2002), the name bank derives from the Italian word banco "desk/bench", used during the Renaissance by Jewish Florentine Bankers, who used to make their transaction above a desk covered with a green table cloth. However, there are traces of banking activity even in ancient times. In fact the word traces it origin back to ancient Roman Empire, where money lenders would set up their stalls in the middle of enclosed courtyards called "macella" on a long bench called a "bancu" from which the words "banco" and "bank" are derived.

The earliest evidence of money changing activity is depicted on a silver drachma coin from ancient Hellenic Colony trapezus on the black sea (Donely, Richard 1995).

In early civilization, a temple was considered the safest refuge for wealth and jewellery. In Egypt, and Mesopotamia gold was deposited in temples for safe keeping, but it lies idle there while others in trading community or government had desperate need of them. This period was followed by Greek and Roman financers in the 4th century BC. They take deposits; make loans, change money from one currency to another, and test commodity for weight and purity. They even engaged in book transactions.

Mcall, Susan (1990) stated that banks started the use of cheques from the 16th century AD, and National Banks came up in the 17th century – 18th century AD. This was followed by the advent of Bank notes in AD 1661, paper currency made its first appearance in Europe in the 17th century. However, Banking Transaction was introduced in Nigeria in the 19th century. The first commercial bank then to operate in Nigeria, was the African Banking Corporation, which opened its first branch office in Lagos in 1892 (Okororie, Uche Henry, 2009). According to findings, all the banks that operated at that time were without formal banking license until the first license was issued in 1952. The first indigenous bank established in Nigeria was in 1929; it however folded up in 1930 due to its undercapitalization, and stiff competition from expatriate banks. (http://www.Ngierianbanks.com).

It has been reported that between 1929 to 1952, there was massive bank failure in Nigeria. This was as a result of lack of banking legislation. Sequel to the first consolidation in the Nigerian banking system by the Central Bank of Nigeria (CBN) the minimum capital base was increased from ₦2 billion to ₦25 billion with effect from 1st January 2006. (CBN Journal 2008).

Statement of the Problem

Banks as financial institutions serve the public for commercial purposes and monetary transactions. It is in this capacity that it has in the recent past introduced the ATM as one of the major systems that enhances services and consequently improved customer relationship generally. With the sudden migration of banks from the

traditional systems of money transactions, which involved bank tellers, cheque books, cashiers and long queries, the ATM has been very useful in the following ways:

(i) **Accessibility:** They run for 24 hours/7 days every week and can be used anytime.

(ii) **Flexibility:** They are user-friendly, allowing for usage even when customers are not from the service bank.

(iii) **Convenience:** Transactions are made at customer convenience as opposed to strict banking hours.

However, the system has some draw backs, one of which is network malfunction of the machine. Also, we have certain errors like, debiting of account without paying cash, dispensing of counterfeit bank notes. Finally, there are reported incidences of fraudulent practices amongst unsuspected customers.

Research Questions

The following research questions were gene-rated to guide the study:

(i) What prompted the need for transition from the traditional method (across the counter transaction) which entailed dealing face to face with the bank desks to the present electronic system(s)?

(ii) How effective is the use of the Automated Teller Machine generally, in the selected banks?

(iii) What observable disparities are there in the selected banks as regards ATM services and use?

(iv) What reaction do the customers have to ATM use and services?

Scope of the Study

This research study was limited to selected banks in Minna metropolis, amongst other banks. The selected banks were as follows:

(i) First Bank Nigeria PLC,
(ii) Guaranty Trust Bank,
(iii) Intercontinental Bank,

(iv) Skye Bank, and
(v) Unity Bank; *respectively*

The study was on the *Emerging Impact of Automated Teller Machines (ATM)* on *Customers Business Transactions.* The limitation of the study ranges from constraints to get the attention of the bank staff and customers due to privacy and restrictions of information.

Objectives of the Study

This research study was on the *Emerging Impacts of ATM on Customer's Business Transaction in Selected Banks in Minna Metropolis.* It was also to identify the level of use and efficiency of the ATM on bank customers in Minna, Niger State. Specifically:

(i) Determine the extent of ATM use in banking and business transactions.

(ii) Examine the effectiveness of ATM in the selected banks.

(iii) Asses the level of reliability of ATM to customer in the selected banks.

(iv) Compare the previous / old forms of monetary transaction with the ATM system, and

(v) Asses the contribution of ATMs to the effective operation of the banks

(vi) in the 21st century.

The Significance of the Study

This research study would be significant in many ways; it will help Nigerian Banks to improve on observable weakness or problems identified in the course of ATM use. The study will also help customers to learn more about the ATM and help the bank to meet certain requirements that would enhance ATM services.

The Role of Commercial Banks according to Wikipedia, the Free Encyclopedia are;

(i) Issue of bank notes (promissory notes issued by a banker and payable to bearer on demand).

(ii) Processing of payments by way of telegraphic transfer, internet banking or other means of transaction.

(iii) Issuing banks drafts and bank cheques.

(iv) Accepting money on term deposit.

(v) Lending money by way of overdraft, instalment loan or otherwise.

(vi) Providing documentary and standby letters of credit (trade finance), guarantees performance bonds, securities underwriting commitments and other forms of off balance sheet exposures.

(vii) Safekeeping of document and other items in safe deposit boxes.

(viii) Currency exchange.

(ix) Acting as "a financial supermarket" for the sale, distribution or brokerage, with or without advice of insurance unit trusts and similar financial products.

In his submission, Goldman Sachs stated that the Economic Functions of Banks include but not limited:

(i) Issue of money, in the form of bank notes and current account subject to cheque

(ii) or payment at the customers order.

(iii) Netting and settlement of payments - banks act as both collection and payment agents for customers, participating in inter bank clearing and settlement systems to collect, present, be presented with, and pay payment instrument.

(iv) Credit intermediation - Banks borrow and lend back on their own account as middle men.

(v) Credit quality improvement [- Banks lend money to ordinary commercial and personal borrowers (ordinary credit quality) but are high quality borrowers. The improvement comes from diversification of banks assets and capital which provides a buffer to absorb issues without defaulting on its obligations.

However, it is pertinent to observe that Hillier, (2002) maintained that "There is no age, gender or racial specification in the use of bank services". This is to say, the bank can be used by people from all walks of life, whether it be children, men, women, business men/women, co-operate bodies, government, unemployed, rich or poor. Banks are open to all.

Migration from the Traditional to Electronic System of Banking

Until about five years ago, bank transaction was carried out in the traditional way of what could be described as predominantly over the counter or face-to-face interaction between a bank's customers and its staff, to either open an account, make withdrawals, cash a cheque, lodge a complaint, pay money into an account, settle bills, etc. This system which was widely known and accepted in Nigeria entailed customers queuing up, in order to carry out their irrespective transactions. The era was at the time quite successful but very rigid, cumbersome, and sometimes Herculean task. This was due to the requirement of frequent bank visits as soon as the need for money arises. (allAfrica.com: Nigeria Banks and ATM fraud)

Zotti, Ed (p65); mentioned the observable delays of customers resulting from unavoidable need to wait. Banking halls were often congested, with various customers needing one service or the other. All these factors combined made bank visits unpleasant, thus the need for a faster more efficient method of banking transaction.

Advent of E-Transaction

The concept of E-transaction was defined, at the second workshop on E-transaction (ETS '09) as systems that involve three (3) or

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more entities in the exchange of information concerning traders, payments, services in which a customer communicate through an architecture to a service provider. It sought to solve the problems inherent from the traditional method with particular focus on the following;

i. Convenience,
ii. Flexibility,
iii. Accessibility,
iv. Saving time.

The Electronic transaction which is now about five (5) years old came in various forms from on line Banking, which allows you make transaction like checking your account balance, transferring money from one account to another, paying certain bills, receiving important alert and messages conveying relevant information about customers account/bank, to E-transfer which deals with funds/money transfer from any location via the internet.

It also enhances the use of credit cards to shop anywhere thereby eliminates the need to carry raw cash.

Finally, the ATM machine (Peterson, 1987) despite that fact that all the above named transactions function as much as possible differently; they have the same objective to make banking easier and friendlier in recent times than what was hitherto.

Overview of the Automated Teller Machine

The Automated Teller Machine (ATM) is defined by Schneier, Bruce (2004) as a device which allows the use of an encrypted data card commonly used by the banking public, giving them immediate access to their funds. Users require personal identification number (PIN) to authenticate access and allow withdrawal of funds from their account.

Since the nations banking industry popularised automation or e-transaction about five (5) years ago, the response of many Nigerians have been brought into the innovation described its emergence as a

mixed grill (allAfrica.com: Nigeria Bank and ATM fraud). It has been reported that there are presently about 28million Nigerians currently using the cards at over 7,000 ATM machines/strategic locations deployed by Banks in the last five (5) years. (Uche H. Okororie, 2009)

Location

The ATMs are located not only near or inside the premises of banks, but also at strategic locations such as shopping centres/malls, airports, grocery stores, petrol/gas stations, restaurants, or any place with large number of people. This procedure is deliberately designed to ease banking transaction as much as possible. There are two types of ATM installations namely: on and off premises. The on premise ATMs are typically more advanced, multi-function machines that complement an actual bank branch's capabilities and thus, more expensive. While the off premise machines are deployed by financial institutions and also the ISOs, that is the (Independent Sales Organisation), where there is just a straight need for cash transaction. They typically are the cheaper mono-function devices. (http://en.wikipedia.org/wiki/Automated_teller_machine)

Many ATMs have a sign above them indicating the name of the bank or organisation owing the ATM, and possibly including the list of ATM network to which that machine is located. This type of sign is called a topper.

Financial Networks

According to literature most ATMs are connected to inter bank networks, thereby enabling people to withdraw easily and deposit money from machines not necessarily belonging to the bank where they have their account or in the country where their accounts are held (Schneier Pg: 127)

1. The unprecedented innovations of the 21st century are a welcome development and in the opinion of the researcher is something beautiful. Some examples of this observation is

that of Inter bank networks which include, PULSE, PLUS, Cirrus, Interact, Inter Switch, STAR, and LINK.

2. It is aiming at reducing/minimising frustration to the barest minimum.

It should be noted that the ATM relies on authorization of a financial transaction by the card issuer or other authorizing institution via the communication network. This is often performed through an ISO 8583 messaging system as reported in (http://mastercard.com/).

Structure of the ATM Hardware

ATM is typically made up of the following devices to ensure its stability and reliability.

1. **CPU:** To control the user interface and transaction device.

2. **Magnetic and or Chip Card Reader:** To identify customers.
3. **Pin Pad:** Similar in layout to a touch tone or calculator keypad.
4. **Secure Crypto Processor:** Generally within a secure enclosure.
5. **Display:** Used by customer for performing transaction.
6. **Function Key Buttons:** Usually close to the display or a touch screen used to select the various aspects of transaction.
7. **Record Printer:** To provide the customer with a record of their transaction.
8. **Vault:** To store the parts of the machinery requiring restricted access.
9. **Housing:** For aesthetics and to attach signage to.
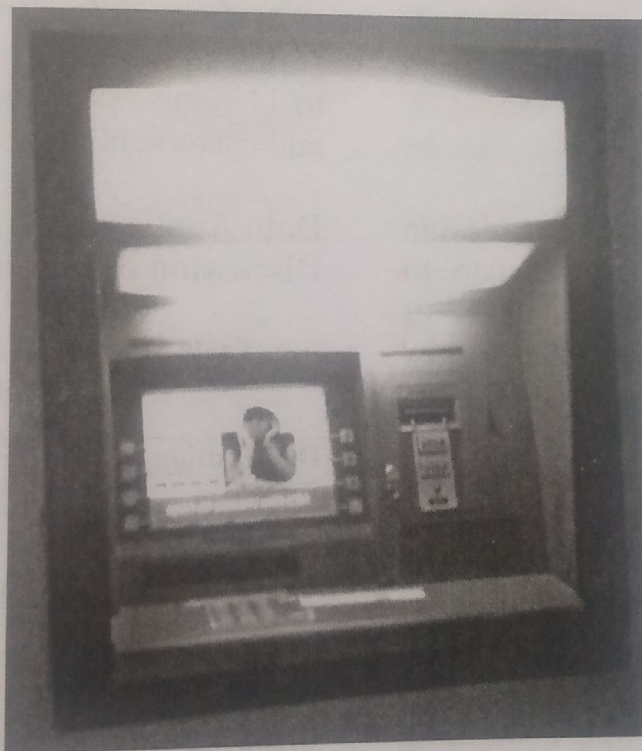
Software

With the migration to commodity PC hardware, standard commercial "of-the-shelf" operating systems and programming environments can be used inside of ATMs. The typical platforms previously used in ATM development include RMS or 05/2. Today the vast majority of ATMs worldwide use a Microsoft OS primarily windows XP professional or windows XP embedded. Primarily widows XP professional or windows XP embedded. (www.technewsworld.com, Jay Iyman 2003)

Security

Brian Marshall (2002) stated that "security as it relates to ATMs has several dimensions". According to this author, the ATM also provide a practical demonstration of a number of security systems and concepts

'operating together and how various security concerns are dealt with. The author further explained that the Early ATM security focused on making the ATMs invulnerable to physical attack; they were effectively safes with dispenser mechanisms. A number of attacks on ATMs resulted with thieves attempting to steal entire ATMs by ram-raiding. (http://www.atmmarketplace.com/article.php ?ld=6736) "An end to ram raids"?

Summary

The aforementioned review and study on the ATM system of Banking has revealed that its development is an intelligent emergence whose advent has opened new frontiers in the banking system in Nigeria in general and in Minna particularly. The review also showed that the participating banks show that Nigeria has fully embraced the ATM, and made it easier, dependable, and useful to customers in the city of Minna.

Research Design

This study adopted a survey research design method. It was considered appropriate to gather relevant data from the subjects of study on the *Emerging Impact of Automated Teller Machine (ATM) on Business Transactions from Selected Customers Banks in Minna Metropolis*. This process emerges in the 21st century and in fact, in the opinion of the researcher fast replacing the over-the counter banking transaction. It is interesting to observe too that the ATM is designed to popularize and make modern banking faster and easier as well as making banking friendly.

Population and Sample Size of Study

The population for this study comprises all bank staff and customers of the selected banks participating in the study namely: the First Bank Nigeria PLC, Guaranty Trust Bank, Intercontinental Bank PLC, Skye Bank, and Unity Bank respectively. A total sample size of one hundred and fifty (150), respondents was randomly selected for the study from the selected banks. Each the

participating Banks donated ten (10) staff, making an overall fifty (50) respondents, while twenty (20) customers each were also randomly chosen from among the participating banks in the study. The selection was carefully done to select literate customers whom, in the opinion of the researcher understood the use of ATM banking to participate in the study.

Instrument and Validation of Instruments

The main instrument for data collection was a researcher-designed questionnaire tagged: *Emerging Impact of Automated Teller Machines on Customers Transaction Questionnaire (EIATMCTQ) with a reliability index of 0.68.* It was originally a 35 items questionnaire screened by experts from the banks to authenticate their validity. Their comments and suggestions were embodied into the questionnaire. The reviewed questionnaire items finally reduced to 11 items before administered to both staff and customers of the participating banks.

Data Analysis, Interpretation, and Discussion of Findings

Table 1: Questionnaire Administration to Respondents

Distribution	Frequency	Percentage
STAFF	50	33.4%
CUSTOMERS	100	66.7%
TOTAL	150	100%

Table 1.1 above shows the number of respondents who participated in the study, these where both staffs and customers, which represented a total of 50 staff or 33.4% while 100 customers or 66.7% reflected the number of respondents who participated in the study, respectively.

Table 2: Distribution and Return Rate of Bank Staff Respondents.

Selected Banks	No. of Questionnaire Administered	No. of Questionnaire Returned	Percentage
First Bank Plc	10	7	70%
Guaranty Trust Bank Plc	10	5	50%
Intercontinental Bank Plc	10	10	100%
Skye Bank Plc	10	8	80%
Unity Bank Plc	10	5	50%
Total (B&C)	50	35	70%

Table 2 above shows that fifty (50) questionnaire were administered to the staff of the selected Banks, out of which 35 (70%) were retrieved for the study with valid data.

Table 3 Distribution and Return Rate of Bank Customers

Selected Banks	No of Questionnaire Distributed	No of Questionnaire Returned	Percentage
First Bank Plc	20	8	40%
Guaranty Trust Bank Plc	20	10	50%
Intercontinental Bank Plc	20	18	90%
Skye Bank Plc	20	16	80%
Unity Bank Plc	20	6	30%
Total (B&C)	100	58	58%

Table 3 shows also that, one hundred (100) questionnaires were administered to respondents out of which fifty eight percent (58%) were returned with valid data from the respondents.

Staff Questionnaire for Data Collection
The Staff Questionnaire titled *Emerging Impact of Automated Teller Machine on Customers Questionnaire (EIATMCO 2009) for Staff* for data collection had eleven (11) items. This was subdivided into two (2)

sections namely: Section A: Demographic Data of Staff, Section B: a) Need for Electronic Transactions in Banks, b) ATM Use, (c) Efficiency/Reliability of ATM respectively. Almost without exception all the respondents showed keen consciousness of the need for the electronic transaction under which there is the Automated Teller Machine (ATM).

From another response, the bank staff admitted to complaints from customers, as regards the use of the Automated Teller Machine (ATM), stating network problems and fraud as the biggest problems facing ATM.

ATM users themselves have suggested that the software of the system should be improved upon such that there are no technical errors and fraud through card duplication become almost impossible. Also, the use of security cameras is adopted, in cases of card theft, so that the offender can be traced and identified. Below are the table of analysis of staff response.

Table 4 Need for Electronic Transaction in Banks.

Responses	No of Respondents	Percentage
YES	35	100%
NO	0	0%
Total	35	100%

All the staff expressed their opinions that the existing electronic transaction under which the ATM falls is a very welcome improvement on the banking hall, face-to-face, over the counter transaction. The ATM they said have made their jobs easier in the sense that not every customer comes to make monetary transactions in the banking hall. Also, the banking halls have been decongested, making it more conducive for long working hours.

Table 5 Automated Teller Machine Use

Responses	No of Respondents	Percentage
High	28	80%
Low	7	20%
Total	35	100%

Most of the respondents agree that the extent of use of the Automated Teller Machine is high, 80% of the subjects share this opinion while 30% believe that not a lot of people have adopted the use of ATM.

Table 6 Efficiency and Reliability

Responses	No of Respondents	Percentage
High	20	57.1%
Low	15	42.9%
Total	35	100%

Here, 57.1% of the respondents agree that the ATM performance is efficient and reliable, while 42.9% think that the system could be improved upon.

Bank Customers Questionnaire for Data Collection

The Bank Customers' Questionnaire was an 11 item questionnaire which was subdivided into sections A and B respectively. Section A sort for demographic data of customers, section B dealt with a) Quality of Service, b) ATM complaint(s), c) Security, respectively.

The study revealed that most of the Bank Customers in this category have been customers with the bank for more than 8 years. Having been customers for that length of time they observe the change from the traditional, over the counter, face-to-face system to the electronic system and its effects, whether positive or negative.

Their general opinion is that ATM services, however not satisfactory especially regarding security, compared to some 6 – 7years before the advent of electronic transactions has been a welcome improvement on the banking system.

Below are the tables of analysis of customers' response to the interviewed questions.

Table 7 Quality of Service

Responses	No of Respondents	Percentage
Efficient	30	51.7%
In-efficient	15	25.9%
Satisfactory	13	22.4%
Total	58	100%

Table 4.7 above showed that the Majority of the respondents 30 (51.7%) opinion indicated that they find the quality of the use of the ATM service at present to be efficient. While 13 (22.4%) said the service is satisfactory and another 15 (25.9%) maintained that the system is in-efficient.

Table 1.8 Automated Teller Machine Complaint(s)

Responses	No of Respondents	Percentage
ATM Fraud/Theft	20	34.5%
Network Error	30	51.7%
Others	8	13.8%
Total	58	100%

The Table 4.8 above shows that about 30 (51.7%) of respondents experienced network error/faults resulting in debiting of their account without dispensing cash, or wrong information from the system, stating insufficient funds or expiry of maximum withdrawals as a reason to decline request for withdrawal. Another 30 (34.5%) of respondents have at one time or the time experienced ATM fraud where certain amounts were deducted from their account without their knowledge, or ATM card. In some cases theft of their ATM card or ambushed by criminals at ATM stand. The others which comprises of 8 (13.8%) of the respondents, have not actually witnessed any difficulty or misfortune using the ATM system, but continue to state the experience of friends and family as examples of loop-holes of the system.

Data Interpretation

The analysis of data obtained from the study revealed that the ATM system is an improvement on the traditional over the counter face-to-face system of banking. The majority of banks have been able to provide an alternative that is faster, more convenient, timely and efficient, bringing ease to both the bank and customers.

The customers on their own part, see the ATM as a good improvement on the traditional banking system, with its flexibility and convenience which allows them

make transactions at their own time. Customers however expressed dissatisfaction with security and reliability of the system.

Summary of Findings

This research study was on: *The Emerging Impact of Automated Teller Machine (ATM) on customers of selected banks in Minna Metropolis, Niger State*. The subjects of the study were the members of staff and customers randomly selected from all the participating banks in Minna Metropolis, from which relevant data were obtained. The researcher used two sets of questionnaire to generate data for the study. Through the opinion poll of the respondents it's been revealed that the ATM system has relieved bank staff of a lot of work load and makes for conducive banking system. Customers similarly expressed their opinion in favour of the ATM, which has made transaction easier and faster.

The study further shows that the Automated Teller Machine (ATM) has solved many problems inherent from the previous traditional, (over the counter, face-to-face) system and meets the objectives of the electronic transaction. Much to the relief of many, banking/monetary transactions can now be carried out with such ease and in a timely fashion too. Most of all it has made cash availability a question of location and choice of the customers, as opposed to over dependence on banking hours which is subject to closing hours and/or public holidays.

The ATM system has however, brought some disadvantages for example; the system requires constant power (electricity) to function effectively. Other problems faced by the systems include; incidence of fraudulent activities perpetuated by unsuspected criminals of the public, network errors which adversely affect cash dispensing, e. t. c.

Recommendation

In view of the above, this study recommends;

1. Following the increasing importance of the Automated Teller Machines (ATM) on business and even day-to-day customers transactions in various banks, that all hands should be on deck to correct any noticeable setbacks in the system. The ATM system's Software should be upgraded to avert network problems and that the use of ATM receipt should be strictly adhered to, in order to make proper lodge of complaint officially.

2. Customers should always exercise little patience in their use of ATM system, as some little errors can be reversed automatically within minutes.

3. The study further recommends that all Bank customers should readily learn the "ABCs" of ATM banking operation.

4. That matters pertaining to fraudulent activities should be properly investigated and offenders brought to book.

5. That the security system should be improved upon by employing the services of efficient security men and guards. In addition, security cameras should be used to monitor activities at the ATM stand.

6. The bank should enlighten customers on the ATM use and likely problems to be encountered through pamphlets and bulletins or wall post. Also, security guards at ATM stands should not only guard but assist customers who may have difficulty of ATM operation/use.

7. Lastly, customers should lodge complaints about inconsistency with the system on time; this is to allow for frequent monitoring of the system and consequent rectifying of whatever problems.

Conclusion

The study therefore concluded that the Automated Teller Machine is an indispen-

sable part of today's banking. However, just like any system it has its own unavoidable weakness and drawbacks which calls for continuous review in order to gain sustaining momentum in the future. Be that as it may, its relevance and popularity is fast penetrating today's banking practice which has overshadowed the fears of people as they continue to make constant use of ATMs even after certain unpleasant experiences in some cases.

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