

IMPACT OF AUTOMATED TELLER MACHINES (ATM) FRAUDS ON BANKS' CUSTOMERS IN NIGERIA.

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ABSTRACT

Although the use of Automated Teller Machines (ATM) is not only safe but also convenient, the increasing prevalence of ATM fraudsters in the banking sectors call for tight security measures in Nigeria. The impact of ATM frauds in the country is so great that many had lost substantial amount of money, suffered injuries, depression, and even death. This study was therefore carried out to assess the impact of ATM frauds on the Banks' customers in Nigeria. The study used both cross-sectional and descriptive survey designs. Snowball and purposive sampling method was used in the selection of respondents; and data were generated through in-depth and key informant interview (KII) methods. The rational choice theory provided the theoretical framework. The findings of the study revealed that victims of ATM fraud suffered shock, depression, anger, and emotional trauma. On many instances, victims have been injured, and even killed. The study therefore recommended, among others that banks should make additional efforts to raise awareness on best use of ATM services, and that appropriate protection and control measures against ATM frauds should be installed in the Automated Teller Machines.

Keywords: Abuja, Automated Teller Machines, Bank customers, Fraud, Nigeria.

ABSTRAIT

Bien que l'utilisation des guichets automatiques bancaires (GAB) soit non seulement sûre mais aussi pratique, la prévalence croissante des fraudeurs ATM dans les secteurs bancaires appelle à des mesures de sécurité strictes au Nigeria. L'impact des fraudes aux distributeurs automatiques de billets dans le pays est si grand que beaucoup ont perdu des sommes substantielles, souffert de blessures, de dépression et même de mort. Cette étude a donc été réalisée pour évaluer l'impact des fraudes aux distributeurs automatiques de billets sur les clients des banques au Nigeria. L'étude a utilisé des plans d'enquête à la fois transversaux et descriptifs. Boule de neige et method

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d'échantillonnage raisonné ont été utilisées dans la sélection des répondants; et les données ont été générées par des méthodes approfondies et des entretiens avec des informateurs clés (KII). La théorie du choix rationnel a fourni le cadre théorique. Les résultats de l'étude ont révélé que les victimes de fraude aux DAB ont subi un choc, une dépression, du malheur et un traumatisme émotionnel. Cela a également entraîné des blessures et la mort, dans de nombreux cas. L'étude a donc recommandé, entre autres, que les banques fassent des efforts supplémentaires pour sensibiliser à la meilleure utilisation des services ATM, et que des mesures de protection et de contrôle appropriées contre les fraudes ATM soient installées dans les guichets automatiques.

Mots-clés: Abuja, guichets automatiques bancaires,, clients de la banque, fraude, Nigeria.

INTRODUCTION

The advent of electronic payment systems in Nigeria brought a significant positive impact to the banking industry. The impact reduction in the size of long queues at banks, reduction in the time that customers either individual or corporate, take to either make or receive payment as well as other transactions in the banks. However, despite this development, electronic banking transaction has been compromised by fraudsters.

The development of electronic transaction in the banks heralded in the e-banking revolution. It makes bank business simpler, easier and safer for many people. In Nigeria, the Central bank had earlier popularized the idea of Cashless Policy; the advent of e-banking was therefore a welcome development, which encourages the use of electronic in the banking services (Tade, 2018). The technology has reduced unnecessary queues in banks, especially among customers collecting less than a specified amount, thereby reducing time and costs of transaction and also the provision of reliable audit trails when necessary.

In order to fast track the operation of e-banking, Automated Teller Machines (ATMs) were introduced to enable banks to provide services efficiently to the general public. The ATMs are basically self-service banking terminals (Rasiah (2010), which enables the customers to withdraw cash, to check balance enquiry, to order a bank statement, to make money transfer and/or to deposit cash. In this context, Adepoju (2010) posited that the ease of settlement of bills such as electricity, school fees, phone bills, insurance premium, traveling bills and even petrol bills has made the use of ATMs very important in the Nigerian Banking system.

The use of ATM is not only safe but also convenient. It has considerably led to expansion of banking network in Nigeria. However, the advantage of safety and convenience has unfortunately been compromised by fraudsters in several ways (Adeoti, 2011).

In 2013, the Nigerian Deposit Insurance Corporation (NDIC, 2013) reported that ATM accounted for about 10% of the total value of funds lost to e-fraud and 46.3% of the reported number of cases. The report in 2015 revealed increase incidence of bank fraud through ATMs (NDIC, 2015).

The problem of ATM frauds is global in nature and its consequences on bank patronage should be of concern to the stakeholders in banks. According to Brunner et al (2004), the ATM fraud is not the sole problem of banks alone, it is a big threat and requires a coordinated and cooperative action by the banks as corporate entities, the customers and the law enforcement agencies.

The ATM is only one of the many Electronic Funds Transfer (EFT) devices that are vulnerable to fraud attacks. It is actually referred to as the Debit card fraud - having much more to do with the compromise of Personal Identification Numbers (PINS) and fraudulent debit card use than with the integrity of ATM hardware systems.

Statement of the Problem

The ATM fraud is becoming more organized and the fraudsters are using increasingly sophisticated methods to obtain and misuse customers' personal and financial information (Sakharova& Khan, 2011). Overtime, consumers have come to depend on and trust the Automatic Teller Machine (ATM) to conveniently meet their banking needs (Adepoju& Alhassan, 2019). Such dependency has become a point of interest to fraudsters; and there are indeed proliferations of them, not only in Nigeria but also across the world. But in recent time there have been a proliferation of ATM frauds in the country and across the globe. Managing the risk associated with ATM fraud as well as diminishing its impact is an important issue that faces financial institutions today.

The effects of the ATM fraud on the banks and the customers are enormous. It has not only caused financial loss to the banks but also undermine customers' confidence in the use of ATMs (Adepoju, 2010). It is not likely to end easily because it is a profitable venture. This study examines the impact of automated teller machines (ATM) frauds on Banks' customers in Nigeria. Three related research questions guided the study:

- a) What are the methods used by ATM fraudster on their victims?
- b) What are the consequences of ATM fraud on the Bank customers?
- c) How can ATM Fraud be curbed?

Conceptual Clarification

Automated Teller Machine (ATM) is defined as computerized machine that permits bank customers to gain access to their accounts with a magnetically encoded plastic card and a code number. Sujith (2014) also define ATM as a computerized telecomm financial institution uncertain devise that provides the customers of a financial institution with access to financial transactions in a public space. It enables the customers to perform several banking operations without the help of a teller, such as to withdraw cash, make deposits, pay bills, obtain bank statements, and affect cash transfers. The ATM is also called Automated Banking machine, automatic till machine, or remote service unit (Business Dictionary, 2019). It is operated by customer inserting a plastic ATM card with magnetic stripe or a 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 by entering a personal identification number (PIN).

An (ATM) is an electronic banking outlet that allows customers to complete basic transactions without the aid of a branch representative or teller. Anyone with a credit card or debit card can access most ATMs. It is also known as cash machine, a computerized telecommunications device that provides the clients of financial institutions with access to financial transactions in a public space without the help/presence of a cashier.

Fraud

Fraud encompasses a wide range of illicit practices and illegal acts involving intentional deception or misrepresentation. It is defined as an intentional perversion of the truth for the purpose of inducing another relying upon it to part with some valuable things belonging to him or to surrender a legal right (Garner, 2006). It occurs when a person through deceit, trickery or highly intelligent, cunning ways, gains an advantage he could not otherwise have gained through lawful, just or normal processes.

Bank

A bank is a financial institution that accepts deposits from the public and creates credit. The Oxford Dictionary (2018) defines a bank as "an establishment for custody of money, which it pays out on customer's order." A bank is a financial institution which deals with deposits and advances and other related services. It receives money from those who want to save in the form of deposits and it lends money to those who need it.

THEORETICAL FRAMEWORK

The Rational Choice Theory has its roots in the classical school of Criminology, which was developed by the Italian social thinker, Cesare Beccaria. As implied by its title, rational choice theory presumes that criminal takes into consideration cost-benefit analysis before embarking on crime. If the benefit they stand to gain is higher than the pains or punishment if they are caught, then crime is likely to be an option. In this way, it is believed offenders can be persuaded to desist from offending by intensifying their fear of punishment. In terms of setting the quantum of punishment, according to this theory, sanctions should be limited to what is necessary to deter people from choosing crime (Siegel & McCormick, 2006). Rational choice theory focuses on the opportunity to commit crime and on how criminal choices are structured by the social environment and situational variables (Nagin, 2007).

The theory is suitable for the explanation of criminality being perpetuated by ATM fraudsters. According to the rational choice theory, human beings are rational actors who perpetuate fraud as a result of cost benefit analysis that is the gain derived from the act. In Nigeria, where the criminals often go scot free without being caught or persecuted for the act due to ineffectiveness of the criminal justice agencies, most especially the Police and the Court, crime remains very attractive. The fraudsters are always calculative, taking into consideration situational factors such as target/victim vulnerability and the security provided by the bank or government. These factors tends to make them calculate their involvement in the cost benefit analysis in which they will measure the pleasure/gain against the pain they will suffer as a form of punishment if they are eventually caught. When the possibility of not being caught is greater than that of being caught, ATM fraud becomes attractive. Similarly, lack of detective mechanism to investigate crime, as well as poor justice system in the country, make ATM fraud attractive. It has brought about increased in ATM fraud in Nigeria.

METHODOLOGY

Research Design

The survey design method was adopted as the research design. Research design according to Adegoke (2012) is the plan, structure and strategy of investigation conceived so as to obtain

answers to research questions and to control variance. Survey research is a social science research method of collecting original data for describing a population too large to observe directly. Hence this method was adopted in this study.

Population of the study

The study was carried out in Abuja, the Federal capital Territory. The population considered in this study comprise of victims of ATM fraud from UBA, First bank and Wema bank. They were identified from complaints received by the Customer Care Units of the banks.

Sampling Technique and Sample Size

The multi-stage sampling technique was applied, and snowball sampling method was used in the selection of respondents. Snowball is useful when it is hard to locate participants. It involves research respondents giving information about other potential respondents. The identified respondents are then used to identify other people who qualify for inclusion in the sample (Adegoke, 2012). Based on the subject matter of the study, purposive sampling technique was adopted for the selection of respondents, since the commercial banks have data about customers who complained of being defrauded through ATM. The Police stations were visited to assess data on complaints of ATM frauds. The sample size consisted of 20 respondents, who were interviewed.

Instrument of Data collection

Data were generated through the use of the in-depth and key informant interview methods. The use of in-depth interview technique was relied upon to gather data for this study because it helps in the interpretative understanding of the subject under study. Comments from the respondents were recorded in a tape recorder. Themes were arranged based on the objectives of the study and manual content analysis was used for data analysis. The key informant interviews with the police and bank officials in charge of ATM were also conducted

ANALYSIS OF FINDINGS

Impact of ATM Frauds on Customers

ATM fraud has discouraged the use of ATM by many customers. The fraudulent activities by ATM fraudsters have great impact on bank customers using ATM cards for both private and commercial purposes. In the long run, many of them have been discouraged from the usage of the facilities.

A respondent captured the situation this way:

After I was defrauded I abandoned my ATM card and decided to be going to the bank to withdraw and make transactions. Though it was stressful, I preferred it because I am sure that my money is safe in the bank (female respondent/IDI/Abuja).

Velan and Balachandran (2011), observed that ATM frauds not only cause financial loss to the banks but also undermine customers' confidence in the use of ATMs. This would deter a greater number of Banks customers from using ATM for monetary transactions.

Unhappiness, Emotional Trauma, and Depression

It is natural when people suffer misfortunes they are bound to be depressed, unhappy and emotional traumatized. One of the respondents has this to say:

The day I got the fraudulent debit alerts, I almost collapsed. My blood pressure increased such that I lost control of myself. (Male respondent/IDI/ Abuja).

Another respondent said,

Immediately I got the fraudulent debit alert, I felt very sad and helpless that I started crying profusely (female respondent/IDI/ Abuja).

It can also be deduced from the above that ATM users also suffered from negative impacts of ATM frauds. According to Yona (2015), the frauds can affect clients' social relationship, cause financial loss and sometimes occasional waste of time (client spending much time dealing with fraud cases), decrease clients' productivity once the clients' financial capital is stolen.

Family Problems

It has been found out that most fraudsters are people who are close to the victims either by blood or association. In many instances, the whole money meant for the maintenance of the family is casted away within a twinkle of an eye. This creates problem such as inability to pay school fees, and feeding. One respondent said:

When I received the debit alert, it deprived me of paying my children's school fees. It also affected feeding in the family (Male respondent/IDI/ Abuja).

Another respondent said:

The theft of ATM card and subsequent cash withdrawal caused serious crisis in the family because of series of allegation on who took the card (female respondent/IDI/ Abuja).

It Can Lead to Injuries of the Customers

Sometimes ATM fraudsters combine armed robbery in order to defraud the ATM card owners of the money. Armed robbery goes with violence; hence in the course of disposing the ATM card owners of their cards, many of them sustain injuries. According to a victim:

I was stupid to have struggled with my purse which contained my ATM card and my phone. As a result, I was stabbed on the left hand and the chest near my breast. It took a while before the injury was healed (female respondent/IDI/ Abuja).

Another respondent stated:

When my ATM was collected, my Pin number was disclosed. I was thrown out of the moving bus and I sustained serious bruises all over my body.(female respondent/IDI/ Abuja).

It Can Lead to Death of the Customers

Many ATM card owners have died from the attack of the ATM fraudsters especially when the victims refused to voluntarily surrender or cooperate with these criminals. According to a respondent who volunteered during KII:

Many people have lost their lives in the course of struggling with ATM fraudsters who dispossessed them of their cards (male respondent/IDI/ Abuja).

METHODS OF ATM FRAUDS

Payment on Spot (POS) owners' fraud: The banks have authorized many customers to use POS to facilitate their commercial transactions. Many are now using POS to pay the ATM card owners by charging certain amount of money as interest for rendering the services. In the course of carrying out these activities, many ATM card owners have become victims of this fraud. A respondent has to say:

There was a day I went to collect money from POS shop, the person tricked me and I became a victim by unintentionally disclosing my PIN number. That was how I was defrauded of N100, 000 before I changed my pin number.”(Respondent/IDI/ Abuja).

From the data gather above, it was revealed that some of the POS owners perpetrated ATM fraud by tricking the holder to disclose their ATM PIN.

ATM machine point fraud: Many ATM card holders because of ignorance and lack of knowledge of the usage of the ATM became victim of fraud. This always happen when the card holder invites another person to assist him or her in the course of the operation of the machine. After the assistance, the fraudster then makes use of the pin number to defraud the victim. One of the respondents stated thus:

My first day at the ATM machine, I didn't understand the machine usage so I asked the young man behind me to assist me. After I have withdrawn and left the machine, getting home, I received three more alerts different from the one i did (Female respondent/IDI/ Abuja).

It was revealed from the interview conducted that it is easier for the ATM card holder to be defrauded at ATM machine point if the holder exposed his card or the method of card skimming, card trapping and card sniffing.

Armed Robbery attacks: In most of the urban cities in Nigeria, where people go to work early in the morning or come back from work late at night, some of cardholders fall victim. In one of the interviews, a respondents said a commercial drivers had pretended as if he was going to nearby places, all passengers that entered the vehicle were robbed at gunpoint and ordered to disclose their cards' pin. One person in the vehicle was sent to collect all the money at the ATM point. The respondent testified further by narrating his experience:

I was a victim of armed robbery attack early in the morning on my way to work. I took a one chance bus, in which my ATM cards were collected and I was forced to disclose my pin number. One of the gangs went to collect the money using my pin number (Respondent/IDI/ Abuja).

Bank Conniver: Many cases of conniver between the bank officials and perpetrators of ATM fraud have been documented by the Police in Nigeria. Some bank officials are involved in ATM fraud by disclosing customers' vital information to the fraudsters. This information assists them to dupe the ATM card owners. Here a respondent has this to say:

I have heard about the cases of First bank and Access bank officials conniving with ATM criminals to defraud account owners(Respondent/IDI/ Abuja).

Bank conniving with customers can take any of the following patterns: dispenser manipulation, fraudulent issuance and fraudulent placements (Okiring, 2018).

Hold ups: The card owners are held up at gunpoint or with knives by criminals after withdrawing from the ATM. In this situation money withdrawn are taken away from them. This can happen at any time of the day. A respondent said:

The money I withdrew from ATM point was collected from me by a group of armed criminals. For safety I quickly gave everything to them (Female respondent/IDI/ Abuja).

Attack of ATM: Apart from the attack of the target customers. The ATM fraudsters often attack ATMs machine, using torches, forklifts, and even-moving vehicles. This kind of attack is referred to as sham-raids or smashes and grabs burglary. Mostly, the ATM is physically attacked with intention to break into the safe or vault inside the ATM machine. This is not very common in Nigeria but there have been instances where it happened. A respondent testified that:

I have heard that ATM machines have been destroyed to collect the money inside in some places in Lagos.(female respondent/IDI/ Abuja).

The NCR (2019) reported that each day there are news reports of attacks on ATMs around the world and criminals continue to vary and modify their attacks and attempt to bypass the protections in place. Okiring (2018) posited that ATM physical attacks aim at the safe inside the ATM, through mechanical or thermal means with the intention of breaking the safe to collect the cash inside. Some of the most common methods include: ram raids, explosive attacks and cutting and robbery when ATMs are being replenished or serviced.

Disclose of information: Most of the ATM card holders were victim of fraud due to revelation of information concerning the operation of ATM. The banks always inform the customers not to disclose their personal information to anyone but sometimes customers are tricked to reveal this vital information especially their pin numbers. Sometimes due to illiteracy and health, defrauder exploits trust imposed on them by close associate to defraud them. One of the respondents also testified to this:

My wife was a victim of this method of fraud. She received a telephone call indicating that it is from her bank and that if she did not disclose some personal information, her account will be closed. Ignorantly, she disclosed her personal information and after some few minutes she received Debit alert.(Male respondent/IDI/ Abuja).

Obiano (2009) blamed the menace of ATM frauds on indiscriminate issue of ATM card without regard to the customer's literacy level. According to him, one of the frequent causes of fraud is when customers are careless with their cards and PIN numbers as well as their response to unsolicited e-mail and text messages to provide their card details

Banks Stealing of Cash from ATMs: Banks in Nigeria are increasingly required to deal with a new form of theft by bank employees from ATMs. This act is often perpetrated by persons in charge of the ATM. The ATM custodian verifies cash in the ATM by checking the available cash balance against ATM Electronic Journal records. The money left in ATM cassette which were

unable to dispense due to mechanical failure are stolen by dishonest bank employee. A respondent reported this:

I made a withdrawal, but the ATM did not dispense but it debited me without reversal. After waiting for 24 hours, I wrote a letter of complaint after several visitations to the bank. All the efforts to get the money reverse proved unsuccessful (Male respondent/IDI/ Abuja).

CURBING ATM FRAUD

ATM Hacking Prevention

It has been suggested that the best way to prevent ATM skimming is for the users to cover the key as they enter their PIN. Banks can install tamper and fraud detectors especially radio-frequency jamming when foreign objects are added to ATMs with an electromagnetic field. This is because ATM fraudsters are rational and would want to device any means that would make it easy for them to defraud/ A respondent captured the situation this way:

I want to suggest that card holders should be very careful when using ATM. They should use their hands to cover their pin numbers when operating the machine as criminals often device dubious means to outsmart them, including hanging around them to copy their pins.(female respondent/IDI/ Abuja).

Steve (2002) asserted that consumers should only use an ATM where and when they feel completely comfortable. They should pay attention to the machine before using it. If something appears unusual or unfamiliar they should use another machine.

Non-disclosure of information by Customers

Customers must ensure that they are not careless about their personal identification number (PIN) and must not release their cards or delegate anyone to ATM machine. This respondent has this to say:

Those who are using ATM for the first time should ask the security men for assistance instead of total strangers. They should not disclose their PIN numbers to anybody(female respondent/IDI/ Abuja).

Steve (2002) also suggested that they should never accept help from strangers at ATMs. They should never disclose their PIN to anyone. They should check that no one is trying to look over their shoulder to observe them entering their PIN.

Improvement on Security System

Many of the commercial banks with ATM have been advised by Central Bank to improve their security system to meet the current global trend. One respondent said:

Though our banks are trying their best in providing security personnel, and security camera, yet the security has to be improved in order to forestall the constant criminal activities around the ATM machine (female respondent/IDI/ Abuja).

Despite all the efforts in providing adequate security measure to forestall ATM frauds in Nigeria. There is still increase in the prevalent of the crime. This is because the

benefits of involvement of the criminals in ATM frauds seem to outweigh the punishment. This is as a result of ineffective law and policing of the criminals to deter them. So fraudulent practices involving ATM pays handsomely in Nigeria.

Installation of Camera and Other Monitoring Devices

Banks can monitor the ATM continuously by installing closed circuit camera and other devices around the ATM machines. They should make sure that ATM locations are well illuminated and the security cameras are positioned in and around the ATM to clearly capture any fraudster attempting to skim the ATM (Adeoti, 2011). Bradbury (2010) also suggested installation of fraud detection and prevention software that analysis pattern of normal and unusual behavior as well as individual transactions in order to flag likely fraud. Jain (2017) posited that foreign object detection technology can also play a role in identifying fake equipment. Hidden from view, this type of technology actively monitors the ATM's fascia.

Police Surveillance at ATM Points

Police is a partner in the security of the ATM facility in any country of the world. The police can perform this primary function of protecting individual and properties by mounting surveillance and station the vehicle around the facility. This was corroborated by one respondent:

Nowadays especially in Lagos and Abuja, police vehicles are stationed around ATM to forestall any criminal activity that may happen around the ATM point (Male respondent/IDI/ Abuja).

Use of ATM in Safe Places

One of the ways to secure the ATM facilities and protect the ATM card owners is to install the ATM in the open and safe environment. The place should be illuminated with an uninterrupted power supply every time. Another respondent supported this by saying that:

For my safety I always prefer to withdraw money in any ATM that is located in an open space that is safe (Female respondent/IDI/ Abuja).

Also Brunner et al (2004) in their study concluded that the location of ATM is a high determinant to fraud or crime carried out at ATM point. ATM within the banking premises is more secure than ATMs outside the bank premises.

Educational Campaigns

Both the government and Bankers can organize anti-fraud education campaign to demonstrate how the customers can make use of their cards and how to get help when in trouble especially in indigenous languages for the customers that cannot read. Here also a respondent said:

Many banks are educating their customers about bank frauds. They use slogans such as 'Do not disclose your pin and personal information to anybody'. The bank will never call you and ask for your account details (Female respondent/IDI/ Abuja).

Customers should be educated that details like your internet banking username, password, debit card or credit card number, ATM PIN or BVN (Bank Verification Number) should not be disclosed and these details will not be asked by any bank.

CONCLUSION

The introduction of ATM in the banking system has assisted both banking industries and the bank customers and in fact the economic development of the country. ATM has made banking business to ease service delivery. It also makes transactions simpler for some customers. The ease of payment of bills such as school fees, debt, phone bills, and eatery bills has made the use of plastic money more important in the Banking world today. ATM enables convenient access round the clock financial service for persons who wish to check their account balance, withdraw and deposit money into and from their accounts and bill payments.

The increasing usage of ATM has brought about profound security threat in the banking system. As the ATM technology is advancing, fraudsters are on drawing board to see how they come up with different fraud skills to beat the security. The methods adopted by the ATM fraudsters include, ATM card theft, skimming, PIN theft, Card reader technique, PIN pad techniques. The impacts of these thefts include emotional trauma as well as depression, among others.

RECOMMENDATIONS

The following recommendations are suggested:

1. The banks should make sure that the ATM security is enhanced through adoption of sophisticated technological means for fraud detection and make huge investment in deploying competent IT(Information Technology) specialists.
2. Banks should make additional efforts to raise awareness on best use of ATM services and appropriate protection and control measures against ATM.
3. The customers should be vigilant in order to reduce ATM fraud.
4. Banks should monitor ATMs continuously by installing closed circuit camera and other devices.
5. Banks should encourage customers to report any suspicious activity on ATMs.
6. Customers should keep changing their ATM card PIN code and internet banking password on regular basis.
7. If the ATM card of a customer is stolen or lost, the customer should alert the bank immediately.
8. Customer should not disclose their sensitive bank information to fraudsters claiming to be bank officials.

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