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Adeyemi S. Ogundipe
Department of Finance,
Faculty of Management
Science, Babcock University,
Ilishan-Remo, Nigeria.

Kayode I. Fasola
Department of Business
Administration, Faculty of
Management Sciences,
Babcock University, Ilishan-
Remo, Nigeria

Oluwatoyin T. Akintunde
Vine Treasure Development
Initiative, 7, Sagemit Building,
Rinsayo Oil, Ring Road,
Osogbo, Nigeria.

Ranti B. Falana
Chrisland University,
Abeokuta, Nigeria.

Correspondence:
Adeyemi S. Ogundipe
Department of Finance,
Faculty of Management
Science, Babcock University,
Ilishan-Remo, Nigeria.

Automatic Teller Machine and Bank Customer Satisfaction. Study of Selected Deposit Money Banks in Nigeria.

Adeyemi S. Ogundipe, PhD; Kayode I. Fasola, PhD; Oluwatoyin T. Akintunde, M.Sc; Ranti B. Falana, PhD.

Abstract

The emergence of Internet-Based Technology (I-BT) into the Nigerian banking industry over the past decade has diversified and revolutionized the sector by offering consumers various choices of accessing banking services. However, in spite of Nigerian banks huge investment in the development of ICT and E-banking system especially in the deployment of ATM and issuance of ATM debit cards in order to meet up with the global baseline standards yet, these developments seem not to have achieved desired objectives. Thus, primary data for the study was collected and analyzed using descriptive and inferential statistics. The demographic variables adopted, frequency distribution tables constructed, and study data were analyzed using multiple regression and SPSS econometric tools. Results of the study as indicated in Hypothesis 1. Showed ATM have positive, but significant effect on customers satisfaction ($\beta = 1.066, t = 10.288, P < 0.05$) while R^2 is 0.417.; Hypothesis 2 has revealed that there was significant relationship between effectiveness of ATM network and customers satisfaction. ($\beta = 0.848, t = 9.444, p < 0.05$) with an R^2 of 0.376.; Hypothesis 3 revealed that there was a significant effect of ATM services and customer reliability ($\beta = 0.906, t = 8.873, p < 0.05$) with R^2 0.347.; and Hypothesis 4 revealed a positive relationship between ATM operation and customers expectation ($\beta = 0.875, t = 9.610, p < 0.05$) with R^2 0.384. Based on findings on the study hypotheses, it was concluded that ATM has a positive relationship with customer satisfaction and therefore recommended that more ATM terminals should be located in busy places for proximity purposes, bank management should ensure cash availability in ATM at all times couple constant and efficient maintenance culture to enhance dispensation of cash to users.

Word count: 272

Keywords: Automated teller machine, internet banking, and Customer satisfaction.

Introduction

1.0 Background to The Study

Customer satisfaction is a reflection of how a customer feels about your company. It is the comparison between customer expectations and the type of experience they actually receive from your brand. In other words, customer satisfaction is how satisfied a customer is after doing business with a company. Customer satisfaction goes hand in hand with great customer experience. Thus, customer satisfaction refers to the extent to which customers are happy with the quality of products and services provided by a business. Similarly, Doreen (2018) opined that customer satisfaction is the extent to which customers are happy with the products and services provided by a business. The usual measures of customer satisfaction involve a survey with a set of statements using a likert technique or scale.

Oduşina (2014) posited that globalization has left banks in Nigeria with no alternative option than to embrace a convenient means of transaction in order to promote customer satisfaction that is if they really want to stay in business and keep generating profit. Although ATM offers a great convenience to customers who are on the run in their everyday life, but at the same time, attached to it is a big risk. Ogunnaike and Olaleke (2010), revealed that the problem of huge crowds, money transfer, long queue are faced by almost all DMBs in

Nigeria in rendering services and meeting customers expectation. Twum et al (2016) stated that the security loopholes and limitations of ATM can be linked to magnetic media.

Ezra (2018) argued that ATM services support financial accessibility to people which is essential in life and performance of their business which influence customer satisfaction. Customer satisfaction drives the frequent use of ATM services which foster performance of the bank through maintenance of loyal and attraction of new customers. Also, Jegede (2016) posited that, thousands of customers are served by banks and banks ATM because the ultimate goal of a bank is to maximize profit and minimize cost. Therefore, banks deploy few ATM which customers compete for. This has caused queues or waiting lines, customers exhibit different traffic behaviour in order to compete for the few ATMs available. According to Muhammad (2012) The problems include: unnecessary congestion in the banking hall, long queue, time wasting to the cost of cash in transit, The adoption of ATM by banks was meant to provide solution to these problems and as such reduce unnecessary traffic in banking hall, allow quick access to customers deposits and to make life convenient to some certain level.

Onyesolu, Asogua and Chukwunke (2016) spelt out the problems encountered when using ATM in Nigerian banks to include insufficient fund in the machine, issuer inoperative, limitation to the amount of daily withdrawal, inability to dispense cash, unable to print receipt, service in progress available shortly, double or wrongful debit of account, user app not available. Bada and Karupiah (2015), outlined lack of network, waiting time, service charge and out of service as part of the problems affecting ATM services in Nigeria. The problems of ATM in addition includes lack of co-operation by the banks to stem incidence of ATM related fraud, network breakdown of ATM, limits on daily transaction, absence of clear direction about inserting ATM cards, PIN theft, long queues, high rate of Visa ATM charges. Also, African Banker (2013) posited that revolutionizing service delivery to customers by reducing the execution time to the barest minimum while simultaneously offering other self-service platforms to both internal and external customers has been a complex task in the banking sector and other financial industries.

1.2 Statement of Problem

Most Nigerian banks over the past years have been investing huge amount of money in the development ICT and E-banking system especially in the deployment of ATM and issuance of ATM debit cards in order to meet up with the global baseline standards. In the Nigerian banking industry these developments seem not to have achieved their objectives as there are still long queues at ATM service points, unreasonable amount of time is still being wasted at ATM service points, inconvenience in carrying out financial transactions, lack of proper guides on the operation of ATM, lack of cash availability beside, machine complexity and machine breakdown, poor quality notes, network failure, unsuitable location, forgot ATM pin number, safety and security are the major problems of ATM users while some customers approve to use of ATMs, Other customers would not make use of ATMs as a result of indifference, vision issue, dread of innovation and hesitance to change and embrace new method of delivery

of service. The study explored the forms of customer satisfaction, challenges and strategies to strengthen customer satisfaction on ATM use by evaluating the effect of the adoption of ATM on customer satisfaction using these specific objectives: To analyse the effect of ATM location and customers convenience; examine the effect of ATM network effectiveness on customer satisfaction; evaluate the relationship between ATM service and customers reliability; investigate ATM operation and customers' expectation.

Brief history of Automated Teller Machine (ATM)

According to Colin (2017) The ATM made its first appearance at Barclays' Enfield Town branch in north London in June 1967, it was invented by a British inventor named John Shepherd-Barron. John S. Barron's idea of ATM was drawn from a vending machine selling chocolate bars which made him question himself that why can't a similar machine be used to dispense cash? Unique codes were issued by Bank tellers to their customers which made them withdraw a maximum of £10 at a time. Similarly, ATM made its debut in the Nigerian economy in 1989 by the Central Bank of Nigeria (CBN). The first Deposit Money Bank to introduce ATM in Nigeria was Societe Generale Bank of Nigeria (SGBN) with exchange name referred to as "cash point 24". This was followed by "First Cash" ATM introduced by First Bank Plc. in 1991. The intention of CBN on the introduction of ATM was to reduce the level of cash withdrawal through the use of teller on counter and to also set a foundation for the adoption of cashless economy. Although, as part of banking reform that started in July 2004 CBN in their pursuit for cashless economy, decongesting bank halls, improving bank services mandated all DMBs in Nigeria to station ATMs in their bank premises and other strategic areas or locations to serve their customers. As fallout of this directive by Central Bank of Nigeria, (Fanawopo, 2006, Olatokun and Igbinedoin, 2009) studies showed that debit card transaction in Nigeria rose by 93% between January 2005 and March 2006 by customers of Deposit Money Banks. The number of ATMs has also grown from just over 500 ATMs in 2006 to over 8,000 ATMs in 2009 which is powered by Inter-switch network. As at now millions of transactions are being performed through the use of ATM in Nigeria annually with over 13,000 ATM terminals. According to Accenture ATM report (2016) the early 1960's ATM technologies could only execute one function which was cash withdrawal, ATMs of 1970's to 2000's were able to withdraw cash, check account balances and print receipts, The 2000's upward ATM service technologies were able to execute functions such as mini statements, Mobile top-ups, utility payments, Ticketing, Mobile and prepaid top ups, General Advertising, Money transfer, Europay MasterCard and Visa (EMV) in addition to the previous 2000's services. Odusina (2014) described ATM as developed technological product introduced to promote quick service delivery and also to diversify financial services such as withdrawals, deposits, transfer of funds and transactions which includes credit card bills, card bills, fund transfer, payment for utilities, cheque book request and other financial enquiries.

2.0. Review of Literature

Automated Teller Machine (ATM) refers to a machine that

can carry out several banking transactions independently in place of a bank employee by receiving and dispensing cash to and from the ATM account holders/clients. According to Twum, Nti, and Asante, (2016) ATM is a terminal built in by DMBs and other financial institutions which allows customers to perform various financial services such as balance enquires, request for bank statement, cash withdrawal and transfer of money from one account to another. Thus, ATM is basically a cash dispenser that has a unique of 24/7 service facility and stands alone or wall mounted unattended to which enables customer carry out transaction without the help of any bank staff except in a case where there is problem or difficulty round the clock (Idowu, 2005). According to Fenuga OJ (2010), ATM is a machine where cash withdrawal can be made over the machine without going in to the banking hall. It also sells recharge cards and transfer funds; it can be accessed 24 hours/7 days with account balance enquiry. Also, Idris (2014), opined that ATM among others was one of the services introduced by banks with the objective of providing customers quick access to their finances, as well to reduce cost of such access. They were introduced initially to serve as cash dispensing machines. However, as a result of the rapid increase in technology, ATMs go to the extent of given accounts balances and bill payments.

2.2.1 Customer satisfaction

Customer satisfaction refers to the degree to which customers derive utility from the use or consumption of a product and/or service. The ATM was known to be a single function machine solely for cash dispense but it later metamorphosed to a multifunctional machine that performs a wide range of banking services such as accepting cash deposit, payment of utility bills, fund transfers thus, improving the utility derived from it by customers.

2.3.0. Automated Teller Machine use and Customer Satisfaction

ATM is an electronic machine that has record-keeping system and vault, permitting bank customers to enter the book-keeping system of the bank through the use of an electronic card, having a personal identification number (PIN), and providing customers a 24/7 access to their accounts (Deekor, 2021; Jimoh, 2019). A major advantage is that ATM does not necessarily need to be located within the bank premises. It can be located in stores, shopping malls, restaurants, fuel stations, open market, and any social place. ATM permits bank customers to use any other ATM around the world to conduct financial transactions. It is regarded as the basic form of non-branch banking According to Shariq and Tondon (2012) through the use of technology, deposit money banks and other financial institutions are able to execute financial task swiftly alongside customer's requirement which would elevate the level of customer satisfaction. Still in relation to customer satisfaction in use of ATM. Onywoki, and Opiyo (2012) emphasized that more than 45 years after the invention of ATM, they are still being used to perform a number of functions, ranging from traditional cash dispensing, cash deposit, account transfers, mini statements and even payment of bills. ATM technology was introduced to Nigeria to improve the convenience, effectiveness and reliability of customers on financial services in order to elevate their level of satisfaction. Twum, Nti, & Asante

(2016) in spite of the crisis of new innovations all the time, the development and effective use of ATM relies upon how much they are embraced by the individuals from the general public. Kotler and Armstrong (2013) described consumer satisfaction as the degree to which an item's apparent presentation coordinates a purchaser's desire for use and consumption with an objective of satisfying wants and needs of such customers.

2.3.1. Diffusion of Innovation Theory

The ATM innovation was a result of Diffusion of innovation theory. Diffusion of Innovation (DOI) Theory, developed by E.M. Rogers in 1962, is one of the oldest social science theories which originated in communication to explain how, overtime, an idea or product gains momentum and diffuses through a specific population or social system. The final product of diffusion is that individuals, as a major aspect of a social framework, receive another thought, conduct or item like the utilization of ATM. ATM innovation was the result of a need to initiate a computerized telecommunication device that provides the customers of a money related institutions with access to monetary exchanges or transactions in an open space without the requirement for a human agent or bank teller which was influence by diffusion. The bank needs to diffuse easy access to its services 24/7 laid foundation for ATM use. Leviton (2017) suggested that an innovation should be diffused and that, in so doing, its reach is extended to those communities and populace sections where need is most pressing and limit is adequate to embrace and execute the innovation to great impact.

2.3.2. Theory of Reasoned Action

This theory suggest that a person's behavior is determined by their intention to perform a behavior, The theory was developed by Fishbien 1967 to shed more light and understanding on the relationships between attitudes, intentions and behaviors. This is one of the most important theories that are used to explain human behaviors (Poon, 2008). Fishbein's theory proposed a connection among attitude and behavior (An A-B relationship). According to Doswell, Braxter, Cha, Kim, and Kevin (2011) the primary purpose of the TRA is to comprehend a person's willful act by analyzing the hidden essential inspiration to carry out an activity. This theory has been criticized on the ground that it doesn't allow for development of hypothesis on account of their vagueness (Ogden, 2003). Cheah (2011) posited that the mindset to use ATM can be explained by people's attitudes toward that behavior and subjective norms. This simply means that people's intention on the use of ATM service is dependent on people's attitude towards adopting ATM to perform financial operations.

2.4.0. Empirical Reveiw

Shamsher (2011) examined the impact of ATM services on customer satisfaction in Indian banks. Factor and ANOVA analysis was adopted and the result revealed that there is a positive relationship between ATM services and customers satisfaction and if proper functioning is ensured by the banks there will be significantly higher customer satisfaction. Similarly, Onyedimekwu and Oruan (2013) empirically evaluated customers' use of electronic banking systems in Nigeria and Dewas Lone and McLean Information System Success model (2003) and a total of

220 questionnaires was analysed and the result of the study showed that among all e-Banking systems, ATM has the highest level of usage however most bank customers were not satisfied with the ATM service functionality. Abdulrahman and Premalatha (2014) further examined factors influencing customers' trust in the use of Automated Teller Machine (ATM) Services in Banks in Sokoto State, Nigeria and factors used were intention behaviour, perceived ease of use and usefulness attitude towards behaviour and actual usage and found that all the factors adopted have a positive and significant relationship with the trust of customers on the use of ATM services in Sokoto State Nigeria. Also Bashir (2014) in his study on customer satisfaction on the use of ATM based service quality in Zamfara. Questionnaires were used as source of data, a total of 150 questionnaires were distributed only 106 has valid responses. The study result showed that customers with agreed responses on perceived ease of use and perceived accessibility has higher mean and standard deviation, while the perceived security responses has higher mean and standard deviation of disagreed responses. Further, Odusina (2014) in his investigation on ATM usage and customers' satisfaction in Nigeria using comparative analysis of three banks (First Bank, Guaranty Trust Bank and Skye Bank) in Ogun State, Nigeria adopted questionnaires as source of data, 200 valid responses was obtained cutting across the banks and found a significant and positive relationship between ATM usage and customer satisfaction. Also, Augustine and Emmanuel (2018) investigated the user experience of ATM in Nigeria with an aim of determining the various experience of ATM users in Nigeria, the extent and the implication of these experiences on bank loyalty and customer retention. The study revealed different experiences of ATM users such as incidence of fraud, card jamming, forgetfulness, scam, network failure, and these experiences impacted on

customer retention and bank loyalty. The outcome of the research suggested customer convenience on ATM usage to be satisfactory but the use of ATM by various banks has led to various experiences which is therefore affecting bank loyalty and customer retention.

3.0. Methodology

3.1. Research Design, Sample and Sampling Technique

The study adopted survey research method and also used random sampling technique because it is the most accessible method for reaching large numbers of ATM users hence, random sample of three (3) DMBs out of which two (2) are first tier banks (First Bank, & UBA), and second tier bank (Wema Bank) were taken. Accidental sampling method was also adopted in selecting 50 persons/customers for each of the concerned DMBs in Ogun State. A well formulated questionnaires were issued to the 50 account holders of each bank for the aim of reaching a dependable conclusion. Sampling validity was done through pre-testing the measuring instrument on elements in the population of study that are not reflected in the study sample. The reliability of the research instrument in this study was tested with Cronbach's Alpha using (SPSS) version 23.0.

3.2. Method of Analysis

The primary data collected was analyzed using descriptive and inferential statistics. The demographic variables were analyzed using frequency distribution tables. The study made use of quantitative method to gather data due to the nature of the topic this method is concerned with the acquisition and interpretation of data which was presented in the form of discrete units. Research questions and hypothesis were analyzed using the Statistical Package for Social Sciences (SPSS) version 25.

Table 4.1.0. Data Analysis and Presentation Based on Research Objectives and Questions Four.

S/N	Questions	Not Applicable %	Undecided %	Strongly Disagree %	Disagree %	Agree %	Strongly Agree %	Mean	STD-Deviation
1	There are no breakdowns when using ATM	(0) 0.0%	(0) 0.0%	(12) 8.0%	(48) 32.0%	(42) 28.0%	(48) 32.0%	3.840	0.970
2	The operation of ATM machines meets customers' expectation	(0) 0.0%	(3) 2.0%	(9) 6.0%	(26) 17.3%	(72) 48.0%	(40) 26.7%	3.913	0.926
3	ATM operation is user friendly	(0) 0.0%	(2) 1.3%	(3) 2.0%	(13) 8.7%	(90) 60.0%	(42) 28.0%	4.113	0.747
4	ATM operates 24/7 days	(0) 0.0%	(3) 2.0%	(7) 4.7%	(16) 10.7%	(76) 50.7%	(48) 32.0%	4.060	0.892
5	ATM has satisfied most of my banking needs	(0) 0.0%	(2) 1.3%	(6) 4.0%	(19) 12.7%	(85) 56.7%	(38) 25.3%	4.007	0.815

Sources: Author Research Field Survey 2022.

Hypotheses Testing and Interpretation: The null hypotheses for this study were tested using simple linear

regression analysis at 0.05 level of significance

Table 4.1: Hypothesis 1: There is no significant relationship between ATM location and customer convenience.

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	
	B	Std. Error	Beta			
1	(Constant)	3.178	0.855		3.717***	0.000
	ATM Location	1.066	0.104	0.646	10.288***	0.000

Source of Variation	Sum of Squares	Df	Mean Square	F-Ratio	Sig.
Regression	352.833	1	352.833	105.851***	0.000 ^b
Residual	493.327	148	3.333		
Total	846.160	149			

R = 0.646; Multiple R² = 0.417R² (Adjusted) = 0.413 Standard error estimate = 1.82573

a. Dependent Variable: Customer Convenience

b. Predictors: (Constant), ATM Location

Sources: Researchers' Field Survey, 2022

Note: *, **, & *** implies 10%, 5% & 1% significance level respectively.

Table 4.1 presents summary results of simple linear regression analysis on the effect of ATM location and customer convenience. According to the results in Table 1.2 ATM have positive, but significant effect on customers satisfaction ($\beta = 1.066$, $t = 10.288$, $P < 0.05$) while R² is 0.417. The result of correlation is 0.646; it shows that only 64% relationship exists between ATM location and customer convenience. The result is supported by the coefficient of determination which was estimated at 0.417. This shows that only 41% of the variation in customer

convenience is explained by ATM location. This calls for inquiry through research to find out the other factors that affect customers' convenience. Further, the unstandardized coefficient of ATM location is 1.066 with p-value of 0.000. This implies that a change in ATM location would cause an increase in the customers' convenience by 1.066. However, the coefficient is statistically significant at $p < 0.05$. Based on this result, the null hypothesis which states that there is no significant relationship between ATM location and customer convenience was rejected.

Table 4.2.: Hypothesis 2: There is no significant relationship between effectiveness of ATM network and customers satisfaction.

Model	Unstandardized Coefficients		Standardized Coefficients		T	Sig.
	B	Std. Error	Beta			
1	(Constant)	5.236	0.703		7.452***	0.000
	ATM Network Effectiveness	0.848	0.090	0.613	9.444***	0.000
Source of Variation	Sum of Squares	Df	Mean Square	F-Ratio	Sig.	
Regression	249.082	1	249.082	89.197***	0.000 ^b	
Residual	413.291	148	2.793			
Total	662.373	149				

R = 0.613; Multiple R² = 0.376R² (Adjusted) = 0.372 Standard error estimate = 1.67108

a. Dependent Variable: CUSTOMER SATISFACTION

b. Predictors: (Constant), ATM NETWORK EFFECTIVENESS

Sources: Researchers' Field Survey, 2022

Note: *, **, & *** implies 10%, 5% & 1% significance level respectively.

Table 4.2 reveals that there was significant relationship between effectiveness of ATM network and customers satisfaction. ($\beta = 0.848$, $t = 9.444$, $p < 0.05$) with an R² of 0.376. The result shows that effectiveness of ATM network has a positive and significant effect on customers' satisfaction. The result conforms to a priori expectation of a positive relationship between effectiveness of ATM network and customers satisfaction. The result of correlation is 0.613, meaning that 61.3% relationship exists between effectiveness of ATM network and customers satisfaction. The result is confirmed by the coefficient of determination which was estimated at 0.376. This shows that 37.6% of the variation in customers' satisfaction is

explained by effectiveness of ATM network. The implication of this is that other factors account for the variation in customers' satisfaction and as such calling for inquiry through research to find out these other factors. Furthermore, coefficient of effectiveness of ATM network is 0.848 with p-value of 0.000. This implies that a change in effectiveness of ATM network would lead to an increase in customers' satisfaction by 0.848. This result is statistically significant at $p < 0.05$. Following this result, the null hypothesis which states that there is no significant relationship between effectiveness of ATM network and customers' satisfaction was rejected.

Table 4.3: Hypothesis3: There is no positive relationship between ATM services and customer reliability.

Model	Unstandardized Coefficients		Standardized Coefficients		T	Sig.
	B	Std. Error	Beta			
1	(Constant)	4.491	0.866		5.188***	0.000
	ATM SERVICE	0.906	0.102	0.589	8.873***	0.000
Source of Variation	Sum of Squares	Df	Mean Square	F-Ratio	Sig.	
Regression	196.505	1	196.505	78.737***	0.000 ^b	
Residual	369.368	148	2.496			
Total	565.873	149				

R = 0.589; Multiple R² = 0.347R² (Adjusted) = 0.343 Standard error estimate = 1.57979

a. Dependent Variable: CUSTOMER REALIABILITY

b. Predictors: (Constant), ATM SERVICE

Sources: Researchers' Field Survey, 2022.

Note: *, **, & *** implies 10%, 5% & 1% significance level respectively.

The result of regression analysis on the effect of ATM services and customer reliability is presented in Table 4.8. Table 1.3 reveals that there was a significant effect of ATM services and customer reliability ($\beta = 0.906$, $t = 8.873$, $p < 0.05$) with $R^2 = 0.347$. The finding of the study reveals that ATM services has a positive and significant effect on customer reliability. The result of correlation is 0.589, meaning that 58.9% relationship exists between ATM services and customer reliability. The result is further confirmed by the high value of coefficient of determination which was estimated at 0.347. This shows that 34.7% of the

variation in customer reliability is explained by ATM services. The implication of this is that other factors account for variation in customer reliability calling for inquiry through research to find out these other factors. Moreover, the coefficient of ATM services is 0.906 with p-value of 0.000. This implies that a change in ATM services would cause an increase in customer reliability by 0.906. The result is statistically significant at $p < 0.05$. Therefore, the null hypothesis which states that there is no positive relationship between ATM services and customer reliability was rejected.

Table 4.4: Hypothesis 4: There is no positive relationship between ATM operation and customer expectation.

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.123	0.729		7.028***	0.000
	ATM OPERATION	0.875	0.091	0.620	9.610***	0.000
Source of Variation		Sum of Squares	Df	Mean Square	F-Ratio	Sig.
Regression		195.508	1	195.508	92.349***	0.000 ^b
Residual		313.326	148	2.117		
Total		508.833	149			

$R = 0.620$; Multiple $R^2 = 0.384$ (Adjusted) = 0.380 Standard error estimate = 1.45501

a. Dependent Variable: CUSTOMERS EXPECTATION

b. Predictors: (Constant), ATM OPERATION

Sources: Researchers' Field Survey, 2022.

Note: *, **, & *** implies 10%, 5% & 1% significance level respectively.

The result of regression analysis on the ATM operation and customer expectation is presented in Table 4.4 reveals that there was a positive relationship between ATM operation and customers expectation ($\beta = 0.875$, $t = 9.610$, $p < 0.05$) with $R^2 = 0.384$. The finding of the study reveals that positive relationship between ATM operation and customer expectation. The result of correlation is 0.62, meaning that 62% relationship exists between ATM operation and customer expectation. The result is further confirmed by the high value of coefficient of determination which was estimated at 0.384. This shows that 38.4% of the variation in customer expectation is explained by ATM operation. The implication of this is that other factors account for 16.4% variation in customer expectation calling for inquiry through research to find out these other factors. Moreover, the coefficient of ATM operation is 0.875 with p-value of 0.000. This implies that a change in ATM operation would cause an increase in the customer expectation by 0.875. The result is statistically significant at $p < 0.05$. Therefore, the null hypothesis which states that there is no positive relationship between ATM operation and customer expectation was rejected.

Summary of Findings

The study showed that ATM location has positive and significant effect on customers' satisfaction. This was confirmed after multiple regression analysis was carried out and provided that $\beta = 1.066$, $t = 10.288$, $p < 0.05$. However, the unstandardized coefficient of ATM location is 1.066 with p-value of 0.000 and the result of correlation is 0.646; it shows that only 64.6% relationship exists between ATM locations on customer convenience. As a result, the hypothesis one (H_{01}) was rejected. Also, the effectiveness of ATM network has a positive and significant effect on customers' satisfaction as this was reaffirmed after a regression analysis was done and the findings disclosed result of $\beta = 0.848$, $t = 9.444$, $p < 0.05$, with the result of correlation as 0.613 and p value of 0.000. Therefore, the

null hypothesis two (H_{02}) was rejected. Meanwhile, the third hypothesis reveals that there was a significant effect of ATM services and customer reliability. This was established after a multiple regression analysis was carried out and the result revealed $\beta = 0.906$, $t = 8.873$, $p < 0.05$. The coefficient is 0.589 with p-value of 0.000, the result is statistically significant at $p < 0.05$. Therefore, the null hypothesis three (H_{03}) was rejected. The result of regression analysis on the ATM operation and customer expectation reveals that there was a positive relationship between ATM operation and customers expectation with $\beta = 0.875$, $t = 9.610$, $p < 0.05$. The result is further confirmed by the high value of coefficient of determination which was estimated at 0.384 and a p-value of 0.000, the result is statistically significant at $p < 0.05$. Therefore, the null hypothesis three (H_{03}) was rejected.

Discussions of Findings

The study of Odusina (2014) on his investigation on Automated Teller Machine usage and customers' satisfaction in Nigeria using comparative analysis of three banks (First Bank, Guaranty Trust Bank and Skye Bank) in Ogun State confirmed a significant and positive relationship between ATM usage and customer satisfaction. Also Augustine and Emmanuel (2018) investigated the user experience of ATM in Nigeria with an aim of determining the various experience of ATM users in Nigeria, result revealed the different experiences of ATM users (fraud, card jamming, forgetfulness, scam, network failure, efficiency and convenience) in Nigeria and the impact of these experiences on customer retention and bank loyalty. Similarly, Charles (2014) in his study customer satisfaction with ATM Banking in Malawi using importance performance approach (Fishbein and Ajzen) to evaluate customer satisfaction revealed that service quality dimensions of the bank are of correlation with customer satisfaction, responsiveness was revealed to be the lowest performing service quality dimension while reliability was

the highest after which was empathy, assurance, tangibles and responsiveness. Meanwhile, Onyedimekwu and Oruan (2013) empirically evaluated customers' use of electronic banking systems in Nigeria and Dewas Lone and McLean Information System Success Model (2003) was deployed, and the result showed that among all e-Banking systems, ATM has the highest level of usage but most bank customers were not satisfied with the ATM service functionality.

5.0 Conclusion

This study examined the impact of automated teller machine and customers' satisfaction in Nigeria which showed a strong and positive relationship between ATM and customers' satisfaction in Nigeria. The findings further showed that ATM locations increases customers' convenience. The ATM network been effective increases customers' satisfaction while using the ATM. The ATM services are reliable thus, leading to customers' been satisfied with the ATM. It was also discovered that the operations of the ATM had met the expectations of the customers under this study. ATM also reduces the traffic of customers in the banking hall. However, it concluded that ATM and customers' satisfaction, despite its inadequacies have improved customer service considering cost reduction, time saving, and easy access to cash. Thus, customers are relatively satisfied with the usage of ATM. Findings of this study aligns with other research works conceptually as it provides necessary policy input for bank management that would enhance customers' satisfaction through improvements in the quality of ATM services with deliberate intention, aimed at delighting users to ensure their retention.

5.1 Recommendations

1. More ATMs terminals should be deployed in busy places for proximity purposes and for reducing the amount of time spent on the queue before accessing the ATM services.
2. Bank management should consider reducing bank charges on the users of ATM services so as to encourage the customer to continue using the ATM services
3. The management of the bank should ensure constant and consistent check-ups are been done on these ATMs in order to avoid network or machine breakdowns and any other possible problems that may inconvenience the customers.

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