THE ASSESSMENT OF THE LEVEL OF SATISFACTION AMONGST THE USERS OF AUTOMATED TELLER MACHINES IN AWKA METROPOLIS

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Abstract
This study assessed the level of satisfaction among ATM users in Awka Metropolis. The examined aspects of satisfaction efficiency and ease of use all viewed from the perspective of the customers. The Survey Research Design was adopted for the study. The study used a sample of 100 bank customers in Awka South LGA. The study used Primary data source through the use research questionnaire to obtain data from the respondents. The data obtained from the respondents were analyzed using descriptive methods such as means and percentages. The findings revealed that bank customers agreed that ATMs in Awka were easy to use and efficient. The researcher recommended among other things that commercial banks should develop a working system that ensures that there are always cash in the ATM machine.
Keywords: Assessment, Satisfaction, efficiency, customer's perception, ATM.

Introduction

The need to reduce crowd in the banking halls and provide more efficient banking services anywhere, anytime led to the adoption of electronic banking services. One of the e-banking services that stands out especially in Nigeria is the Automated Teller Machines (ATMs). Odunsina (2014) describes the Automated Teller Machine (ATM) as a product of technological development developed to enhance quick service delivery as well as diversified financial services such as cash deposits, withdrawals, funds transfer, transactions such as payment for utilities credit card bills, and other financial enquiries. Automated Teller Machine (ATM) is the first well known machines to provide electronic access to customers. With the advent of ATM, banks are able to serve customers outside the banking hall (Odunsina, 2014). ATM offers customers the convenience of banking in many more locations than ever before (Ikechi, Robinson and Emenike, 2018).

The ATM is a computerized technology infrastructure that provides clients of financial institutions with access to financial transactions in a public space without the need for human personnel (Ali and Kalu, 2016). Characteristically, a user inserts into the device a special plastic card that is encoded with information on a magnetic strip. The strip contains an identification code that is transmitted to the bank's central computer by modem. To prevent unauthorized transactions, a personal identification

number (PIN) must also be keyed in by the user with the aid of a keypad. However, after this operation, the computer permits the machine to complete the transaction The ATM card can also be regarded as Plastic Money; it is not only safe but convenient. The ease of settlement of bills has made it acceptable and important throughout the country. Virtually all banks in Nigeria have introduced ATM because they want to remain relevant in the sector. ATM was conventionally introduced as a means of satisfying customers in 1989. It was installed by the defunct Societe Generale Bank of Nigeria (SGBN) in the same year. Since its introduction, many Nigerian banks have installed ATM in response to the changing nature of modern banking operation. Solomon and Ajagbe (2014) stressed that banks have formed national and global linkages that enable them universally serve their customers better. These linkages are multiplied when banks share their ATMs by allowing customers of other banks access their account through other partner bank's automated teller machines (Solomon and Ajagbe, 2014).

Customer satisfaction derived from ATM use is therefore the feeling developed from an evaluation of the ATMs service experience whether the ATM performed relatively well or poorly against expectations. The evaluative judgment about satisfaction with ATM banking is therefore conceived to fall somewhere on a bipolar continuum where at the lower end it signifies low levels of satisfaction (expectations exceed performance perceptions) and at the higher end it signifies a higher level of satisfaction (performance perceptions exceed expectations). This evaluative judgment occurs at a particular time based on usage experience of ATM banking which occurred at a particular time or on accumulated experience of ATM use.

When ATM users perceive that their positive expectations are met or exceeded, they are satisfied with the service. Similarly, when their negative expectations are unrealized, they are satisfied with the ATMs service. On the other hand, if positive expectations are not met or if negative expectations materialize, ATM users would be dissatisfied with their ATM use. At such, satisfaction refers to the consumer's fulfilment response. It is a confirmation by the user, that a product or service feature, or the product or service itself, provides a pleasurable level of consumption-related fulfillment

The numerous problems associated with the use of ATMs such as; poor network, card seizures, high charges, unpaid debts and the issue of some bank customers who still prefer to operate their accounts without the use of ATMs are the major problems that necessitated this study.

The researcher therefore, examined the following the specific objectives.

1. To determine the bank customers' perception of ease of use of ATMs in Awka metropolis.
2. To ascertain the customers' perception on the efficiency of the ATMs used in Awka metropolis.

From the above stated objectives of the study, the researcher formulated the following research questions:

1. What is the perceived ease of use of ATMs of bank customers in Awka Metropolis?
2. What is the perception of bank customers on the efficiency of the ATMs used in Awka Metropolis?

The paper is organised as follows' the next section reviews relevant literature with regards to context justification and provide a theoretical background for the study, respectively. Next describes the sample data and empirical methodology. The last section summaries the main results, offers conclusion and recommendations.

Conceptual Review

Concepts of Automated Teller Machines (ATMs)
According to Ikechi, Robinson and Emelike (2018), The Automated Teller Machine (ATM) is a self-service machine that dispenses cash and performs some human teller functions. Automated Teller Machine (ATM), also known as an automated banking machine (ABM) or Cash Machine and by several other names, is a computerized telecommunications device that provides the services of a cashier, human clerk or bank teller. On most modern ATMs, the customer is identified by inserting a plastic ATM card with a magnetic stripe or a plastic smart card with a chip that contains a unique card number and some security information such as an expiration date or CVV. Authentication is provided by the customer entering a personal identification number (PIN). Using an ATM, customers can access their bank accounts in order to make cash withdrawals, credit card cash advances, and check their account balances as well as purchase prepaid cell phone credit (Ali & Kalu, 2016).

The major types of electronic cards in Nigeria include debit cards and credit cards. Debit cards are linked to bank customer accounts and offer immediate confirmation of payment while credit cards can be used for accessing local and international networks and were widely accepted in most countries, the underlying infrastructure and operational rules are often provided by global trusted service provider such as Visa and Master card, in addition to local lines. Debit cards are the dominant card mechanism in Nigeria (Ali & Kalu, 2016).

Perceive Ease of Use

Perceived ease of usefulness is the extent to which a person believes that using a particular system will be free of effort (Sun, Wang & Cao, 2009). Studies validated that when individuals think employing a certain technology is easy to use, they will be inclined to work with it (Davis, 1986; Liu, Chen, Sun, Wible and Kuo, 2010). Perceived Ease of Use that influence a person's intention to make use of a technology. Connecting this fact to social media, it is assumed that if ATMs are easy to handle, managers will make use of it. As in the case of PU, PEU has an influence on a person's attitude towards using their technology system.

Perceived Efficiency of ATMs

The concept of efficiency of a production entity was introduced by Farell (1957) as a measure of input- output relationship. Efficiency in the banking industry is a reflection of how banks deliver valuable financial services through various combinations or bundles of inputs (Kablan, 2007). The determination of input and output relationship is tied to the intermediation role performed by banks in the economic system. Banks are financial intermediaries because they engage in the transfer of funds from surplus units to deficit units, i.e., from savers to borrowers. The inputs are cash deposits, tangible assets, employees, information technology and time; the transformation process involves all activities related to intermediation; whereas customer satisfaction, market share, corporate image, profitability and overall efficiency are measures of banking output.

Theoretical Review

This study is anchored on **Technology Acceptance Model (TAM),** TAM was propounded by Davis (1986). It replaced the theory of reasoned action's attitude toward behavior with two technology acceptance measures which are: perceived usefulness and perceived ease of use. TAM didn't include the theory of reasoned action's subjective norms in its structure. It was developed after the introduction of information systems into organizations. It is developed in information technology field while the theory of reasoned action and theory of planned behaviour developed in the psychology field, so that it is less generalized than Theory of Reasoned Action (TRA) and Theory of planned behaviour (TPB) (Davis, 1986). The development for TAM comes through three phases: adoption, validation, and extension. In the adoption phase, it was tested and adopted through a huge number of information system applications. In the validation phase, researchers noted that TAM uses accurate measurement of users' acceptance behavior in different technologies. The third phase, the extension, where there are many researches introducing some new variables and relationships between the TAM's constructs.

TAM was later developed in information technology field. It had been extended from the previous works of Davis (1986) by Venkatesh and Davis (2000) in order to explain perceived usefulness and perceived ease of use from the social influence and cognitive instrumental processes' view-points. Social influence processes refer to:

subjective norm, voluntariness, and image, while cognitive instrumental processes refer to: job relevance, output quality, result demonstrability, and perceived ease of use. Unlike the earlier version of TAM, Venkatesh and Davis inserted subjective norm as an additional construct by adopting from theory of reasoned action and theory of planned behaviour models. Subjective norm has direct relations with perceived usefulness and intention of use. Its relation with perceived usefulness is moderated by the user experience, while its relation with intention of use is moderated by the user experience and voluntariness of use. Extending TAM to the later model by including some constructs from older theories in addition to some moderators to perceived usefulness and perceived ease of use will enhance the performance to the model. As an example, the existence of experience moderator will show the increase in the level of users' experience in technology over the time, and this will cause a tangible change in technology acceptance to them.

Empirical Reviews

Bashir (2014) investigated the perceived customer satisfaction towards introduction of automated teller machine (ATM) in Nigerian banks. The researcher distributed 150 questionnaires across different banks customers in Zamfara State, 136 questionnaires were returned filled out of which 106 contained valid responses. Descriptive statistics were used to analyze three research questions of the study. This covered perceived ease of use, perceived accessibility and perceived security in order to measure customer satisfaction in relation to ATM service quality. The result indicated that the customers with agreed responses on perceived ease of use and perceived accessibility has higher mean and standard deviation, while the perceived security responses have higher mean and standard deviation of disagreed responses. Matimbwa (2018) examined the factors that determine customer satisfaction with ATM services offered by CDRB Bank in Tanzania specifically Iringa Municipality. A quantitative study described the relationship between social economic factors, various aspects of ATM services and customer satisfaction was applied to 100 respondents drawn from 340 CRDB customers who are also holders of ATM cards. Results reveal customers usually use basic ATM services such as balance inquiry and withdrawal. The relationship between overall customer satisfaction and convenience, efficient operation, security, reliability, responsiveness and cost were significant at $p<0.01$. Privacy was found to have a negative significant relationship with overall customer satisfaction at $P<0.05$.

Odusina (2014) investigated ATM usage and customers' satisfaction in Nigeria. It was discovered that despite the increasing number of ATM installations in Nigeria customers' needs are not satisfactorily met as customers are always seen on queue in large numbers at various ATM designated centers as well as poor service delivery of some of these machines. The research engages comparative analysis of three banks in Ogun State, Metropolis of Nigeria which includes First Bank, Guaranty

Trust Bank and Skye Bank. However, questionnaires were distributed to the respondents. A total of 200 respondents answered the questionnaire cutting across the three banks, the chi-square statistical tool was used to analyze the data and the results showed a positive and significant relationship between ATM Usage and Customers' Satisfaction.

Alabar (2012), conducted research on 'Electronic Banking Services and Customers Satisfaction in the Nigerian Banking Industry. He sampled 400 respondents of some selected banks (FBN, UBA, Access, Diamond, GTB and Ecobank) across the six geopolitical zones of Nigeria, Abuja inclusive. He found out that Electronic Banking Services has significant influence on customers' satisfaction after testing his hypothesis using regression analysis.

Ogunniyi, Onuaoha and Izogo (2012), studied the 'Analysis of the Negative Effects of the ATM as a channel for delivering banking services in Nigeria'. The authors sampled 600 respondents from Anambra and Lagos states in Nigeria. The reason according to the authors was because the two states constitute different people from different parts of Nigeria. Chi-square was used to test the hypothesis, and result showed that ATM should not be installed indiscriminately everywhere and that ATM has increased the rate of crime in Nigeria.

Mwatsika (2016) examined the factors influencing customer satisfaction with ATM banking. 353 ATM card users rated the performance of ATM banking in 25 service quality attributes and further rated their perceived satisfaction with ATM banking. The regression analyses of the performance of the 25 ATM banking attributes and customers' satisfaction first reveal that the 25 attributes adopted from empirical studies provide a perfect model for predicting customer satisfaction. Secondly, reliability and responsiveness are the key service quality dimensions of ATM banking and thirdly, the analyses revealed 12 key attributes that influence customers' satisfaction with ATM banking and these are: ATM fees charged, ATMs not out of order, cleanliness of ATMs and ATM stations, accuracy of ATM transactions, ease of access to ATMs, readable slips, convenient location, employee accessibility to solve ATM problems, privacy at ATM stations, employee speed in solving ATM issues, ease of application process for ATM cards and cash availability in ATMs.

Akinmayowa and Ogbeide (2014) investigated the dimensions of ATM service quality and its effect on customer satisfaction. Questionnaire was developed and used to collect information from the study sample. The structured questionnaire was administered to three hundred and fifty (350) respondents of which three hundred and three (303) were found usable, giving 87% response rate. Data collected were analyzed using SPSS 20.5. Regression results indicate that convenience, efficient operation, security and privacy, reliability and responsiveness are significant dimensions of ATM service quality and that ATM service quality has a significant

positive relationship with customer satisfaction. Findings from their study are relevant in improving ATM service quality by banks' management to stimulate broad-based customers' satisfaction.

Ikechi et al. (2018) the effect of ATM service quality on customer satisfaction. The major problem of the study was how to operationalize the two major constructs, service quality and customer satisfaction, with respect to ATM, given diverse views of several authors on this issue. The major hypothesis of this study is that 'there is no significant difference between customers' expectation of ATM service quality and its performance. A twenty-two item, five-point Likert scale, ranging from strongly disagree to strongly agree and grouped under the RATER model was used to obtain data from the respondents. Four hundred copies of questionnaire were used for the analysis. T-test independent statistics and regression analysis were used to test the hypotheses. The independent t-test conducted to test the first hypothesis showed that the performance of ATM is not significantly different from customers' expectation of ATM services quality. This shows that there is customer satisfaction as a result of customers' expectations being met. This corroborates the fact that customers in Nigeria use ATMs as a result of the satisfaction they derive, despite the challenges they face.

Ugwuonah, Ifeanacho, Egbo and Chuba (2009) assessed customer perception of bank ATM services in Nigeria. The data for the study were collected through survey instrument developed and administered to 300 bank customers, selected across four Nigerian banks in Nigeria. They were analyzed using descriptive and inferential statistics, which include simple frequency distribution, tables of means and analysis of variance (ANOVA). Results shows that ATM services were more patronized by the younger bank customers than the older ones. Major means through which customers become aware of ATM transactions include the efforts of bank staff (50.9%) and consumers' friends (31.4%). Customers were most satisfied with correctness of their account and the time it takes to complete an ATM transaction but least satisfied with service charge and waiting time before transaction.

Methodology

The study used Survey research design in which questionnaires, interviews, observations to obtain data from primary source. The study uses a sample of 100 bank customers in Awka South LGA. The respondents are selected using the Random Sampling Technique. The Cluster Sampling method was adopted in arriving at the selected sample size. Four clusters were selected to cover major location where a significant number of ATMs were stationed. The first cluster was the banks segment in Nnamdi Azikiwe University which comprises of seven (7); United Bank of Africa (UBA), First Bank Plc, Heritage Bank Plc, Access Bank Plc, Zenith Bank Plc., Fidelity Bank Plc and Guaranteed trust Bank. The second cluster

is the UNIZIK permanent site where ATMs of UBA and Sterling bank are situated. The third cluster is at Regina junction where Access Bank Plc, Zenith Bank Plc and Fidelity bank Plc have their branches with operational ATMs. The Fourth cluster is cited at the Eke Awka market where Sterling Bank Plc, UBA, First Bank, Heritage Bank Plc and a host of others. Twenty-five (25) questionnaires were randomly distributed to ATM users at the ATM centers in each of these clusters making it a total of 100 respondents.

Descriptive Statistics
As stated in the previous chapter, the criteria for analysis of the grand mean are as follows; 5.00 – 4.21 = Strongly Agree; 4.20 – 3.41 = Agree; 3.40 – 2.61 = Undecided; 2.60 – 1.81 = Disagree; 1.80 – 1.00 = Strongly Disagree

Descriptive statistics on the Perceived Satisfaction from ATM use.
Table 1:   Descriptive Statistics

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
PEU	100	6	18	1313	13.13	2.485
PEF	100	9	20	1462	14.62	2.658
Valid N (listwise)	100					

Source: *SPSS 22.0 Descriptive Statistic Output, 2021*
Table 4.2 shows the minimum, maximum, sum, mean and standard deviation of Perceived Ease of Use (PEU) and Perceived Efficiency (PEF).

Research Question One:
What is the perceived ease of use of ATMs by bank customers in Awka Metropolis?

Table 2: Grand Mean for Customer's Perception on Ease of Use

Variable	N	Sum	Mean Score	Number of Questionnaire Items	Grand Mean	Remark
Ease of Use	100	1648	16.48	4	4.12	Agreed

Source: *Author's computation from Descriptive Statistics Output, 2021*

As shown in table 2, the grand mean of 4.12 falls within 4.20 to 3.41 which is the range for Agreed. Therefore, on the average, bank customers in Awka Metropolis agree that ATMs in Awka Metropolis are easy to use. This suggests that bank customers in Awka metropolis are satisfied with the performance of the ATMs used therein in terms of ease of use. This indicates that the bank customers that use ATMs do not find it stressful or difficult to use and that it did not require complex procedures.

Research Question Two

What is the perception of bank customers on the efficiency of the ATMs used in Awka Metropolis?

Table 3: Grand Mean for Customer's Perception on Efficiency

Variable	N	Sum	Mean Score	Number of Questionnaire Items	Grand Mean	Remark
Efficiency	100	1462	14.62	4	3.65	Agreed

Source: *Author's computation from Descriptive Statistics Output, 2021*

As shown in table 3, the grand mean of 3.65 falls within 4.20 to 3.41 which is the range for Agreed. Therefore, on the average, bank customers in Awka Metropolis agree that the ATMs used in Awka Metropolis are efficient. This implies that bank customers in Awka metropolis are satisfied with the performance of the ATMs used therein in terms of efficiency. This shows an agreement among the respondents that it is faster and less costly to withdraw or transfer funds using ATMs in Awka Metropolis. They also agree that there are less errors associated with the use of ATMs in Awka Metropolis.

Discussion of the Findings

The study assessed the level of customer satisfaction of ATMs users in Awka Metropolis, Anambra state. Customer satisfaction was measured in terms of ease of use and efficiency. The data was retrieved from 100 respondents using a questionnaire developed by the researcher. The grand mean was used to analyze the data and the findings revealed that customers were satisfied with the ease of using ATMs in Awka Metropolis. The bank customers agreed that these ATMs were not difficult to operate and did not require complex procedures. This finding agrees with the findings of Bashir (2014) who found that customers agreed to the notion that ATMs are easy to use. According to the Technology Acceptance Model, this is expected to culminate into improved adoption and use of the ATMs

The findings also revealed that bank customers agreed that ATMs in Awka were efficient. Indicating that the bank customers in Awka perceive that ATMs in Awka metropolis are less costly and time consuming. Thus, they are satisfied with the efficiency of the ATMs. Elements of efficiency such as accuracy of ATM transactions, speed and cost in the study of Mwatsika (2016) were significant predictors of satisfaction. However, this finding is goes against the findings of Ugwuonah et al. (2009) who found that customers were most dissatisfied with the service charge and waiting time before transactions. The findings of Akinmayowa and Ogbiede (2014) revealed that efficiency is a key determinant of ATM service quality. Based on the Technology Acceptance Model, satisfaction translates into improved use and this was the case in this study.

Conclusion and Recommendations

In accordance with the findings, the researcher therefore concludes that the ATMs in Awka Metropolis are easy to use and their services efficient.

The following recommendations are put forward by the researcher:
1. Operators of banks should ensure even distribution of ATMs in all corners of Awka. There should be more strategic planting of ATMs in major shopping malls, hotels, filling stations and other popular places. This would increase the accessibility of ATMs in Awka and hence improve the use of ATMs in Awka Metropolis.
2. Banks should constantly seek better ways to improve the ATM services rendered by periodically getting feedback from customers on their level of satisfaction with the use of these ATMs

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