
**AUTOMATED TELLER MACHINE AND CUSTOMER SATISFACTION IN BANKING IN UGANDA: A
CASE STUDY OF BANK OF AFRICA BULAGA MINI BRANCH****1 Nantege Jane, 2 Dr Ariyo Gracious Kazaara, 3 Kaziro Nicholas****1, 2, 3 Metropolitan International University****ABSTRACT**

The study is intended to assess the effects of ATM use on customer satisfaction in banking. The study will be driven by the fact that ATM use access to bank services beyond working hours and days. This is supported by diffusion innovation theory since ATM innovation was result of a need to initiate a computerized telecommunication device to provide 24/7. It study will be guided by three research objectives: examining the forms of customer satisfaction in the use of ATM, Identifying the challenges of ATM use, and strategies to strengthen customer satisfaction. The study was both qualitative and quantitative survey design, non-experimental and cross sectional in nature. The primary data was collected using questionnaires method from 15 respondents using a technique of random sampling and analyzed with SPSS. The findings from the respondents helped to know the challenges faced in the use of ATM and the different strategies to strengthen customer satisfaction. The results revealed the challenges faced in the use of ATM in Bank of Africa Bulaga Mini Branch, regarding whether incorrect inserting of ATM card due to illiteracy level hinders ATM use results indicates the mean 4.47 and the standard deviation of 0.640. Majority of the respondents agreed to this challenge implying that there is a challenge of incorrect inserting in of the card. Finding whether limited cash withdraw is a challenge on the use of ATM at Bank of Africa results indicates the mean of 4.93 and the standard deviation of 0.258. Bank of Africa Bulaga Uganda should sensitize customers on the proper use of ATM using local media like churches, mosques as the need to strengthen customer satisfaction

Key words: automated teller machine, customer satisfaction and banking**Background of the Study**

Automated teller machine is a computerized telecommunications device that provides the customers of a financial institution with access to financial transactions in a public space without the need for a human clerk or bank teller (Alex & Kazaara, 2023). Automated teller machines combine computer terminal, record keeping system and cash vault in one unit. Permitting customers to enter the banks record keeping system with a plastic card containing personal identification number (PIN) or by punching a specific code into the computer terminal linked to the bank's computerized records 24-hours a day (Ramadhan et al., 2023)

The evolution of Automated teller machines as not in isolation rather as a result of the general global wave in the technological revolution. The banking industry of Uganda has of lately significantly changed the services delivery methods to include the Automation of cash, withdraws, deposits, transfers, Bank statements, checking Accounts balance, pay bills (Racheal et al., 2023).

Bank of Africa has around 450 which help the bank to achieve its goal of efficiency, effectiveness and customer convenience (Bank of Africa Annual report 2013). Ogbuji (2012) postulated that ATM allows a customer to

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conduct his/her banking transactions from almost every other ATM machine in the world (Alex & Kazaara, 2023). However, the speed of the machine has been generating a lot of heat at the bank ATM and customers face a splurge of frustration when using it; Either the machine will not dispense cash or debit transactions when cash is not dispensed or cards get stuck in them. Dapo (2008) indicate that the proliferation of machines is giving more concern (Alex et al., 2023). As with every technological break through the Automated teller machines generate astronomical challenges and problems for the beneficiaries of the financial services in Uganda. Most of the users encounter the problem of scam. Apart from epileptic services rendered by the machines, faceless crooks steal from the accounts of hundreds of bank customers via ATM technology. The fraudsters perpetrate this financial crime by stealing personal identification numbers (PIN) a special secret code that grants access to the usage of the cards and consequently getting hold of the hundreds of the susceptible Automated teller machine users (Faith et al., 2023).

Customer satisfaction is a business term which captures an idea of measuring how satisfied customers are with the efforts in the market place. It is seen as a key business performance indicator and part of the four perspectives of a balance score card (Collins et al., 2023).

The impact of Automated teller machines on customer satisfaction is not yet established and there have been near lack of empirical research efforts on the effect of ATM use on customer satisfaction in the banking sector of Uganda. However, the most revolutionary electronic innovation in this country is the Automated teller machine. In Uganda financial institutions with ATM have been networked and this has increased their utility to customers (Gracious, 2023).

Statement of the problem

Automated teller machines (ATM) technology improves access to bank services in Uganda with customer's ability to make transaction outside banking hours creating customer satisfaction for bank clients. Balunywa disclosed that despite the merits of automated teller machines, customers still complain of shortfalls on the use of the system such as; breakdown of ATM, limited knowledge on the use of ATM cards, fraudulent transactions and its operation in few languages, long queues at ATM service points, retention of customers cards (Racheal et al., 2023). Much as Bank of Africa has managed to put up 450 machines, they are stills experiencing long queues in the banking hall and ATM service points with no clear known cause. (Christopher, Moses, Muhindo, & Komunda, 2022) argued that ATM technology in banking industry has caused long queues which results to customer dissatisfactions since people wait for hours to get cash needed to meet their daily expenses and limit customer daily withdraw between Ushs800000 to ushs1000000 depending on the individual banking policy like Bank of Africa allows a daily maximum withdraw at ushs1000000 (Joventia et al., 2023). (Wegulo et al., 2023) reveals that the number of ATM users is increasing instantly due to the restrictions against withdraw from the teller leading to queues outside the Bank and chaos at all cash vending machines which lead to customer dissatisfaction. Thus, necessitating the study to assess the effects of automated teller machines use on customer satisfaction in Bank of Africa Bulaga mini branch

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Objectives of the study

1. To examine the forms of customer satisfactions in the use of ATM in Bank of Africa Bulaga Mini branch.
2. To identify the challenges in the use of ATM in Bank of Africa Bulaga branch.
3. To suggest the strategies of strengthening customer satisfaction at ATM point of Bank of Africa Bulaga Branch

Research Questions

1. What are the forms of customer satisfactions in the use of ATM in Bank of Africa Bulaga Branch?
2. What are the challenges faced in the use of ATM in Bank of Africa Bulaga mini-Branch?
3. What are the strategies of strengthening customer satisfaction at ATM point of Bank of Africa Bulaga Mini Branch?

Methodology

Study design

The research is descriptive and analytical in nature. However, to find out the effects of ATM on customer satisfaction, quantitative and qualitative methods are used. Quantitative research design was adopted because it describes the study phenomenon in terms of numbers and non-experimental design which allows analysis using statistical method to generate descriptive statistics (Creswell, 2009). Nelly (2010) defines quantitative design as an approach which quantifies responses in numbers instead of explanations. The design will be considered appropriate for the study due to need to collect data from different people in order to establish the effects of ATM use on customer satisfaction.

Population

A population in statistics is the specific parameter about which information is desired and it may include a set of people, services, elements, group of things or households that are being investigated (Kothari, 2009). The study was only to target ATM users (customers of Bank of Africa Bulaga Mini Branch). A random sampling system was used in the study

Sample size and selection methods

The sample of (15) ATM users of Bank of Africa Bulaga Mini Branch was selected. The selection was achieved through random sampling methods. The sample was selected because we assumed they were knowledgeable about the Bank of Africa ATM use and the fact that the purpose of the study was to establish the effect of ATM usage on customer satisfaction.

Sampling methods

The sample of the study was selected using convenience sampling together with simple random sampling method which meant that all respondents would have an opportunity to be chosen. Random sampling is part of the sampling technique in which each sample has an equal probability of being chosen (Krista, 2014). A sample was chosen randomly to ensure unbiased representation of the total population.

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Data collection instruments**Survey questionnaires**

This research used self-administered questionnaires for the respondents. These were distributed among the staff in their respective departments. The justification of this instrument is that questionnaires are easy to quantify and analyze. In addition, the questionnaire will be used because the study will focus on opinions, attitudes, feelings, and perceptions of respondents.

Interviews

An interview guide consisting of structured questions was designed and administered to the customers of Bank of Africa Bulaga Mini Branch. Information solicited by this instrument helped the researcher enhance responses from the self-administered questionnaires and this made it possible for the researcher to cross examine some key issues in the research. The choice of the instrument was made because it was considered as a good method for producing data which dealt with the topic in depth.

Data management

Data was assembled through the means of self-administered questionnaire (primary data) as well as reading different materials such as internet, journals, text books among others (secondary data). Questionnaire will be issued to the randomly selected respondents waiting for the ATM services at the ATM. Secondary data refers to the data used for a project that was originally collected for some other purpose (Saunders, 2011).

Data processing

Data was processed with the help of statistical package of SPSS version 20 to generate descriptive statistics (Nelson et al., 2022).

Data Analysis

After the collection of data, the researcher edited and coded the questionnaires. This was done to determine the response rate; qualitative and quantitative form of analysis is administered. The data was generated, calculated and converted into frequency tables and bars.

RESULTS**Relationship of respondents with Bank of Africa Bulaga Mini Branch**

This was centered on establishing the relationship of sampled respondents with Bank of Africa Bulaga Mini Branch.

Table 1: Relationship with Bank of Africa Bulaga Mini Branch

BOA-Customer		
Valid	Frequency	Percent
Yes	14	93.3
No	1	6.7
Total	15	100

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Source: primary data (2021)

Table 1 revealed that majority; almost all participants at 93.3 % are customers of Bank of Africa Bulaga Mini Branch in Wakiso District. This implied that participants had adequate knowledge about service of ATM point of Bank of Africa Bulaga Mini Branch which guaranteed reliability and validity of the data collected.

Duration of customers with Bank of Africa

This was centered on establishing the duration of receiving ATM services by customers at the ATM service point Bank of Africa Bulaga Min Branch

Table 2: Years of customers with Bank of Africa

Customer duration		
Valid	Frequency	Percent
Less than a year	1	6.7
Between 1 year and 5 years	7	46.7
Above 5 years	7	46.7
Total	15	100

Source: primary data (2021)

According to table 2 majorities of the respondents have been great clients of Bank of Africa for at least one year which indicates that that they are well conversant with the services offered at the ATM service point of Bank of Africa Bulaga Mini Branch providing a guarantee that the information collected is valid and reliable.

Awareness on ATM use

This was centered on establishing the customer's awareness on ATM use at Bank of Africa Bulaga Mini Branch

Response	Frequency	Percent
Yes	15	100
No	0	0.0
Total	15	100

Source: primary data (2021)

Table 3 revealed that all sampled participants at 100% were aware of the ATM use since they were found in the queues waiting to use the ATM service at Bulaga Mini Branch. This implied that participants have adequate exposure about the services offered at ATM at Bank of Africa Bulaga Mini Branch.

Customer frequency on the ATM use in Bank of Africa.

This was centered on establishing the customer's frequency use of ATM in Bank of Africa Bulaga Mini Branch

Table 4: Customer frequency on the use of ATM use

Valid	Frequency	Percent
Daily	7	46.7
Weekly	2	13.3
Monthly	6	40.0
Total	15	100

Source: primary data (2021)

Table 4 revealed that 46.7 % use ATM service daily, 13.3% use it weekly while at least 46.7% use it daily. Majority of the customers use the ATM services daily and it seems that these customers are business entrepreneurs who need to do different forms of transactions daily on their Bank accounts. However, a small percentage of weekly users who are married participated in the study. Thus, guaranteed reliability and validity of the data.

Rate of ATM services at Bank of Uganda Bulaga Mini Branch

This was centered on establishing the rating of ATM service at Bank of Africa in Uganda

Table 5 Rate of ATM services at Bank of Africa

How do you rate the ATM		
Valid	Frequency	Percentage
Very satisfactory	5	33.3
Satisfactory	10	66.7
Total	15	100

Source: primary data (2021)

As per table 5 majorities of the respondents are not fully satisfied and convinced with the services offered at the service point of Bank of Africa indicating that efforts are still needed in order to satisfy its loyal customers

Forms of customer satisfaction in the use of ATM in Bank of Africa Bulaga Mini Branch

Table 6: Forms of customer satisfaction

Forms of customer satisfaction	No	Min	Max	Mean	Std dev.
ATMs services available 24/7 days	15	2	5	4.67	0.816
It is easy to make cash deposits via ATM	15	1	4	1.87	0.990
It is easy to make cash withdrawals via ATM	15	2	5	3.53	1.187
ATMs are located near customer which induce satisfaction	15	1	5	3.40	1.352
It is secure to make financial transactions via ATM	15	1	5	4.00	1.000
Valid No(list wise)	15				

Source: primary data (2021)

Table 6 revealed the forms of customer satisfaction in Bank of Africa Bulaga Mini Branch, regarding whether the ATM services were available 24/7 days for the use to customers indicates the mean 4.67 and standard deviation of 0.816. Majority of the respondents agreed to this form of satisfaction since the ATM point is located outside the Banking Hall of Bank of Africa Bulaga Mini Branch and accessible 24 hour throughout the week (Christopher, Moses, Muhindo, & Nturanabo, 2022).

Finding whether cash deposit is easily made via ATM point at Bank of Africa Bulaga Mini Branch and results from table 4.10 indicate the mean of 1.87 and the standard deviation of 0.990. This has been so challenging as a good number of the respondents always find it very difficult causing dissatisfaction among the customers implying that depositing the money via ATM cannot be easily made. Finding whether cash withdrawal is cheap to make via ATM indicates the mean of 3.53 and the standard deviation 1.187 (Annet et al., 2023). Majority of the respondents agreed to this form of satisfaction that cash withdrawal is cheaper via ATM by inserting the debit card and request for cash within the bank withdraw daily transactions limits and below the amount available on the account. Finding whether ATM is located near to customers at Bank of Africa indicates the mean of 3.40 and the standard deviation of 1.352 (Christopher, Moses, & Harold, 2022). Majority of the respondents agreed to this form of customer satisfaction as it is located near them which ease accessibility to financial services. Finding whether making financial transactions is secure via ATM at Bank of Africa Bulaga Mini Branch results indicate the 4.00 and the standard deviation of 1.000. Majority of respondents agreed to this form of customer satisfaction that making financial transactions via Automated Teller Machine of Bank of Africa Bulaga Mini Branch is secure.

Challenges faced with the use of ATM services at Bank of Africa Bulaga Mini Branch

Table 7: challenges faced with the use of ATM services

Descriptive statistics	No	Min	Max	Mean	Std dev.
Challenges faced with the use of ATM					
Network breakdown affect the use of ATM	15	4	5	4.80	0.414
Inserting the card incorrectly due to illiteracy among customers hinder use	15	3	5	4.47	0.640

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Limited cash withdraw at the ATM point	15	4	5	4.93	0.258
It is complicated to use ATM	15	1	5	1.93	1.387
Long queues delay customers to use ATM services	15	4	5	4.53	0.516
High financial charges involved to use ATM	15	1	5	3.60	1.404
ATM not able to print slips when demanded	15	1	5	2.07	1.486
Personal pin number theft at the service point	15	1	5	3.20	1.082
Valid no (listwise)	15				

Source: primary data (2021)

Table 7 revealed the challenges faced in the use of ATM in Bank of Africa Bulaga Mini Branch, regarding whether incorrect inserting of ATM card due to illiteracy level hinders ATM use results indicates the mean 4.47 and the standard deviation of 0.640. Majority of the respondents agreed to this challenge implying that there is a challenge of incorrect inserting in of the card.

Finding whether limited cash withdraw is a challenge on the use of ATM at Bank of Africa results indicates the mean of 4.93 and the standard deviation of 0.258 (Micheal et al., 2023). Majority of the respondents agreed to this challenge implying that limited cash withdrawal inconveniences the ATM users. Finding whether network breakdown affects the use of ATM at Bank of Africa Bulaga Mini Branch results indicates the mean of 4.80 and the standard deviation of 0.414. All respondents agreed that network breakdowns lead to dysfunction of ATM which denies customers from access the services implying that the network breakdown is a great challenge at the ATM service points of Bank of Africa Bulaga Mini Bran (Kazaara & Christopher, 2023).

Finding whether the ATM financial charges are high/ expensive to user's results indicate the mean of 3.06 and the standard deviation of 1.404. Majority of the respondents agreed which implied that Bank of Africa Bulaga Mini Branch charges high cost on the use of ATM.

Finding whether it is complicated for customers to use an ATM and the results indicate the mean of 1.93 and the standard deviation of 1.387. majority of the respondents agreed to this implying that ATM is complicated which probably due to illiteracy or wrong designed use ATM interface without self-direction for use.

Strategies to strengthen customer satisfaction on the use of ATM services AT Bank of Africa Bulaga Mini Branch.

Table 8: strategies of strengthening customer satisfaction with the use of ATM

Descriptive statistics					
Strategies to strengthen ATM use	No	Min	Max	Mean	Std.Dev
Increase on accessibility of ATM machines nearer to the customers	15	4	5	4.73	0.458

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Sensitization on the use of the ATM machine	15	4	5	4.53	0.516
Provision of the support desk on the use of ATM card to transact	15	4	5	4.47	0.516
Strengthen the network signal to influence the use of ATM	15	4	5	4.80	0.414
Increase on secure safety measures on ATM card	15	3	5	4.33	0.617
Reduction on transaction financial charges on ATM	15	3	5	4.27	0.617
Valid No (listwise)	15				

Source: primary data (2021)

Table 8 revealed that the strategies of strengthening customer satisfaction at ATM point of Bank of Africa Bulaga Mini Branch, regarding whether increasing on the accessibility of the machines nearer to customers strengthen customer satisfaction with the use of the machine and the results indicate that majority of the respondents agreed to this (Gracious, 2023).

Finding whether sensitization on the use of the machines strengthen customer satisfaction results indicate that all respondents agreed to this which implied that sensitization equip customers with the required skills and knowledge on the use of the Automated Teller Machine.

Finding whether provision of the support desk on the use of ATM card to transact strengthen customer satisfaction at Bank of Africa Bulaga Mini Branch results indicate that all respondents agreed and positively reacted to this which implied that the support desk on the use of ATM services is on a great importance (Mark et al., 2023).

Finding whether strengthening the network signal to influence the use of ATM AT Bank of Africa Bulaga Mini Branch results indicate that the respondents agreed to it implying that strengthening the signal quickens ATM transactions reducing on the long queues at the service point and also facilitating customer satisfaction (Paul et al., 2023).

Finding whether reduction on the transaction financial charges on ATM strengthen customer satisfaction results indicate that the respondents again warmly welcomed and agreed to this strategy which implied that reduction on the financial charges facilitates customer satisfaction since it is also supported with the law of demand.

Mechanism to improve service delivery at ATM service point of Bank of Africa Bulaga Mini Branch in Uganda

The organization can improve ATM services through regular servicing of the system, locating ATM points nearer to the customers, providing enough required security at the ATM, sensitization, monitoring of the ATM cash balances to avoid shortages, strengthen ATM signals to accelerate transaction processing cycle, improving on ATM card security measure and re-design ATM system user inter-face to possess clear direction of inserting the card without try and error method and the alike strengthen customer satisfaction.

Conclusion

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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, the study explored the forms of customer satisfaction, challenges and strategies to strengthen customer satisfaction on the use of ATM.

Challenges faced in the use of ATM at Bank of Africa Bulaga Mini Branch Uganda were incorrect inserting of ATM card due to illiteracy level, limited cash withdraw, network breakdown, long queues, high financial charges, inadequate technical support to help users, card retention and theft of card personal identification number. Nevertheless, disagreed on the ATM inability to print slips when demanded

Recommendations

Bank of Africa Bulaga Uganda should sensitize customers on the proper use of ATM using local media like churches, mosques as the need to strengthen customer satisfaction

Bank of Africa Bulaga Branch should provide support desk officers to educate customers by giving them proper instructions about the use of ATM card to strengthen customer satisfaction

Bank of Africa Bulaga Mini Branch should procure modern technology to strengthen network signal to quick processing of ATM T\transaction in order to arouse customer satisfaction.

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