

CUSTOMERS' EXPERIENCES WITH ATM: A COMPARATIVE ANALYSIS OF GCB AND BARCLAYS BANK ATM SERVICES

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ABSTRACT

This study investigated the experiences of Ghana Commercial Bank (GCB) and Barclays bank customers with Automatic Teller Machines (ATMs) in the Tamale Metropolis. Primary data were collected in 2011 from a randomly sampled 80 ATM users by means of a semi-structured questionnaire. The data were analysed using descriptive statistics and multiple regression analysis. The study revealed that, the main reasons why customers prefer ATM to other e-banking services include convenience, speed, security, reliability and cost effectiveness of ATM services. Machine running out of cash, link failure and long time in dispensing cash were found to be the most occurring ATM challenges. The findings showed that, in all cases, these challenges were perceived to occur more often with GCB ATMs than in Barclays bank ATMs. The mean customer satisfaction level was found to be 61.8% and 69.4% respectively for GCB and Barclays bank ATM users. The study established a significant difference in the mean customer satisfaction between customers of GCB and Barclays bank. Eventually, the study found the critical ATM customer satisfaction parameters to be promptness of card issue, service quality of ATM personnel, quality of notes, machine performance, safety and security, cost effectiveness, and service quality of ATM personnel. Based on the beta values, the three most important determinants of satisfaction were found to be promptness of card issue, safety and security, and cost effectiveness. Management of these banks must take into account these factors in designing and implementing ATM based policy reforms.

**KEYWORDS:** Automatic Teller Machine (ATM), Tamale Metropolis, Customer Satisfaction, Challenges, Ghana.

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INTRODUCTION

Background

The trend in banking has progressed from a cash economy and transformed to a cheque economy which has further been converted to a plastic card economy. Ferocious competition from inter and intra bank groups along with global forces have constrained banks to adopt technological advances to meet the challenges of the electronic age [12]. The influence of technology over product innovations in banks is enormous. Banking services of the 21st century have more or less become a necessity, undeniably patronized by both rich and average well-to-do citizens of every country. These services provided are aimed at ensuring the comfort, convenience and security of the customer, expressed in varied forms from mechanical to electronic, to ensure fast and rapid delivery of services intending at satisfying the customer. Indeed, customer satisfaction is critical in bank services. The level at which customers are satisfied with the services of the banks, extrapolate the future status of the banks. Therefore the question as to whether customers are satisfied with the kind of services provided, is relevant and worth researching into.

The Automated Teller Machines (ATM) is a cash dispensing teller machine. This helps a bank customer to withdraw money from his account without having to go inside the banking hall. In recent times, deposit taking ATMs are being used elsewhere in the world. ATM is a user friendly, computer driven system, which operates 24 hours a day, 7 days a week. Being a totally menu driven system, the ATM displays easy-to-follow, step-by-step instructions for customers. It can be accessed using an ATM card that gives entry into an ATM room. The Personal Identification Number (PIN), exclusive to each customer, has to be keyed-in before any transactions can be made. Many banks have opened off-site ATMs at airports, railway stations, petrol pumps, market centres,

universities, etc. [8]. The plastic card is replacing cheque, personal attendance of the customer, banking hour's restrictions and paper based verification. ATMs are used as spring board for Electronic Fund Transfer. ATM itself can provide information about customers account and also receive instructions from customers - ATM cardholders. An ATM is an Electronic Fund Transfer terminal capable of handling transactions such as cash deposits, transfer between accounts, balance enquiries, cash withdrawals and bills payments.

Several banks operate ATM services in the Tamale Metropolis. However, Barclays bank was the first to introduce ATM in 1998 in the Tamale Metropolis. Currently, the number of banks that operate ATM services in the Metropolis include Barclays Bank with four (4) ATM machines, Ghana Commercial Bank (GCB) with four (4), Agricultural Development Bank (ADB) with three (3), Zenith Bank with two(2), while National Investment Bank (NIB), Fidelity, Home Finance Company (HFC), SG-SSB, Access Bank, Stanbic Bank, Prudential Bank, GTB, Standard Chartered Bank, Amalgamated Bank, and Ecobank each have one ATM. With this growing number of ATMs in the metropolis, there is the need to survey customers' perception of the level of satisfaction they gain from ATM usage. This will provide feedback to the banks so that they can take the necessary steps to keep their customers satisfied. The study is particularly necessary because in the developing world and in Ghana particularly, customer care remains a big problem. Service providers usually sit behind their desk expecting customers to report complains instead of going to customers to find out their concerns. It is not even uncommon to find service providers arguing with and sometimes yelling at customers who have come to complain about their dissatisfaction of a service. Given these experiences, most customers rarely complain officially to banks about their frustrations with thier services. A study like the present one offers customers the opportunity to express themselves concerning their satisfaction or dissatisfaction with the use of banking services. One major problem faced by bank customers (especially GCB) before the advent of ATM was long queues in banking halls which left many bankers frustrated. The introduction of ATM was supposed to reduce queues in banking halls and bring some comfort to customers. Therefore, it is imperative to find out how customers feel about this new 'saviour'. Comparison is sometimes important. It will be relevant for a bank to know how its customers rate its services as well as how the customers of its competitor also rate the competitor's service. This study compares the ATM usage experiences of banks in the Tamale Metropolis to avert the minds of the banks towards developing effective strategies to attract, satisfy and retain customers.

Banking services rendered in the Tamale Metropolis are varied, some of which include, ATM, E-zwitch, Teller and Mobile SMS Banking. However, this research is centred on how the use of ATM influences the relationship between the customer and the bank. Banking services are geared towards customer convenience, comfort and ultimately satisfaction. These parameters however, could best be analysed by the customer instead of the bank. Customers easily become irritated when much of their time is spent in the bank, hence culminating in the need for electronic banking to fast tract banking services. Two major banks (GCB and Baclays bank) are the sample banks for this study. GCB has been selected because it is the largest bank in the Metroplis; it is also publicly controlled; and together with Barclays bank has the highest number of ATMs. Barclays bank has also been chosen because it was the first to introduce ATM into the Metrepolis; it is privately controlled (arguably, the largest); and has the largest number of ATMs together with GCB.

This study sought to find answers to the following critical questions:

1. Why do customers use ATM of GCB and Barclays Bank?
2. What are the challenges faced by customers in the usage of ATM of GCB and Barclays Bank?
3. What levels of satisfaction do customers derive from the usage of ATM of GCB and Barclays Bank?

The following hypothesis was tested:

*H<sub>0</sub>: There is no significant difference in satisfaction of ATM service between customers of GCB and Barclays bank.*

*H<sub>1</sub>: There is significant difference in satisfaction of ATM service between customers of GCB and Barclays bank.*

#### LITERATURE REVIEW

In the 21st century the use of ATM is gradually becoming a matter of necessity as most economies are converting into a cashless one. Due to this reason, a number of theoretical and empirical researches on ATM have been undertaken throughout the globe. This section therefore encapsulates a review of significant previous findings of other researchers in areas of customers' usage of ATM, challenges faced by customers in the usage of

ATM, levels of satisfaction customers derive from the usage of ATM and the need for ATM in the banking sector.

Lack of privacy in executing the transaction, security concerns and the complexity of the machine were the major concerns for ATM customers in Bangladesh [16]. Some researchers have concluded that technology-based services are likely to give a sense of incompetence to customers, isolate them, and increase passiveness [2].

It is evident that convenience, efficient operation, security and privacy, reliability and responsiveness are not the only characteristics that influence customers' satisfaction. The other factors that contribute to customer satisfaction include trust, value, and image of the bank [14]. [3] examined the satisfaction level of ATM card holders of a leading bank (HBCS) in Bangladesh. The study found significant relationship between ATM service quality and customers' satisfaction. The study identified that location, personnel response, quality of currency notes, promptness of card delivery and performance of ATM were positively and significantly related to customers' satisfaction. Security, frequent breakdown of machine, and insufficient number of ATM were major contributors to customers' dissatisfaction. In another study in Bangladesh, [16] found that 24 hours service, accuracy, and convenient locations were the main predictors of customer satisfaction. The study also indicated lack of privacy in executing the transaction, fear of safety and complexity of the machine as the major cause of concern for the customers. [14] studied the perceived attributes of ATM service quality and their marketing implication. They found that convenience, reliability, and ease of use are important aspects, whereas complexity and unreliability (risk) were causes of dissatisfaction. [7] in a study of ATM users in Canada, established that major reasons for using ATM were accessibility, freedom to do banking at all times, and to avoid waiting lines. The study also found the users' apprehension about the risk associated with its use and complexity of the machine in executing the transaction. [9] examined the relationship between dimensions of usage rate and performance expectation, and customers' prolonged satisfaction with ATM services. The results indicated that, usage rate had a negative association with customers' perceived prolonged satisfaction whereas performance expectation was found to be a positive and significant predictor of customers' prolonged satisfaction. [10] found that accessibility and location of ATMs significantly affect users' satisfaction.

Robust research on ATM and customer service in the Ghanaian context is particularly scarce. The ones identified are [15] and [11]. [15] revealed a high degree of customer complaints with ATM downtime, cash out, high charges and sometimes, poor service recovery efforts when customers have problems. [11], working on service quality in ATMs in Ghana found the factors deriving customer satisfaction to be reliability, responsiveness, convenience, ease of use and fulfilment. The above studies have focused on the experiences of customers in the national capital, Accra. But the experiences of customers in Accra may not necessarily be the same as the experiences of customers in other parts of the country, especially the north. From the review of the literature, it is clear that studies on ATM in the Northern region of Ghana especially Tamale are lacking. This study plugs this loophole by interfacing with customers of GCB and Barclays bank in Tamale and brings to bear their experiences with ATM usage. Also, in the view of [11, p.2] "It appears the bank managers have very little understanding of customer's expectations with the ATMs". This calls for more studies on customer behaviour to enlighten bank managers and other officials with the view to improving ATM service quality and customer satisfaction.

#### MATERIALS AND METHODS

Data were sourced mainly from customers of GCB and Barclays banks in the Tamale Metropolis. Only customers who had ATM cards were interviewed. In all, 80 ATM card bearers (40 GCB customers and 40 Barclays bank customers) were sampled and interviewed. A semi-structured questionnaire was administered to each customer. The customers were stratified first into GCB and Barclays bank customers and then using equal sampling, 40 respondents were randomly selected from the customer base of each bank. Data analysis was done using software programmes such as Statistical Package for Social Scientists (SPSS) and Microsoft excel. Descriptive statistics form the pivot of the analysis. The paired t-test was also conducted to examine the difference in customer satisfaction level between the two banks.

#### Econometric Model

An econometric model (multiple regression analysis) was applied to express the relationship between customer satisfaction and customer satisfaction indicators. The multiple regression method applied is expressed as:

$$Y=f(x_1, x_2, x_3, \dots, x_6) \dots\dots\dots(1)$$

$$Y=b_0 + b_1x_1 + b_2x_2 + b_3x_3 + \dots b_6x_6 + 1 \dots\dots\dots(2)$$

Where  $\mu$  is the stochastic term, Y is the regressand representing customer satisfaction and depends on regressors such as:

$x_1 \equiv$  cost effectiveness,  $x_2 \equiv$  promptness of card issue,  $x_3 \equiv$  machine performance,  $x_4 \equiv$  service quality of ATM personnel,  $x_5 \equiv$  quality of notes,  $x_6 \equiv$  safety and security.

**The Study Area**

The area used for this study is the Tamale Metropolis. Tamale is the capital city of the Northern Region of Ghana. The Tamale Metropolis is located in the centre of the Northern region and shares boundaries with five other districts namely the Savelugu-Nanton district to the North , Yendi Municipality to the East, Tolon-Kumbungu district to the West , Central Gonja district to the South West and East Gonja to the South. The total estimated land size of 750 km sq is about 13% of the total land area of the Northern Region. The Metropolis is also an ideal location to do business due to its strategic positioning as a link between the north and the southern part of Ghana for both domestic and foreign trade; this is attracting many investors into the area of late particularly firms from the banking and financial sector. The Metropolis has seen an increase in financial institutions from 5 to over 15 between 2006 and 2012.

**RESULTS AND DISCUSSION**

**Why Customers Use ATM**

According to the respondents, several reasons including convenience, speed, security, reliability and cost account for their use of ATM services. The responses of ATM users are shown in figure 1.

*Convenience:* this talks about how customers avoid long queues in the banking halls. In the analysis of the data gathered where customers were granted multiple choices, 63 out of the 80 respondents which represents 78.8% replied that, convenience influenced their use of ATM service most.

*Speed:* less time is spent in ATM transactions as compared to the human teller. The results indicate that 53 respondents representing 63.3% of the total respondents are influenced by the speed or fastness involved in the use of ATM service.

*Security:* this talks about how customers feel secured in engaging in transactions. This also accounts for customers' use of the ATM services. Twenty (20) respondents representing 25% mentioned security as part of the reasons why they use ATM.

*Reliability:* this is concerned with the provision of 24hour service. As part of the reasons why customers use ATM, 17.5% of the respondents use ATM because of its reliability.

*Cost:* this explains the fee customers pay relative to the services enjoyed. Five (5) out of the 80 respondents representing 6.3%, use ATM because of its cost effectiveness

Figure 1 indicates that, more customers use ATM because of the convenience of the service. This is followed by the speed, security, reliability and cost in that order.

**Sources of Knowledge about ATM**

Table 1 indicates that, the banks are the main sources of providing knowledge to customers about the use of ATM service. The ATM machine commands several features and performs various functions such as cash withdrawal, transfer of money, checking of balance and printing of mini-statement. However, some customers are ignorant about the other features of the ATM service. According to them their ignorance is due to insufficient information from the banks. The second most important source of information about ATM is the ATM manuals that are usually issued with the ATM cards. Friends constitute the third most important source of information about ATM. This means that ATM users interact amongst themselves and among non-users. This implies that if users are served well they can potentially encourage non-users to also join the service. But if they are not treated well they equally have the potential to stop using the service; get other users to also stop using the service; and discourage non-users from patronising ATM services. This calls for the need for banks to pay more attention to

customer care since satisfied customers will help attract and retain more customers. The media has not been a good source of information on ATM. Only about 1.3% of respondents got information about ATM from the Media. The banks should advertise more about ATM in the print and electronic media to improve costumers' knowledge on the functionalities of their ATMs.

#### Preference of Customers for Banking Products

Table 2 shows the preferences of customers in terms of the various banking services offered them by the banks. Majority of respondents' (88.8%) preferred ATM service to other services such as human Teller services (12.5%), E-zwitch (7.5%), Mobile SMS banking (2.5%) and internet banking (1.3%) in that order. Customers advanced several reasons why their preference of ATM far outweighs the other banking products. They explained that, the ATM is convenient, more accessible, and saves a lot of precious time. Those who chose the teller on the other hand claim that, the teller offers them the opportunity to communicate with the bankers directly.

#### Challenges Customers Face in the Use of ATM

Though ATM services have the potential of providing customers with ease of transaction, better and convenient customer service, customers face challenges such as card locking, long duration of ATM card delivering, insecurity, machine break downs, long time in cash dispensing, link failure, problems with respect to PIN change and machine running out of cash. Table 3 shows the various challenges to customers' ATM usage.

Machine running out of cash, link failure and long time in dispensing cash appear to be the most occurring ATM challenges. In all cases, these challenges are perceived to occur more often with GCB ATMs than in Barclays ATMs. About 30 respondents representing 75% of GCB ATM users agreed that machine break down occurs often compared to 14 (35%) respondents in the case of Barclays bank. Respondents complained that sometimes ATM machines can breakdown for a week or more forcing them to use crowded brick and mortar banking halls. Both banks, but especially GCB must do routine maintenance to prevent outright breakdown of machines. Link failure is another problem that occurs quite often. About 23 (58%) of GCB respondents compared to 12 (30%) of Barclays bank respondents said that link failure occurs often. It appears link failure is not limited to only ATM but also teller service, mobile banking and SMS, E-zwitch, and internet banking since they share a similar link. For instance, Issahaku (2012) found link failure to be one of the critical challenges facing E-zwitch users in the Upper West Region of Ghana. Whatever the reason for the link failures might be, banks must take appropriate steps to address it if they must keep their customers satisfied. Long time in dispensing cash also appears quite often with GCB ATM. About 11 (27.5) of GCB respondents compared with 5 (12.5%) of Barclays bank respondents said it occurs often.

Figure 2 indicates that, 55% and 45% of sampled customers of both Barclays Bank and GCB respectively, claimed they did not face any challenge in using the ATM service. This therefore implies that, more customers of Barclays Bank faced no challenge in using ATM as compared to customers of GCB.

An interview with the customer advisor of Barclays bank revealed that most of the times, customers complain about the ATM machine capturing cards and not being given the amount requested for, and the inability to withdraw lower denomination such as 2cedis, 4 cedis, etc. With respect to the servicing of the ATMs, the Customer Advisor said they have preventive maintenance which is done quarterly and routine maintenance which is done as and when the machine develops problems.

#### Mean Satisfaction Levels of Customers in the Use of ATM

Measurement of customer satisfaction is relative. However, in the light of this research it is evaluated with parameters such as promptness of card issue, the service quality of ATM personnel, the quality of notes (currency), machine performance, safety and security, and cost effectiveness. Each parameter was ranked on a five point likert scale and subsequently aggregated in percentage form to construct a composite customer satisfaction index.

To be able to determine and analyse differences that exist between the satisfaction levels of the customers of GCB and Barclays Bank, the student t-test for paired means was applied to a sample of 40 respondents from each bank. Table 4 gives a clear view of the analysed data.

The mean customer satisfaction level was 61.8% and 69.4% respectively for GCB and Barclays bank. The null hypothesis tested was that, there is no difference in the mean level of ATM customer satisfaction between GCB and Barclays bank customers. The hypothesis was tested at a significant level of 5% (which gives a critical value of 1.96). The null hypothesis was rejected since the test value (2.17) is greater than the critical value. The rejection of the null hypothesis denotes that, there is a significant difference in the mean customer satisfaction between customers of GCB and Barclays bank in the Tamale metropolis in terms of ATM usage. This difference can be evaluated by the following parameters:

*Promptness of Card Issue:* this parameter explains how fast the banks react to issuing and replacement of ATM cards. In measuring satisfaction with regards to this variable, mean satisfaction level was 67.5% for customers of Barclays bank compared to 35% for customers of GCB.

*Service Quality of ATM Personnel:* this explains how efficient ATM personnel are able to respond, address customer complaints and handle other ATM machine related issues. With respect to this parameter, the mean satisfaction level was 47.5% and 35% for Barclays bank and GCB respectively.

*Quality of Notes:* this is concerned with the 'goodness' of notes inputted into the ATM machine. With this variable, the mean satisfaction level was 77.5% for each bank.

*Machine Performance:* this talks about how effective and efficient the ATM machine operates in terms of cash dispensing, money transfer, printing of mini-statement, etc. In evaluating this variable the mean satisfaction was 62.5% for customers of Barclays bank and 22.5% for GCB customers.

*Safety and Security:* in dealing with this variable, the concern is on ATM fraud and theft issues at ATM terminals, the mean satisfaction level for this parameter was 75% for Barclays bank and 62.5% for GCB customers.

*Cost Effectiveness:* This talks about the fee customers pay relative to services provided. Following the analyses the mean satisfaction was 62.5% for Barclays bank customers compared to 45% for GCB customers. It can therefore be verified from the above analyses that customers of Barclays bank rated their satisfaction with respect to the parameters higher than customers of GCB.

#### Econometric Model for Determining Customer Satisfaction of ATM Service

The results of the econometric model for measuring customer satisfaction are presented in tables 5 and 6. From the ANOVA table (Table 5) the F-statistic is significant at 1%. This means that the independent variables jointly determine the dependent variables very significantly. This point is buttressed by high  $R^2$  and adjusted  $R^2$  values of 80.8% and 79.22% respectively. An initial tests for the presence of multicollinearity among the independent variables proved that there were no significant linear correlations among the variables. All parameters are measured in percentages.

#### Fitted Model

Based on the regression results, the coefficients can be fitted in the model as follows:

$$CUSA = 3.560 + 1.456pce + 0.644sqap + 0.607qon + 0.890mac + 1.148sas + 0.853cof \dots \dots (3)$$
$$R^2 = 0.808 \quad Adj. R^2 = 0.722 \quad F = 51.603 \quad p = 0.000$$

Where *pce* is promptness of card issue, *sqap* is service quality of ATM personnel, *qon* is quality of note, *mac* is machine performance, *sas* is safety and security, and *cof* is cost effectiveness. Following the model illustrated above, the variables and coefficients are discussed below:

#### Intercept

The intercept is 3.560. This means that, if the other variables are held constant, customer satisfaction will be 3.560%. This is customers' satisfaction level when no ATM services are provided. It has a p-value of 0.399 which means the intercept is not significant at even 10%. Its insignificance makes a lot of economic sense because ATM users will not derive any meaningful satisfaction if ATM services are not provided to them.

#### *Promptness of Card Issue*

This has a coefficient of 1.456 which means, a 1% increase in promptness of card issue will increase satisfaction by 1.456%. It also has a p-value of 0.000 and a beta value of 0.363 which implies that the parameter is significant at even 1%. This finding is consistent with [5], who found promptness of card issue to be important to the satisfaction of ATM customers in Uganda. From the beta coefficients, this parameter is the most important determinant of satisfaction. If promptness of card delivery increases by one (1) standard deviation unit, satisfaction will increase by 0.363 standard deviation units. Thus, ATM operators should bear in mind that, the more promptly ATM cards are issued the happier their customers get and should therefore work to cut out undue delays in card issue.

#### *Service Quality of ATM personnel*

This parameter has a coefficient of 0.644 which implies that, 1% increase in service quality of ATM personnel will increase satisfaction by 0.644%. This variable is significant only at 10%. The lesson here is that ATM personnel should listen more to their customers, interact friendly with them and solve their problems in the best way possible; if their (ATM personnel) objective is to satisfy their customers. [6] similarly found problem handling to be important to ATM users in India.

#### *Quality of Notes*

This parameter is also significant at 5%. Its coefficient is 0.607 which means that, 1% increase in the quality of notes will lead to 0.607% increase in satisfaction. Customers are happy when they can withdraw money of any denomination or a combination of denominations of good quality.

#### *Machine Performance*

The coefficient of the parameter is 0.890. This implies that, 1% increase in machine performance will increase satisfaction by 0.890%. This parameter has a p-value of 0.000 which signifies that it is significant even at 1% level. Banks should put in place measures to increase the performance of machines in terms of speed, robustness and user-friendliness in order to meet the aspirations of their customers. According to [1] important dimensions of operation of ATM such as maximum speed, minimum errors, user-friendliness, high uptime, and cash back are important ATM service quality dimensions.

#### *Safety and Security*

Safety and security of customers with respect to ATM service also performs significantly on the model. This is contrary to [11] who found safety and security to be insignificant in determining ATM service quality in Accra. In this study, it has a p-value of 0.000 and beta value of 0.299. The coefficient is 1.148 which means, a 1% decrease in safety and security will decrease satisfaction by 1.148%. Its beta value of 0.299 makes it the second most important determinant of customer satisfaction. This tells how much weight customers place on the safety and security of their ATM transactions. In this light, banks are advised to enhance security features of ATM cards and also beef up security at ATM terminals to prevent fraud and theft.

#### *Cost Effectiveness*

This has a p-value of 0.000 which implies that the variable is significant at even 1% level. The coefficient is 0.853 which implies a 1% decrease in the cost effectiveness of the service will induce a decrease in satisfaction by 0.853%. Put differently, if ATM services become more cost effective (that is customers get their money's worth) by 1%, customers' satisfaction rises by 0.853%. This result agrees with [10] who found cost effectiveness to impact positively on the satisfaction of ATM users in India.

### **CONCLUSIONS AND RECOMMENDATIONS**

This study explored the experiences of GCB and Barclays bank customers with ATM. The study revealed the main reasons for customers using ATM to include convenience, speed, security, reliability and cost of ATM services. Managers of these banks must take these reasons into consideration in designing and implementing ATM based policy reforms. Machine running out of cash, link failure and long time in dispensing cash were found to be the most occurring ATM challenges. The findings show that, in all cases, these challenges are perceived to occur more often with GCB ATMs than in Barclays bank ATMs. The banks are advised to take steps to address these problems in order to attract and retain ATM customers.

The mean customer satisfaction level was 61.8% and 69.4% respectively for GCB and Barclays bank. Consequently, the study established a significant difference in the mean customer satisfaction between customers of GCB and Barclays bank in the Tamale metropolis in terms of ATM usage. The implication is that, customers of Barclays bank rated their satisfaction from ATM use higher than GCB customers did. The satisfaction levels though above average can be improved by both banks. Finally, the study found the significant ATM customer satisfaction parameters to be promptness of card issue, service quality of ATM personnel, quality of notes, machine performance, safety and security, cost effectiveness, and service quality of ATM personnel. Based on the beta values, the three most important determinants of satisfaction were found to be promptness of card issue, safety and security, and cost effectiveness. These factors must be given priority by banks in delivering ATM services to customers.

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Table 1: Customers source of knowledge about ATM

Source of knowledge	Frequency	Percentage
Friends	18	22.5
Banks	33	41.3
Media	1	1.3
School	3	3.8
Parents	4	5.0
ATM manual	21	26.3
<b>Total</b>	<b>80</b>	<b>100.0</b>

Table 2: Preferences of Customers of Various Banking Products

Banking Product	Frequency	Percentage	Ranks
ATM	71	88.8	1 <sup>st</sup>
Teller	10	12.5	2 <sup>nd</sup>
E-zwitch	6	7.5	3 <sup>rd</sup>
Mobile SMS Banking	2	2.5	4 <sup>th</sup>
Internet Banking	1	1.3	5 <sup>th</sup>

Table 3: Frequency of Challenges Faced by ATM Users

Challenges	Often	Rarely	Never
Card locking			
GCB	9	5	26
Barclays Bank	0	16	24
Insecurity			
GCB	4	8	28
Barclays Bank	1	7	32
Machine Breakdown			
GCB	30	5	5
Barclays Bank	14	15	11
Machine out of Cash			
GCB	7	15	18
Barclays Bank	0	12	28
Link Failure			
GCB	23	11	16
Barclays Bank	12	16	12
PIN Change			
GCB	4	3	33
Barclays Bank	1	7	32
Long Time in Cash Dispensing			
GCB	11	18	11
Barclays Bank	5	5	30

Table 4: Results of t-test for differences in satisfaction between customers of GCB and Barclays Bank

Banks	N	Mean	St.d	VAR	Test value	d.f
GCB	40	61.8	11.57	133.83	2.17	39
Barclays	40	69.4	18.78	352.69		

Table 5: Summary of ANOVA for Regression Analysis

Model	Sum of Squares	Df.	Mean Square	F	Sig.
Regression	17729.103	6	2954.851	51.296	.000
Residual	4205.052	73	57.603		
Total	21934.155	79			

Table 6: Results of Regression Analyses

Model	Unstandardised Coefficients		Standardised Coefficients Beta	T	Sig.
	B	Std. Error			
(Constant)	3.560	4.200		.848	.399
Promptness of Card Issue	1.456	.259	.363	5.620	.000
Service Quality of ATM Personnel	.644	.364	.109	1.768	.081
Quality of Notes	.607	.267	.141	2.277	.026
Machine Performance	.890	.244	.218	3.655	.000
Safety and Security	1.148	.243	.299	4.731	.000
Cost Effectiveness	.853	.206	.219	4.137	.000

Dependent Variable is level of satisfaction

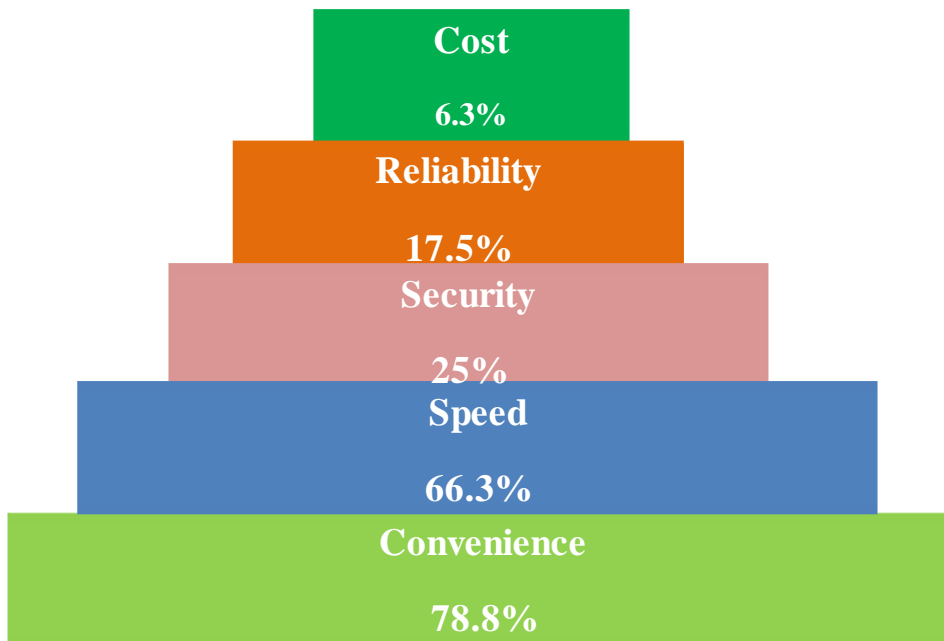


Figure 1: Customers' Reasons for using ATM

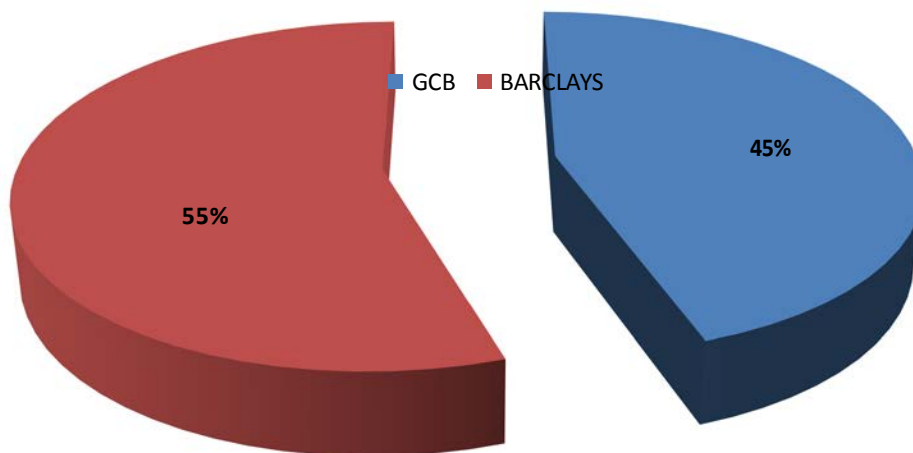


Figure 2: Customers Facing no Challenge in the Use of ATM