The Use of Automated Teller Machines (ATMs) for Improved Service Delivery: A Case Study of Cavmont Bank Kalingalinga Branch in Lusaka, Zambia

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Abstract

Automated Teller Machines (ATMs) are a category of information and communication technologies that have increasingly become vital to improving bank service delivery in developing countries. This study was therefore conducted as an investigation into the usage of ATMs for improved service delivery with focus on Cavmont Bank Kalingalinga Branch. The objectives of the study were to assess customers' level of knowledge on the usage of the ATMs; to evaluate the user friendliness of the ATM at Cavmont Bank Kalingalinga Branch; and to establish the challenges of having one ATM at Cavmont Bank Kalingalinga Branch. It was a case study employing both qualitative and quantitative methods of data collection and analysis. The study established that all the respondents were well aware of the ATM at the Cavmont Bank Kalingalinga Branch. However, only 62% of the respondents had used the ATM. The majority (51%) of the respondents considered the ATM at Cavmont Kalingalinga Branch to be user friendly. Of the 62% of people using the ATM, 53% indicated that having few ATMs in Kalingalinga will result in customer dissatisfaction which may compel them to seek better services from other banks. Non-use of the ATM was attributed to many factors including lack of ATM cards, security of the location of the ATM and technical issues such as insufficient funds in the ATM, especially on weekends. The study established that installation of ATMs has improved service delivery and recommends that, in order to maximize the benefits of this information technology, clients should be properly orientated to the operations of the technology.

Keywords: Automated Teller Machines, Cavmont Bank, Customer satisfaction, User friendly

1. INTRODUCTION

The rapid market and technological advances that are taking place in the area of information and communication technologies (ICTs) have an impact on all sectors of society. In the banking sector, the adoption of ICT improves customer services, facilitates accurate record keeping, provides for home and office banking services for clients, ensures convenient business hours, and enhances faster services among others. ICT products in the banking sector include Automated Teller Machines (ATMs), Smart Cards, Telephone Banking, Electronic Money Transfer, Electronic Data Interchange, Electronic Home and Office Banking. ATMs have particularly brought about a number of benefits in the banking sector.

ATMs are products of ICT which banks use as a tool to make their banking services more efficient. ATMs entered the banking industry in the 1980s. Before the introduction of ATMs, banks used to experience a lot of congestion in their relatively small banking halls. All the banking transactions used to happen from inside the branches, over the counter. The daily banking transactions included cash deposit, cash withdrawal, cheque deposits, balance inquiries and printing of statements. All these transactions could only happen within the banking working hours. With the introduction of ATMs, it became easy to get money without writing cheques or standing in queues to make basic transactions at any hour of the day.

According to Resnick (2013), people worldwide make 49 billion ATM transactions per year. A visit to an ATM today can help one accomplish a lot of value-added transaction services like utility bill payments, pre-paid mobile re-charge, credit card payments, tax payments and much more. The most pervasive new use for the machines involves making it easier to deposit money. Some banks are building in tools that allow customers to keep better track of their accounts. Cavmont Bank Zambia has taken advantage of this information system in order to make its service delivery more efficient.

1.1 Background about Cavmont Bank

Cavmont Bank Limited (herein referred to as Cavmont) is a registered commercial bank in Zambia licensed by the Bank of Zambia, the national banking regulator. The Bank has more than 50, 000 clients and about 240 employees. The bank was established on January 1, 2004 following a merger between Cavmont Merchant Bank Ltd, (incorporated October 1992), and New Capital Bank Plc,

(incorporated June 1992). Cavmont has eighteen branches spread-out across Zambia. Cavmont provides an array of banking services including community banking, retail banking, investment, and corporate banking.

Cavmont boasts of 25 ATMs. Additionally, the Bank operates innovative merchant ATMs (the first of their kind in Zambia) which are currently being rolled out all across Zambia. The Cavmont ATMS are unique in the sense that they possess card readers that do not retain the card under any circumstances, but instead read the card which is (in some cases) to be pulled out before the transaction is carried out by the customer.

Kalingalinga Compound is one of the many places in Zambia that has benefited from the ATMs. Kalingalinga is a low-income, high-density settlement located east of Lusaka. As of 2013, it comprised of 25,000 to 30,000 residents. It borders Mtendere and Kabulonga residential areas. It was one of Lusaka's earliest squatter settlements. By the late 1960s, many of Kalingalinga residents were lured to Chainama Hills (later renamed "Mtendere"), a newly opened development that promised "water, good roads, schools, and a clinic". Those who left for Chainama Hills were mostly supporters of President Kaunda's UNIP, leaving behind a population with considerable support for the opposition Northern Rhodesian African National Congress. Over the years, Kalingalinga was gazetted as a legal settlement area and has since seen the development of socio-economic amenities such as clinics, schools and banks.

In view of the growing population in Kalingalinga, including small and medium business enterprises, Cavmont Bank undertook a project to setup a branch that would provide efficient banking services to the community. Thus in 2004, the Branch was established near the Kalingalinga Community Centre along Kamloops Road. This was an ideal location for all community members to easily access. This was the first commercial bank to be established within the Kalingalinga community.

The community instituted a sensitization committee. This committee worked hand in hand with the Bank to encourage other members of the community to access banking services that had been brought. The growing number of customers resulted in long queues that could not be accommodated in the bank facility. This also impacted on the efficiency of banking services that were being offered to the customers.

Therefore to decongest the Branch, Cavmont Bank installed its first ATM at the Kalingalinga Branch in September 2013. The ATM became operational on 7th October 2013. In spite of the efforts made to install an ATM at the Kalingalinga Branch, the long queues have continued to characterize the Branch. The researcher therefore sought to investigate the usage of the ATM at the Kalingalinga Branch and assess the causal factors to the long queues.

1.2 Statement of the Problem

Despite installing an ATM at the Cavmont Bank Kalingalinga Branch, the branch is still experiencing long queues of customers during working hours. This has continued even after the installation of the ATM in 2013 and the causal factors are not yet well known. If this is not addressed, the Bank's efficiency and customer service will be compromised and eventually the Bank will lose a considerable number of customers to the competitors. The ATM was installed in a bid to improve service delivery by providing a communication system that would allow customers to access selected banking services off the counter. The ATM would also reduce the long queues that were characteristic of the Branch. However, the foregoing objectives have not been fully realized as evidenced by the continued queues of customers inside the Branch facility.

1.3 Research objective

The general objective of the study was to investigate the usage of the ATM for improved service delivery at Cavmont Bank Kalingalinga Branch. The specific objectives of the study were to:-

a) establish customers' level of knowledge on the usage of the ATM,
b) determine the user friendliness of the ATM at Cavmont Bank Kalingalinga Branch,
c) establish the challenges of having one ATM at Cavmont Bank Kalingalinga Branch.

2. LITERATURE REVIEW

Literature review is an account of what has been published on a topic by accredited scholars and researchers. Literature review also shows how the investigation to be conducted fits with what has gone before and puts it into context. The purpose of this review was to convey what knowledge and ideas have been established on the usage of automated teller machines as ICT tools for improved service delivery in banks. This reviewed available literature under three themes: customers' level of knowledge on the usage of ATMs; user friendliness of ATMs; and challenges of having few ATMs.

2.1 Customers' Level of Knowledge on the Usage of ATMs

The level of customers' knowledge on the usage of ATMs plays a very big role on how much customers utilize services offered at ATMs. Many have observed that proper use of ICTs improve service delivery in the banking system studied (Omari, 2012; Adelowo, 2010; Prasanthi, 2015). A study conducted by Omari (2012) explored the use of the ATM services at Akim Oda Branch of Barclays Bank Ghana Limited. The main objective of the study was to determine the reasons underlining the low patronage of ATM services at the Branch. It was established that most of the customers had a good knowledge of the services offered by the ATM. The major challenges faced by customers relating to usage of the ATM were frequent network failures, frequent breakdowns, and high withdrawal charges. Adelowo (2010) conducted a case study of selected Banks in Minna Metropolis to investigate the challenges of Automated Teller Machine (ATM) usage and Fraud occurrences in Nigeria. His conclusion revealed that customer awareness level on the usage of ATMs was affected by the demographic profile of customers. Participants from high density areas tended to be less aware of the usage due to the fact that they could not read English, the language that most ATMs had been programmed to use. He thus recommended that ATMs should be programmed in a language that the intended users could easily understand.

2.2 User Friendliness of ATMs

The user friendliness of an ATM is one of the key factors that affects customer usage. Reviewed literature showed that the rate of ATM usage by customers has a strong correlation with how easy it is to use the ATM. In 2003, Joseph and Stone assessed the United States of America customers' perception of ATM quality. The aim of this study was to evaluate bank customer perceptions of the impact of technology on service delivery in the banking sector. Joseph and Stone (2003) indicated in their study that ATMs were not very user friendly, customers were not provided a proper complaint registration channel and this further exacerbates their non-use of the ATM. The study revealed that user-friendliness, convenient locations, secure positions and the numbers of ATMs provided by the banks are essential dimensions of service quality.

2.3 Challenges of having few ATMs

In 2012, Omari conducted a study to assess the use of Automated Teller Machine of Barclays Bank Ghana Limited, Akim Oda Branch. The study was aimed at determining the reasons underlining the low patronage of ATM services at this branch. It was established that one of the main factors

accounting for the low patronage was inadequate ATMs in strategic places. Omari concluded that the number of ATMs in strategic areas had a significant impact on customer usage of the services offered at the ATM. He thus recommended that sufficient ATMs be placed in strategic areas so as to improve the bank service delivery.

Additionally, Srinivasa et al. (2013) conducted an empirical study of customer satisfaction in ATM Services among selected banks of the Nigerian metropolis. The study established that inadequate ATMs forced people to queue for long hours in the sun just to make a transaction. It was also established that overcrowding of customers at the ATMs greatly compromised the security of customers' cash and accounts. It was thus concluded that with inadequate ATMs, customers were likely to perceive a sense of incompetence on the bank's part, disregard them, and develop apathy towards the use of ATMs. It was for this reason that the study recommended that the bank should ensure that enough ATMs were installed to meet customer demand.

3. RESEARCH METHODOLOGY

This research was a case study employing both qualitative and quantitative methods of data collection and analysis. According to Blakstad (2008), a case study is an in-depth study of a particular research problem. It is often used to narrow down a very broad field of research into one or a few easily researchable examples. It is a useful design when not much is known about an issue or phenomenon. Cavmont Kalingalinga branch has an estimated 2500 customers. For the purpose of this study, the population defined for the research was made up of branch customers whose accounts were entitled to ATM cards such as current account, savings account and instant savings account holders. In this regard, eighty 80) customers were sampled using a convenient sampling technique. This was considered suitable because of the nature of the community. The data collection tools for the study were semi-structured questionnaires. The collected data was analyzed using Microsoft Excel. The data was laid in a manner that would make analysis easier. The results were presented using tables, graphs and evaluated using percentage

4. PRESENTATION AND DISCUSSION OF FINDINGS

4.1 Profile of respondents

Eighty customers of Cavmont Kalingalinga Branch were targeted for the study. However the researchers only retained 76 respondents which represented 95% response rate. The composition of the respondents was 49% males and 51% females. In terms of age, the respondents were mainly

in the age group of 29-39, representing 50% of the respondents. Twenty-nine per cent of the respondents were in the age group of 40-50, 16% were in the age group of 18-28, and 5% were aged above 50 years. The majority (47%) of respondents had attained university education while the minority (7%) had a minimum of basic education ranging from Grade 8 to Grade 12 while 46% of the respondents had attained college education. It was assumed that people with a considerable amount of education would be literate and therefore likely to operate the ATM without any problems.

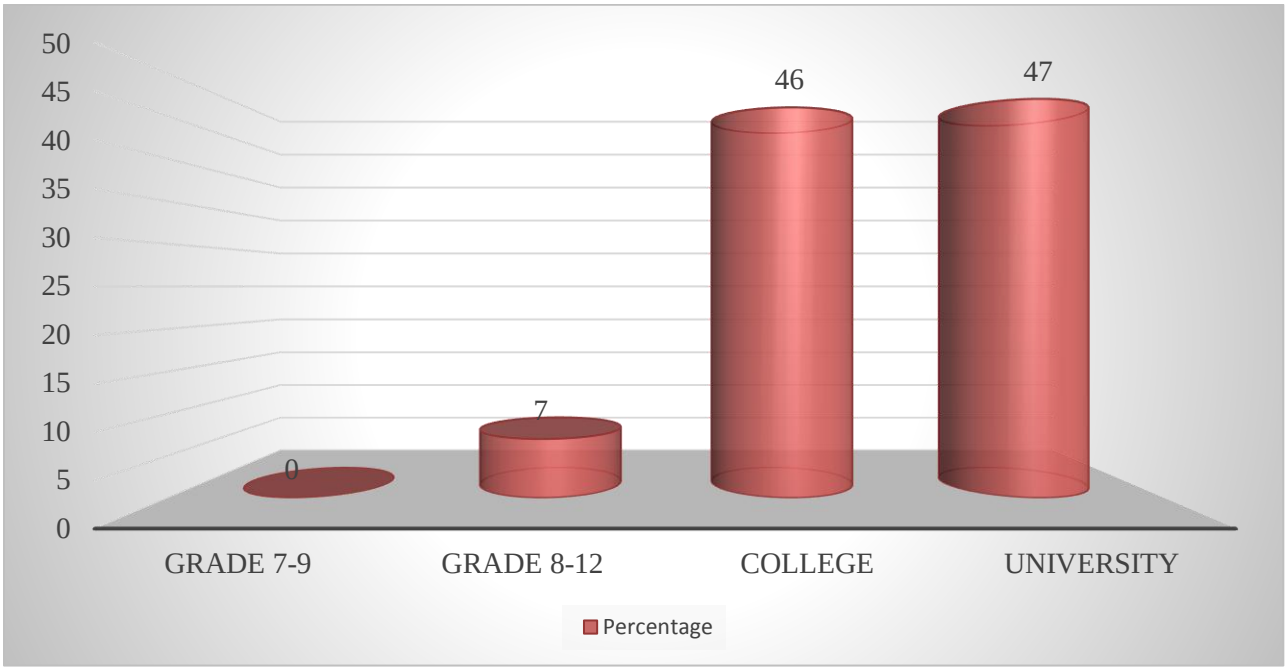


***Figure 1**: Level of education of the respondents*

4.2 Level of Knowledge on usage of the ATM

Figure 2 presents data on the awareness and the level of usage of the Kalingalinga Branch ATM. The data showed that all the respondents were aware of the availability of the ATM services at the Branch. However, only 62% of the respondents used the ATM. The other 38% had not at any point used the ATM services.

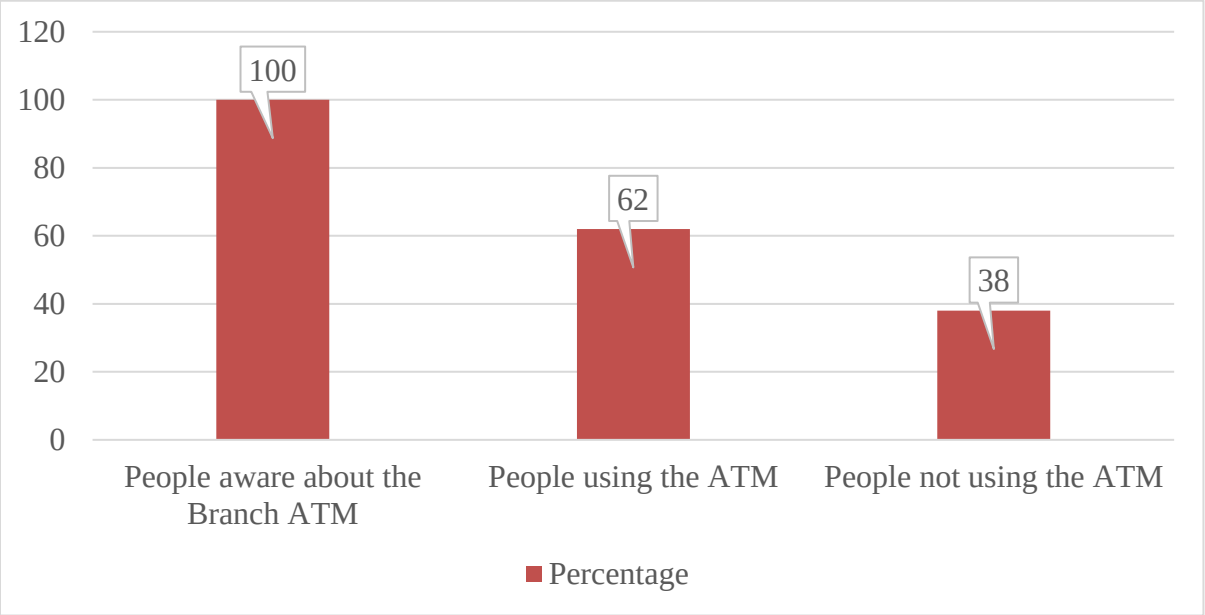


Figure 2: Awareness and usage of the ATM

Figure 3 presents data on the reasons for non-use of the ATM. When the 29 of the respondents who indicated that they had never used the ATM were asked to state the reason for their nonuse of the facility, 45% of the responses indicated that they were not sure how the machine worked (i.e. they did not know how to operate the ATM). On the other hand, 38% of the respondents preferred to avoid using the ATM because of personal preferences while 10% of the respondents could not use the ATM because they had no ATM cards; 7% gave other reasons such as the ATM had limited functions and frequent breakdowns of the ATM.

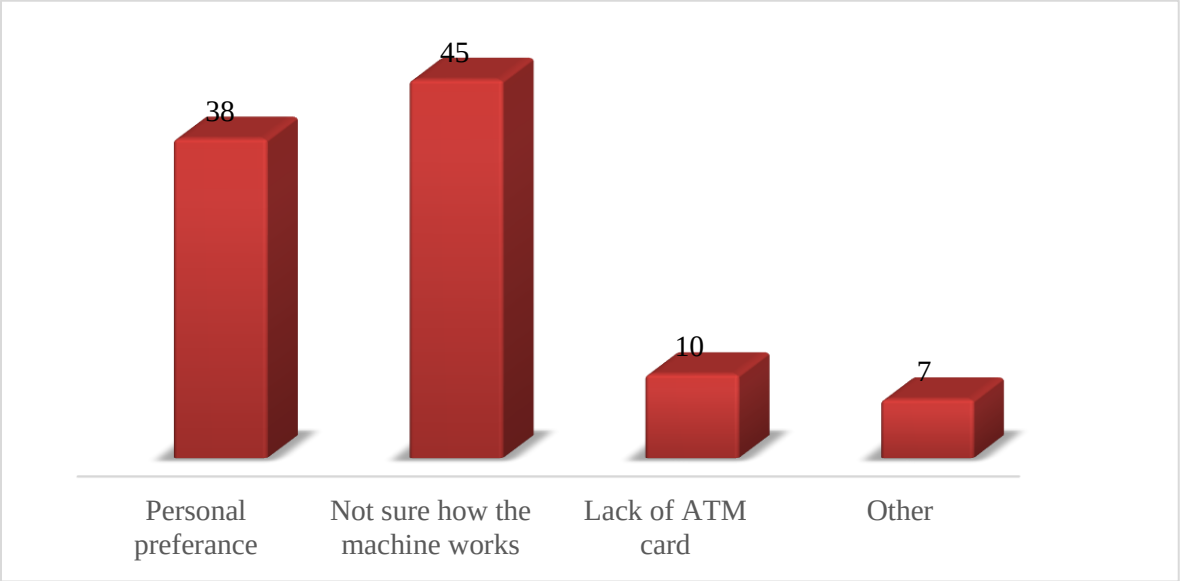


Figure 3: *Reasons of non-use of the ATM*

4.3 User Friendliness of ATM

The data on the user friendliness of the ATM was collected from the 47 respondents. 24 (51%) were of the view that the ATM was user friendly while 49% viewed the ATM as not being user friendly. These findings are different from Joseph and Stone (2003) who in their study found that ATMs were not very user friendly, customers were not provided a proper complaint registration channel and this further exacerbates their non-use of the ATM.

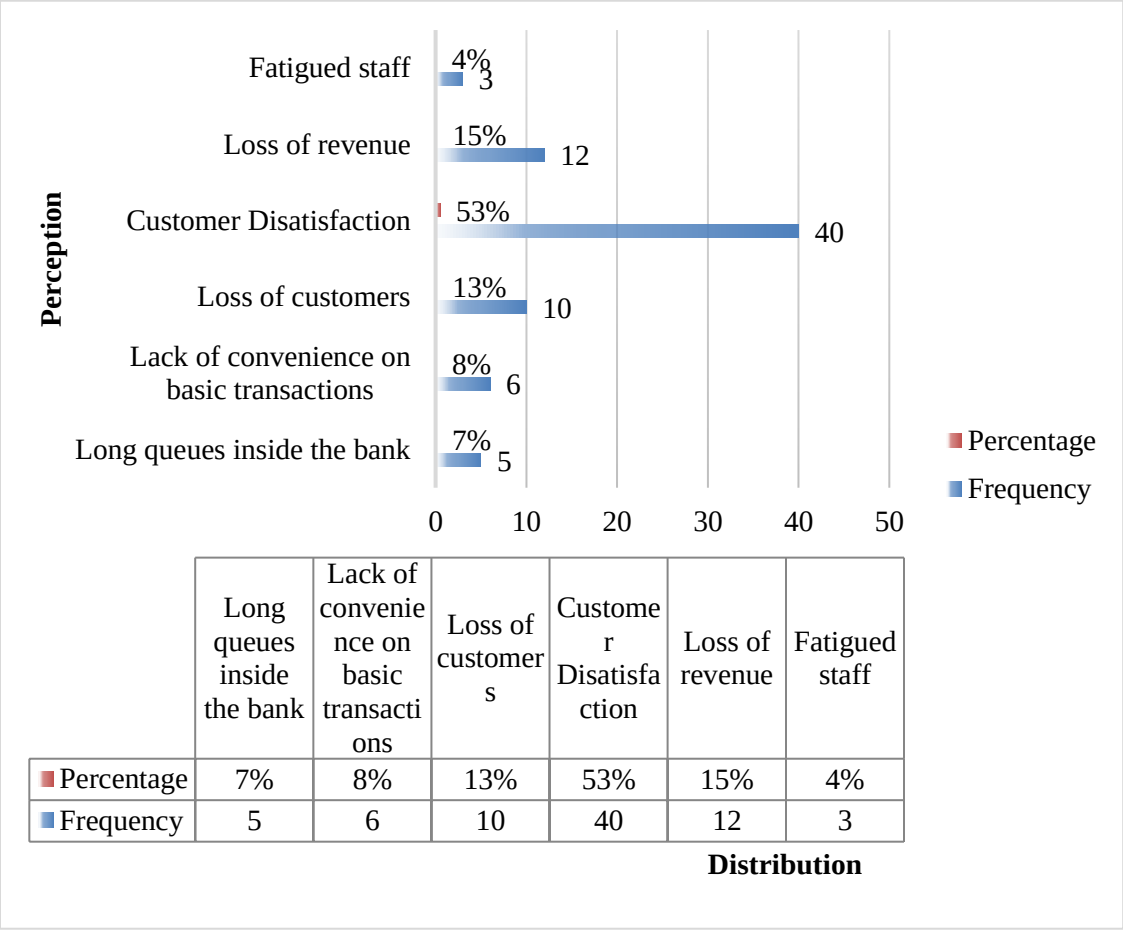
Respondents were further asked to state the challenges they faced as they carried out their ATM transactions. 43% of the respondents reported that the ATM was not interactive as it lacked audio feedback to guide the customer as they did their transactions. While 28% of the respondents observed that ATM had insufficient labeling (the slots on the ATM were not labeled for cash, receipt and card); 17% of the respondents cited language barrier (the ATM used English as its default language). Although the lowest level of education for respondents was Grade 8, 17 per cent still insisted on having at least two languages that customers can choose from, preferably Nyanja as it was a language many people understand in the locality. Six respondents highlighted other challenges, among which was the locality of the ATM. They were of the view that the location was not secure hence they felt insecure to use the ATM late at night. Others reported that the ATM was usually devoid of cash, especially on the weekends. Therefore it was very inconveniencing

for them to cover long distances only to find their transaction being unsuccessful due to insufficient funds in the ATM.

4.4 Challenges of having few ATMS

Figure 5 below shows data on the challenges that few ATMs pose as identified by the respondents. Fifty-three percent (53%) of the respondents indicated that the few ATMs caused dissatisfaction among the customers. Eight percent (8%) of the respondents observed that few ATMs inconvenienced customers. If say a customer did not have enough time to get to the ATM, she or he would be compelled to use an ATM of a different bank in their vicinity. However, such a transaction would incur extra service charges. Further inconvenience arose from long queues on the ATM which might require them to take more time from other personal and professional businesses. Seven per cent of the respondents observed that few ATMs resulted in long queues of customers transacting over the counter which in turn led to congestion of the banking hall, ultimately leading to loss of customers.

Respondents were asked to indicate the impact of the challenges pointed above have on the business of the Bank. Fifteen per cent of the respondents indicated that the Bank would lose considerable revenue; four per cent of the respondents looked at the challenge from the personnel's point of view. They posited that few ATMs resulted in a fatigued workforce. The fatigue arose from the fact that the banking halls were congested and the personnel had to assist customers with basic transactions which could be performed on the ATM.



	Long queues inside the bank	Lack of convenience on basic transactions	Loss of customers	Customer Disatisfaction	Loss of revenue	Fatigued staff
Percentage	7%	8%	13%	53%	15%	4%
Frequency	5	6	10	40	12	3

***Figure 5**: Challenges of having few ATMs in an area*

These findings are consistent with Srinivasa and others (2013), who established that inadequate provision of ATMs forced customers to queue for long hours in the sun just to make a transaction in the Nigerian metropolis. Overcrowding of customers at the ATMs greatly compromised the security of customers' cash and account. They thus concluded that with insufficient ATMs, customers are likely to get a sense of incompetence on the bank's part, isolate them, and increase passiveness.

5. CONCLUSION AND RECOMMENDATIONS

The study was conducted as an investigation into the usage of ATM for improved service delivery with a focus on Cavmont Bank Kalingalinga Branch. The study established that the Branch had only one ATM. In spite of all the respondents being aware of the ATM at the branch, only 62 percent had used the machine. Forty-five per cent of the respondents expressed a lack of knowledge

on how the machine operated hence avoiding to use it all together. Although lack of knowledge on the operations of the ATM played a big role in its non-use by some respondents, it was not entirely the causal factor. The high percentage of non-use of the ATM was attributed to many other factors including lack of ATM cards, security of the location of the ATM and technical issues such as insufficient funds in the machine especially on weekends.

The majority of the respondents considered the ATM at Cavmont Kalingalinga Branch to be user friendly. However, 49 per cent of the respondents considered the ATM to be non-user friendly. This group cited factors such as insufficient labels on the ATM, design of the ATM (namely that the ATM card did not completely enter the machine), and use of the English language as the main drawbacks to the user friendliness of the machine. Some reasons cited for non-user friendliness were simply technological design innovations which the customers were not accustomed to but did not present any major challenge. Majority of respondents indicated that having few ATMs in Kalingalinga would result in customer dissatisfaction which might compel them to seek better service from other banks. This would mean losing both customers and revenue for the bank. It was thus recommended that:-

a) New account holders should be properly oriented to the operations of the ATM. The starter pack of the client should give step by step guide on how the machine works and how to use it.
b) The ATM should be made more user friendly by adding an option of local language from which the customer can choose. The ATM should also have clear labels that will guide the user.
c) The ATM should be made more interactive by adding audio feedback to it. This is especially important to accommodate people with special needs such as the blind.
d) The ATM should have sufficient funds at all times considering that it is the only ATM in the area. This will reduce the inconvenience caused to the customers
e) Cavmont Bank should consider adding more services (for instance funds transfer, airtime purchase and bills payments) to the ATM.

REFERENCES

Adelowo, S.A. (2010). *Challenges of Automated Teller Machine (ATM) Usage and Fraud Occurrences in Nigeria – A Case Study of Selected Banks in Minna Metropolis.* Journal of Internet Banking and Commerce, vol. 15, no.2

Bashir, I. (2014). *Customer Satisfaction Of Automated Teller Machine (ATM) Based On Service Quality*. WEI International Academic Conference Proceedings New Orleans, USA.

Blakstad, O. (2008). *Research Designs. Available at* from www.explorable.com/research-designs Accessed on 26th August, 2016

Hansen, K.T. (1996). *Gender, Generation, and Access to Housing in Zambia*. Gender Research on Housing in Africa. Nordic Africa Institute. pp. 127–44.

Joseph, M. and Stone, G. (2003). An *Empirical Evaluation of US Bank Customer Perceptions of the impact of Technology on Service Delivery in the Banking Sector.* International Journal of Retail and Distribution Management, Vol. 31(4) pp.190-202.

Joseph, M. and Stone, G. (2003). *An Empirical Evaluation of US Bank Customer Perceptions of the Impact of Technology on Service Delivery in the Banking Sector*. International Journal of Retail and Distribution Management, 31(4), 190-202.

Kanika, V. (2014). *Measuring Customer Satisfaction Towards ATM Services - A Comparative Study Of Union Bank Of India And Yes Bank.* Agra: Abhinav Publication.

Karunesh, S. (2011). *Analytical Study of Customer Satisfaction at ICICI Bank with special reference to ATMs.* International Conference on Information and Financial Engineering vol.12.

Omari, R.K. (2012). *An assessment of the use of Automated Teller Machine (A.T.M) of Barclays Bank Ghana Limited Akim Oda Branch.* Unpublished thesis

Prasanthi, B.V. (2015). *Palm Vein Biometric Technology: An Approach to Upgrade Security in ATM Transactions.* International Journal of Computer Applications Vol.112 (9).

Resnick, D. (2013). *Urban Poverty and Party Populism in African Democracies.* Cambridge UP. pp. 71–72.

Srinivasa, P.R. et al., (2013). *An Empirical Study of Customer's Satisfaction in ATM Services*. International journal of management research and business strategy, Vol. 2, No. 4.