



Measuring Standards and Service Quality of Automated Teller Machines (ATMs) in the Banking Industry of Ghana

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ABSTRACT

There is no doubt that the Banking Industry in Ghana is growing enormously. The growth of the Banking Industry in Ghana has emerged as a result of a variety of businesses being executed by individual customers in Ghana as well as proliferation of the Oil and Gas Industry which require Banking Investments. From the year 2000, proliferation and emergence of Nigerian Banks such as United Bank for Africa (UBA), Intercontinental Bank and Zenith Bank have emerged in the Banking Industry of Ghana. Both private and public Banks in Ghana give out their best to customers in terms of Banking Hall Transactions, Internet Banking, Automated Teller Machine (ATM) Banking, Credit Card Transactions etc. The convenience of using ATM for Banking Transactions by customers of Banks in Ghana has a major role to play in customer retention and satisfaction. This research paper focuses on measuring the ATM standards and service quality of Banks in Ghana with a research focus on Intercontinental Bank Ghana (IBG) Ltd (private) and Ghana Commercial Bank (GCB) Ltd (public) as well as other Banks in Ghana. The methodologies used for this research involved interviews with IT officers of the case study Banks and administrations of questionnaires to a number of Bank customers in Ghana. The research, based on its findings, discusses how to improve ATM standards and service quality of the Banking Industry in Ghana for promotion of productivity and enhancement of customer retention and satisfaction.

Keywords: *Automated Teller Machine (ATM), Banking Industry, ICT, Bank(s), Customer Retention, Customer Satisfaction, Transaction*

1. INTRODUCTION

For the past twenty (20) years, the use of Information and Communication Technology (ICT) has grown tremendously. Many Banking industries globally and worldwide are applying ICT for their Banking activities and some Banks use ICT-platform as their main transaction environment. Some examples of these Banking transactions involving the use of ICT include: Internet Banking, ATM Banking, Mobile Device Banking, Credit Card Transactions etc. Almost any transaction being done in Banks worldwide currently, involve the use of ICT. This shows the importance of ICT in the Banking Industry. Transactions are made more: accurately, faster, secure and profitable with the use of ICT in Banking as compared to the manual approach which was being used formally, especially in developing nations.

In Ghana, since 2000 we have witnessed the growth of the Banking Industry through proliferation of Nigerian Banks and other Banks from different countries. Promotion of customer retention by Banks in Ghana requires very good marketing skills of both public and private Banks. This can be done by exhibiting excellent marketing and Banking skills to their customers as well as using ICT to enhance their Banking needs.

Organizational sustainability, which depends on essential excellence in quality, is very important [1]. The developments of ICT and reliable technologies have enabled organizations to provide superior services for customers' satisfaction and retention [2].

This paper is formulated and subdivided as follows: Sections 1.2 and 1.3 elaborates on a brief background of the case study

Banks. Section 2 and 3 discusses the Research Objectives and Methodology of the paper. Section 4 presents an outline of the importance of ICT in the Banking Industry. Section 5 reviews the literature of the paper and Section 6 presents related work in the reviewed literature. Sections 7, 8 and 9 respectively discuss Features, Advantages and Disadvantages of ATM Banking in Ghana. Research findings and discussions are elaborated in Section 10 and Section 11 respectively. Section 12 concludes the paper.

1.1 Background of Intercontinental Bank Ghana (IBG) Ltd

Intercontinental Bank Ghana Limited (IBG) is a financial institution driven by a passionate customer centric philosophy. The Bank's mission "to help stakeholders create



and preserve wealth” is captured in their mantra/pay off: “Happy Customer, Happy Bank” and anchored on the Bank’s belief in customer intimacy. As a Bank, IBG is committed to making customers happy by delivering excellent customer service [3].

With this philosophy, IBG pledges to constantly upscale their processes to delight the customer with better, faster, efficient, courteous and wealth-creating service delivery. IBG received its Universal Banking License from the Bank of Ghana in September 2006 and commenced business soon after following the acquisition of the erstwhile Citi Savings and Loans Limited - one of the then leading savings and loans companies in Ghana [3].

IBG, jointly owned privately by Ghanaians and Nigerians, is a subsidiary of Intercontinental Bank (Nigeria) Plc.

The Bank is committed to its vision of aiming “to be the number one financial services institution in Ghana with a strong regional presence by 2016”, this is evident in the steady growth in its assets and customer base in the past three years. This growth is reflected in the twenty-seven (27) Business Offices the Bank currently operates in which are located in various areas Accra, Kumasi, Tarkwa, Takoradi, Techiman as well as in Tamale. The Bank also has presence in eight (8) agencies operating in Greater Accra, Ashanti and Eastern regions. Plans are also far advanced to open more Business offices thus increasing the presence of the Bank in many other parts of the country. It is projected that IBG’s branch network will be increased to a minimum of thirty (30) by close of 2011. This spread is intended to ensure customers’ convenience in their transactions with IBG in order to introduce their brand value closer to individuals and corporate organizations [3].

1.2 Background of Ghana Commercial Bank (GCB), Limited

The Ghana Commercial Bank (GCB), a state owned Bank was established in May of 1953 mainly for Ghanaian entrepreneurs. However in today’s world this Bank is now the largest indigenous Bank nationwide. This Bank currently has 149 branches located throughout the African nation and continues to provide top quality service at all locations. For many business owners, finding a place to safely store your hard earned money can be hard if there is not a Bank in your local area which meant that your money was not completely safe and you could be robbed at any point [4].

However with the installation of the Ghana Commercial Bank this was no longer such a large issue as most entrepreneurs were able to open up a Bank Account which they could deposit their money into and know that it would be secure. As the Bank continued to grow and new branches were

built, they continued to focus on satisfying customer and shareholder expectations by providing the most cost efficient services and high quality customer service through inter branch networking. This is done by constantly improving the level of customer service ICT and technological information [4].

In 1996 the Ghana Commercial Bank was listed on the Ghana Stock Exchange. Since this listing happened GCB has become one of the most capitalized companies. Continuing to stick their main mission of customer satisfaction GCB is continuing to improve the networking between branches and have restructured their human resource bases and strategies. All of these important improvements lead this Bank to being the highest profit earner within the Ghana Banking Industry in 2001. While serving the whole continent of Africa can be hard, this Bank has established itself in ten regions and one hundred and ten districts so that they can provide Banking Services to as many Ghanaians as possible. This Banking System also works hard to provide their customers with a wide array of different Banking Services so that you can utilize the Bank to its fullest potential. With over two thousand employees, this Bank is well equipped to handle your Banking needs as well as provide customers with a pleasant Banking experience [4].

2. RESEARCH OBJECTIVES

The main objectives of this research paper are to:

- Analyse the current standards, quality of service and trends of ATM Banking in Ghana
- Discuss and suggest improvements of the found ATM standards and trends.

3. RESEARCH METHODOLOGY

- **Interview:** One of the researchers interviewed IT Officers of IBG and GCB to find out the current ATM standards and trends in their Banks and the Banking Industry in general.
- **Questionnaire:** This took the form of printed questions given to a selected group of Banking customers or respondents to answer them. Based on the research study, questionnaires were prepared to know the current ATM service quality, standards and trends in Banking Industry of Ghana.
- **Literature Review:** The authors adopted integrated and exploratory literature about current ATM Standard, trends and service quality of Banks to gain a general overview of ATMs.



4. IMPORTANCE OF ICT IN THE BANKING INDUSTRY

Table 1, below outlines some reasons why ICT is important in the Banking Industry.

Table 1: Importance of ICT in the Banking Industry

Factor	Reason
Security	Security and integrity of data in Banks is very important. Security in terms of the Banks Assets as well as the data of customers is a vital issue for Banks and their customer retention and satisfaction. With the proliferation of ICT, excellent Database Management Systems, cryptography and secure servers with reliable operating systems have taken care of this issue.
Data Storage	Customer Database of Banks depending on the number of customers can be extremely large and difficult to handle manually. Computers and ICT through reliable Database Management Systems (DBMS) such as oracle have solved problems of Bank data storage and shows the importance of ICT in the area of Storage of bank data.
Accurate Transactions	Transactions such as Debiting and Crediting are currently done through the use of ICT and this makes Banking Transactions more accurate in order to yield good profits.
Fast Transactions	Transactions are also faster in Banks through ICT. ICT makes transactions faster through dissemination of required information or data at a quicker and faster rate.
Convenient Transactions	ICT Banking transactions such as ATM, Internet Banking, Mobile Banking etc. help promote customer retention, convenience and satisfaction. Without ICT all these transactions will not be possible.

5. LITERATURE REVIEW

5.1 A Brief History of ATM

It is believed by some people that Luther George Simjian was the inventor of ATM because his idea came first. Some also believe it was Don Wetzel because he's got patents on display in the Museum of American History to prove it. Still others, including the Queen of England believe the inventor of ATM is John Shepherd-Barron. John D. White contacted ATMmachine.com and sent them copies of patents and gave convincing evidence that he is the ATM inventor. James Goodfellow of Scotland also contacted

ATMmachine.com and gave his account, including copies of patents. Jairus Larson contacted ATMmachine.com and, although he did not invent the ATM, he did develop the first "on-line" ATM. Since the patent on an ATM was never applied for until years after Mr. Simjian, confusion on the inventor still exists [5].

5.2 What is an ATM?

Automated Teller Machine (ATM) is a computerised machine that provides the customers of Banks the facility of accessing their accounts for dispensing cash and to carry out other financial transactions without the need of actually visiting a Bank Branch. The ATM cards/debit cards that usually permit cash withdrawal can be used at a Bank's ATM for various transactions [6].

5.3 ATMs in Ghana

Certainly, the most revolutionary electronic innovation in Ghana and the world over has been the ATM. In Ghana, Banks with ATM offerings have them networked and this has increased their utility to customer retention and satisfaction. The Trust Bank (TTB) Ghana, in 1995 installed the first ATM. Not long after, most of the major Banks began their ATM networks at competitive positions. Ghana Commercial Bank started its ATM offering in 2001 in collaboration with Agricultural Development Bank. Almost all Banks with the exception of some rural ones currently operate ATMs in Ghana. The ATM has been the most successful delivery medium for Consumer Banking in Ghana. Customers consider it as important in their choice of Banks, and Banks that delayed the implementation of their ATM systems, have suffered irreparably. ATMs have been able to entrench the one-branch philosophy in this county, by being networked, so people do not necessarily have to go to their branch to do some Banking [7]. Though ATMs have enjoyed great success because of their great utility, it has been recognized that it is possible for Banks to improve their competitive stance and profitability by providing their clients with even more convenience. Once again ICT was what saved the day, making it possible for home and office Banking Services to become a reality. In Ghana, some Banks started to offer PC Banking Services, mainly to corporate clients. The Banks provide the customers with the proprietary software, which they use to access their Bank Accounts, sometimes via the World Wide Web (WWW) usually referred to as Internet Banking. This is on a more limited scale though, as it has been targeted largely at corporate clients [7].



5.4 ATM Service Quality

Organizations are aware that quality of service rendered or provided promulgates strategic competitiveness in dynamic business environment. Literature provides significant relationship between quality of service and firms' performance based on improved productivity, increased market share, enhanced customers' attraction and loyalty, improved staff morale and sustained profitability [8].

Use of ATM has become exceedingly admirable and popular among customers as convenient mode of Banking Transactions. This technological innovation has transformed the Banking Business. Banks in Ghana and worldwide are aggressively adopting ICT modes of transactions which include ATM. The advantages and benefits of using ATM have given new impulsion in dimensions of quality of service and Banks are offering new choices to customers.

Literature review indicates different dimensions of ATM service quality. According to [9] service quality depends on:

- A secure and convenient location of ATMs
- Adequate number of ATMs
- User-friendly system and
- Functionality of ATMs

Results of an examination conducted by [10] revealed the factors that influence customers' satisfaction about ATM service quality include:

- Costs involved in the use of ATM by the customer, and
- Efficient and reliable functioning of ATM.

Results of an examination conducted by [11] depicted that the United States customers' perception of ATM service quality. They found out that Banks should have:

- User-friendly ATMs
- Convenient locations of ATMs
- Secure positions of ATMs and
- adequate number of ATMs installed for essential dimensions of ATM service quality.

In another case study of Botswana relating to ATM service quality, [12] established speed of operation, and waiting time as the important, predictors of ATM service quality.

6. RELATED WORK

Research involving ATM standards and customer retention and satisfaction through introduction of ICT and

ATMs in the Banking Industry has been conducted recently by a number of researchers within the past ten (10) years. Notable among these researchers ideas include how the technology innovation and ICT are helping the Banking Industry to improve productivity and satisfy customers.

Abor, J. (2004) presented a paper titled Technological Innovations and Banking In Ghana: An Evaluation Of Customers' Perceptions. *Abor, J. (2004)*, discussed and elaborated how developments in Information and Communication Technology (ICT) are radically changing the way business is done in Sub-Saharan Africa. The paper further discussed how developments in technology have resulted in new delivery channels for Banking Products and services such as Automated Teller Machines (ATMs), Telephone Banking, PC-Banking, and Electronic Funds Transfer at Point of Sale (EFTPoS). *Abor, J. (2004)* evaluated the perceptions of Banking Customers regarding the effect of technological innovations on Banking Services in Ghana. The study focused on customers with Banks that have at least one form of technological innovation. The results of the study generally indicated that, technological innovation or electronic delivery channels have contributed positively to the provision of Banking Services and the growth of the Banking Industry in Ghana.

Khan M. A. (2010) investigated significant dimensions of ATM (Automated Teller Machine) service quality and its effect on customer satisfaction in Pakistan. He used questionnaires to collect the data from a convenience sample of 500 customers of multinational and national Banks. *Khan M. A. (2010)* revealed that regression results indicated convenience, efficient operation, security and privacy, reliability and responsiveness are significant dimensions of ATM service quality and that ATM service quality positively and significantly contributes toward customer satisfaction. The study makes a significant contribution to the quality management literature because few empirical studies are available when dealing with this aspect of the Banking Sector in Pakistan.

Marfo-Yiadom et al., (2012) discuss that competition and reforms in Ghana's financial sector have brought about a lot of innovation into the Ghanaian Banking Industry. Their study explores how innovative Banking Products are perceived by consumers. Their study used purposive sampling technique to gather data from 288 students from a public university in Ghana. The study revealed that the critical features that influenced customers' choice of Banking Products and their adoption were convenience, reliability, security, flexibility, time saving and ease of use. The most popular innovative products were Automated Teller Machines (ATMs) and E-zwich. Telephone Banking and Credit Cards were not very popular.

Due to the low usage of products such as the telephone and internet Banking, their paper recommended that



Banks in Ghana should embark on an educational campaign to highlight the benefits of these products to the populace.

7. Features and Standards of ATM Banking in Ghana

From the definition of ATM in section 5.2, we know that ATM is a computerised machine used for Banking Transactions. The main features of ATMs in Ghana include, buttons for inputting and typing transactions and a visual display unit (monitor or screen) which allows the customer to visualise and see what he/she is transacting. To start an ATM transaction a customer/user inserts his/her ATM card into the required slot and keys in a Private Identification Number (PIN) for security reasons. The ATM begins to process the customer's transaction and will request the customer to input what he/she wants to process or transact. After the transaction the customer's ATM card is ejected by the ATM machine which is removed by the customer. This basically concludes a simple ATM transaction.

Notable and common ATM transaction standards in Ghana include:

- Cash withdrawal Facility is Available to all ATM Cardholders
- Balance Enquiry Facility is Available to all ATM Cardholders
- Mini Statement Services to all ATM Cardholders

Unfamiliar and rare ATM transactions in Ghana include:

- Funds Transfer Facility Between Own Accounts
- Funds Transfer Facility Between Different Accounts
- Cash Deposit Facility Using an ATM card
- Payment of Direct Tax facility Using an ATM Card

8. Advantages and Benefits of ATM Banking in Ghana

As elaborated and enumerated above, the main advantages of ATMs in the Banking Industry of Ghana and worldwide has to do with convenience to customers. Convenience in terms of joining long queues in the Banking Hall, too busy to go to the Bank and opting to withdraw cash anytime and at a close location as well as checking/printing balance and mini statement of accounts are some notable benefits.

9. Disadvantages and Challenges of ATM Banking in Ghana

Notable disadvantages of ATM Banking in Ghana include:

- The ATM may not be user friendly and difficult to use.
- ATM card may get stuck in the machine or jam up which may result in transaction failure.
- Not all customers stay close to the location of an ATM, so ATM Banking doesn't guarantee a Banking Transaction.
- There is the issue of security; a robbery is more viable at the location of the ATM as compared to a Banking Hall. Where the location of the ATM is in a secluded or isolated area, a robbery can occur. So Banks have to take caution when setting up ATMs.
- There is not 100% guarantee of the ATM functioning, so dependence on ATM may fail the customer at times.
- Though some transaction may be convenient and useful to the customer, not all advanced transaction such as cash deposits and fund transfers can be done by ATMs in Ghana.

10. RESEARCH FINDINGS

The questionnaires were constructed and adopted based on the literature review hypothesis in Section 5.4. Questionnaires were administered to customers of IBG, GCB as well as Other Banks. A sample size of one hundred and twenty (120) questionnaires was disseminated to Bank Customers. One hundred and two (102) accurate and precise responses in accordance to the hypothesis were received. This is depicted in Table 2 below and shows more patronage of customers in GCB (35.3%) than the IBG and Other Banks.

Table 2: Questionnaire Distribution and Responses

CUSTOMER DESIGNATION	NUMBER	PERCENTAGE
IBG	36	35.3%
GCB	54	52.9%
Other Banks	12	11.8%
TOTAL	102	100%

- Question 1 (Q1) of the questionnaire asked about the gender of the respondents. The results below in Table

3, reveals that the male respondents (58.5%) were more than the female respondents (41.2%).

Table 3: Gender of Bank Customer Respondents (Q1)

GENDER	NUMBER	PERCENTAGE
Males	60	58.5%
Females	42	41.2%
TOTAL	102	100%

- Question 2 (Q2) of the questionnaire asked about the age category of the respondents. The results below in Table 4, reveals that majority of the respondents are youthful and in the range of 19-28 years (50%) followed 29-39 years (44.1%).

Table 4: Age Category of Bank Customer Respondents (Q2)

AGE	NUMBER	PERCENTAGE
More than 50 years	0	0%
40-50 years	6	5.9%
29-39 years	45	44.1%
19-28 years	51	50%
15-18 years	0	0%
TOTAL	102	100%

- Question 3 (Q3) of the questionnaire asked how long customers had owned a Bank Account. The results below in Table 5, reveals that most the respondents have owned a Bank Account for 6-10 years (53%) and 3 respondents have owned a Bank Account for more than 20 years (2.9%).

Table 5: Years of Bank Account Ownership - Bank Customer Respondents (Q3)

YEARS	NUMBER	PERCENTAGE
1-5 years	24	23.5%
6-10 years	54	53%
11-15 years	21	20.6%
16-20 years	0	0%
More than 20 years	3	2.9%
TOTAL	102	100%

- Question 4 (Q4) of the questionnaire asked whether customers owned an ATM Card. The results below in Table 6, reveals that most the respondents (99) owned an ATM Card (97%). Very few respondents (3) did not own an ATM Card (3%).

Table 6: Ownership of ATM Card - Bank Customer Respondents (Q4)

ATM CARD OWNERSHIP	NUMBER	PERCENTAGE
Yes	99	97%
No	3	3%
TOTAL	102	100%

- Question 5 (Q5) of the questionnaire asked how long respondents (customers) had owned an ATM Card. The results in Table 7, shows that majority of the respondents (51) had owned an ATM card for 1-5 years (50%), followed by 6-10 years (35.3%) and 11-15 years (11.8%). However three (3) of the respondents didn't have any duration because they didn't own an ATM Card as shown above in Table 6.

Table 7: Duration Ownership of ATM Card - Bank Customer Respondents (Q5)

ATM CARD OWNERSHIP DURATION	NUMBER	PERCENTAGE
1-5 years	51	50%
6-10 years	36	35.3%
11-15 years	12	11.8%
16-20 years	0	0%
Non ATM Card Ownership	3	2.9%
TOTAL	102	100%

- Question 6 (Q6) of the questionnaire asked whether respondents (customers) engaged in ATM Banking. With reference to Table 8, the study reveals that majority of the respondents (90) engaged in ATM Banking (88.2%) and 12 of the respondents (11.8%) did not engage in ATM Banking.



Table 8: Engagement in ATM Banking - Bank Customer Respondents (Q6)

ATM Usage	NUMBER	PERCENTAGE
Yes	90	88.2%
No	12	11.8%
TOTAL	102	100

- Question 7 (Q7) of the questionnaire asked how often respondents (customers) engaged in ATM Banking. With reference to Table 9, the study reveals that majority of the respondents (39) don't have a specific time for ATM Banking (38.2%) and perform ATM Banking when necessary. 21 of the respondents engaged in ATM Banking every two weeks and two sets of 15 of the respondents engaged in ATM Banking 1-3 times a week and twice a month.

Table 9: ATM Banking Frequency - Bank Customer Respondents (Q7)

FREQUENCY OF ATM BANKING	NUMBER	PERCENTAGE
1-3 times a week	15	14.7%
Every two weeks	21	20.6%
Twice a Month	15	14.7%
When necessary, no specific time	39	38.2%
Non ATM Users	12	11.8%
TOTAL	102	100%

- Question 8 (Q8) of the questionnaire asked the reasons why respondents (customers) don't engage in ATM Banking. The results depicted in Table 10 reveal that 12 of the respondents do not engage in ATM Banking because most of the time ATMs provided by their Bank's don't function and the ATMs provided by their Banks are not user friendly.

Table 10: Reasons for not Engaging in ATM Banking - Bank Customer Respondents (Q8)

REASONS	NUMBER	PERCENTAGE
The ATM provided by my Bank is not in a safe, secure and	0	0

convenient location		
Most of the time, the ATM provided by my Bank doesn't work or function	6	50%
The ATMs provided by my Bank is not user friendly	6	50%
The ATMs provided by my Bank are inadequate	0	0
TOTAL	12	100%

Figure 1, further depicts reasons why customer respondents don't engage in ATM Banking

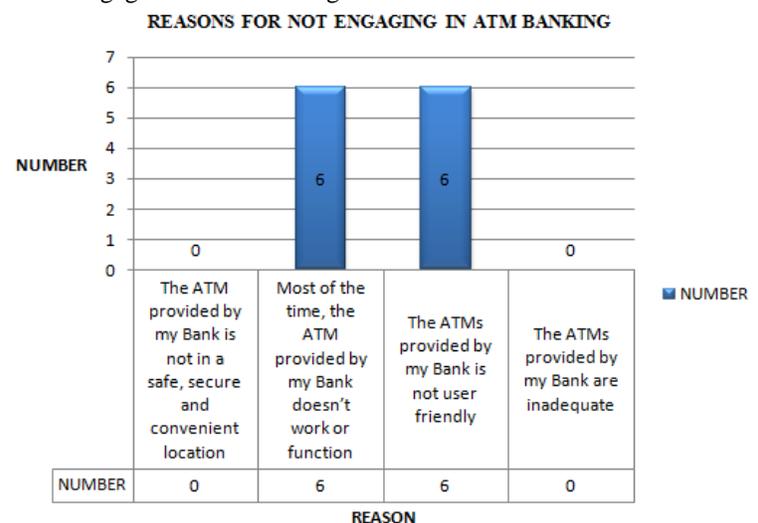


Figure 1: Reason why Respondents Don't Engage in ATM Banking

- Question 9 (Q9) of the questionnaire asked about which ATM transactions respondents (customers) usually perform. With reference to Table 11, the study reveals that majority of the respondents (90) use ATM Banking for Cash withdrawal (52%), 57 respondents (33%) use ATM Banking for Balance Enquiry and 27 respondents (15%) use ATM Banking for Mini Statement Service. The study however, revealed that none of the respondents perform ATM Banking Transactions involving cash deposit and cash transfer to their own accounts and different accounts.



Table 11: ATM Banking Transactions - Bank Customer Respondents (Q9)

ATM BANKING TRANSACTIONS	NUMBER	PERCENTAGE
Cash Withdrawal	90	52%
Balance Enquiry	57	33%
Mini Statement Services	27	15%
Cash Transfer facility between Own Accounts	0	0%
Cash Transfer facility between Different Accounts	0	0%
Cash Deposit facility using an ATM card	0	0%
TOTAL	174	100%

Figure 2 further depicts ATM Banking Transactions of customer respondents.

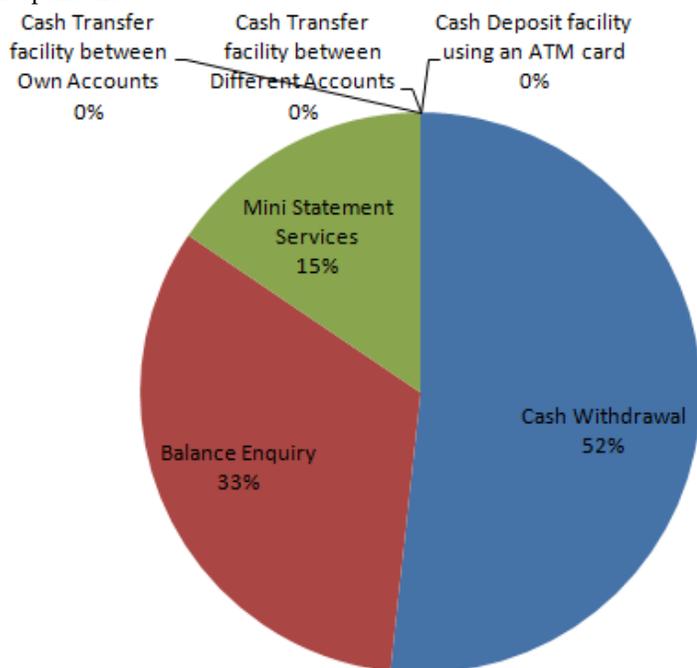


Figure 2: ATM Banking Transactions of Respondents

- Question 10 (Q10) of the questionnaire asked whether respondents (customers) can use their ATM Cards to deposit cash. With reference to Table 12, the study reveals that most the respondents (51) do not use their ATM Card to deposit cash and 51 of the respondents

(50%) don't know whether their ATM Cards could be used for a cash deposit transaction. The study also revealed that none of the respondents affirmed that they could use their ATMs cards to deposit cash.

Table 12: ATM Card Allows Cash Deposit into Personal Account - Bank Customer Respondents (Q10)

ATM CARD ALLOWS CASH DEPOSIT	NUMBER	PERCENTAGE
Yes	0	0%
No	51	50%
Don't Know	51	50%
TOTAL	102	100%

- Question 11 (Q11) of the questionnaire asked whether respondents (customers) can deposit cash into another personal account using their ATM Cards. With reference to Table 13, the study reveals that most the respondents (54) don't know whether their ATM Cards could be used for a cash deposit transaction into another personal account and 48 respondents do not use their ATM Card to deposit cash into another personal account. The study also revealed that none of the respondents affirmed that they could use their ATM cards to deposit cash into another personal account.

Table 13: ATM Card Allows Deposit of Cash in Your own Account of Another Bank - Bank Customer Respondents (Q11)

ATM CARD ALLOWS CASH DEPOSIT INTO ANOTHER PERSONAL ACCOUNT	NUMBER	PERCENTAGE
Yes	0	0%
No	48	47%
Don't Know	54	53%
TOTAL	102	100%

- Question 12 (Q12) of the questionnaire asked whether respondents (customers) can transfer cash into another person using their ATM Cards. With reference to Table 14, the study reveals that most the respondents (54) don't know whether their ATM Card could be used for a cash deposit



transaction into another person’s account and 48 respondents do not use their ATM Card to deposit cash into another personal account. The study also revealed that none of the respondents affirmed that they could use their ATMs cards to deposit cash into another person’s account.

Table 14: ATM Card Allows Deposit of Cash into Another Person Account - Bank Customer Respondents (Q12)

ATM CARD ALLOWS CASH DEPOSIT INTO ANOTHER PERSON’S ACCOUNT	NUMBER	PERCENTAGE
Yes	0	0%
No	48	47%
Don’t Know	54	53%
TOTAL	102	100%

Most of the time transactions receipts are not available	12	11.8
Sometimes there are too many customers by the ATM when I want to make a transaction	9	8.8
Most of the there are time too many customers by the ATM when I want to make a transaction	3	2.9
The ATMs provided by my Bank is not 24 Hour Service	6	5.9
Non ATM Users	12	11.8
TOTAL	102	100%

- Question 13 (Q13) of the questionnaire asked which problems and challenges respondents (customers) face when using ATMs. With reference to Table 15, the study reveals that most the respondents (60) had a problem/challenge with the fact that sometimes transaction receipts are not available. 12 of the respondents complained of their transactions receipts not being available most of the time. 9 of the respondents faced challenges/problems of too many customers by the ATM sometimes and 3 of the respondents had the same challenge/problem of customers by the ATM most times. 6 of the respondents had a challenge of the Bankers not providing 24 hour ATM service. The study also revealed that none of the respondents affirmed their ATM cards got stuck in the machine.

Table 15: Challenges When Using an ATM in Ghana (Q13)

ATM BANKING CHALLENGES	NUMBER	PERCENTAGE
My ATM Card gets stuck in the machine too easily	0	0
Sometimes transaction receipts are not available	60	58.8

Figure 3 further depicts challenges respondents face in ATM Banking Transactions of customer respondents

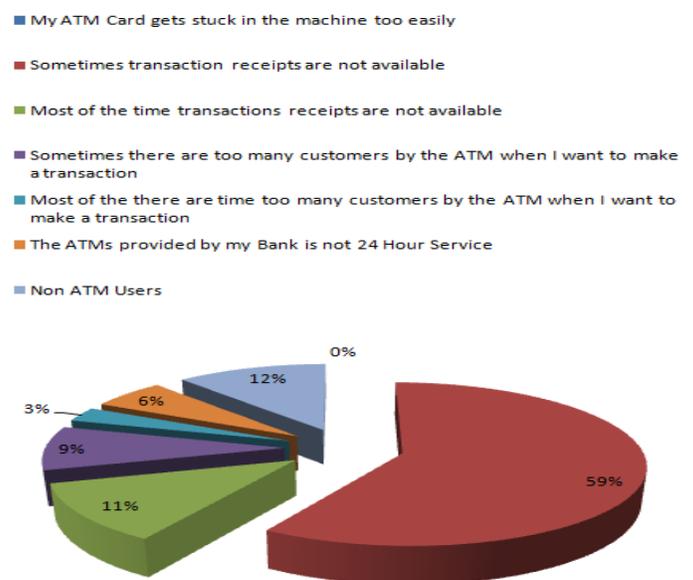


Figure 3: Challenges When Using an ATM in Ghana

11. DISCUSSIONS

The analysis and finding of the research proved that most customer respondents of the Banks owned an ATM Card and engaged in ATM Banking. Reference from Table 8 also showed that patronage of ATM Banking by the respondents was



very high. Only a few customers did not engage in ATM Banking because of reasons depicted in Table 10 and Figure 1. The research study also revealed that ATM Banking in Ghana does not involve cash deposit and transfer transactions and this was also confirmed through interview with the IT officers of the case study Banks. The interview also confirmed that some ATMs in Ghana can be used for cash deposit and transfer but that compartment has been deactivated and isn't implemented due to reasons beyond his knowledge. Most customers affirmed "No" or "Don't Know" to the questions on cash deposit and transfer. Summary of responses to question 14 (Q14) and 15 (Q15) of the questionnaire showed that quality of ATM Service quality in the Banking Industry of Ghana had grown over the years and services keep improving with time. Other respondents complained ATMs are not functional on weekends and holidays. Responses also included Banks should service the ATMs regularly and make receipts available all times because the receipts are very important in the ATM usage. Customers responded that more ATM features such as cash transfers and deposits which reflected as 0% in Tables 11, 12, 13, 14 and Figure 2 should be introduced. Customers continued to respond that more ATM machines should be provided at vantage points in consultation with customers. ATM Card renewal should not be difficult as it is now and ATM charges should also be reduced. In summary, measurement of ATM service quality, standard and patronage in the Banking Industry in Ghana is high but referring to the findings of this research, there is more room for improvement order to promote customer retention and satisfaction.

12. CONCLUSION & RECOMMENDATION

12.1 Conclusion

The rapid proliferation and diffusion of ICT in the Banking Industry of Ghana provides a platform to use modern technologies to develop operational efficiency and quality of service to attain and retain customers. The quick growth of ATMs in Ghana since 1995 offers opportunities to Banks to be strategic and advantageously use ATM service for customers' Banking needs and passion. For effective customer responses, satisfaction and retention, Banks in Ghana should proactively monitor customers' preferences with regard to use of ATMs and try to implement these preferences in the features of ATMs. Banks in Ghana should focus on important aspects of user friendliness, ATM functionality, availability of transaction receipts, security and privacy as well as frequent monitoring and maintenance of ATMs.

12.2 Recommendation

This paper recommends that the Banking Industry in Ghana should augment and diversify their services through ATMs. Banks should also improve ATM features to suit customers and use this medium to build a strong and a sustainable relationship with customers.

ACKNOWLEDGEMENTS

We wish to express our profound gratitude to IT officers of IBG and GCB, who granted us audience for an interview and also to the Bank Customers who filled the questionnaires. This helped us to know the current trends of ATMs in Ghana and gave us good research directions in order to produce this research paper.

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