

**THE CONTRIBUTION OF ELECTRONIC BANKING TO BANKS'
PROFITABILITY AND SERVICE DELIVERY.A CASE STUDY OF FIDELITY
BANK GHANA LTD.**

**BY
BONSU, FREDA AMPONG (MRS)
(PG9620113)**

**A Thesis submitted to the School of Business, Kwame Nkrumah University of
Science and Technology in partial fulfillment of the requirements for the
degree of**

MASTERS IN BUSINESS ADMINISTRATION (FINANCE)

AUGUST, 2015.

DECLARATION

I, hereby declare that this submission is my own work towards the Masters in Business Administration and that, to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

BONSU, FREDA AMPONG (MRS)	13 th AUGUST, 2015
(PG9620113)	Signature	Date

Certified by:

DR. KWAME MIREKU	13 th AUGUST, 2015
Supervisor's Name	Signature	Date

Certified by:

PROF. J.M FRIMPONG	13 th AUGUST, 2015
The Dean, KSB	Signature	Date

DEDICATION

This work is dedicated to my loving husband, Mr. Ricky Nesta Bonsu; my beloved children, Victoria Afrifaa Mensah-Bonsu and Frederick Agyemang Mensah- Bonsu and the newly born baby Kofi. Thank you all for your support, love and care. You have been a great source of inspiration to me throughout this project work. May God bless you all.

ACKNOWLEDGEMENT

I am first and foremost grateful to the Almighty God for having brought me this far. My sincere appreciation goes to Dr. Kwame Mireku, my supervisor for his useful advice, patience, guidance, direction and counsel in seeing me through this study.

I would also like to take this opportunity to render my heartfelt gratitude to my beloved mother, Madam Cecilia Boateng for her immense contribution towards my education and for being there for me.

My appreciation goes to the staff of Fidelity Bank Ghana Ltd, Kumasi branches for their great assistance and to Mr. Prince Kusi-Mensah, who inspired and encouraged me into achieving this success.

To my course mates; Abena Anane Kwayie, Abraham Oppong-Tawiah, Helbert Kojo Sam and Enoch Kofi Abenney. It was great learning and working together for our common goals.

ABSTRACT

Electronic banking is changing the face of banking within the last decade. The aim of the study was to examine e-banking's contribution to profitability and service delivery of Fidelity Bank Ghana Limited. In achieving the aim of the study, the following objectives were espoused: Ascertain the electronic banking services offered by FBL; Examine the contributions of e-banking to FBL's profitability; Assess if the provision of these services has affected the service delivery of FBL; and Understand the challenges faced by FBL in the introduction of electronic banking services. The population comprises of all the branches of Fidelity Bank Limited. In selecting the respondents, both purposive and stratified random samplings were used. The purposive sampling was adopted to select managers who are in charge of electronic banking. The stratified random sampling was also adopted to select respondents from all the departments in the bank. Both primary and secondary data were used with questionnaires as the main instrument used for the collection of primary data. Data was analysed using inferential analysis including mean, standard deviation, charts, tables and percentages. The study also found out that e-banking products makes delivery of banking services very convenient with less queuing unlike the traditional branch banking. Again e-banking transactions are secured, the e-banking products are very easy to use and the various e-banking products do not share the personal information of customers with others. The study also revealed that electronic banking contributes to profitability of banks since offering e-banking is quite cheaper than the traditional branch banking. The study recommended that the Government of Ghana should provide the necessary measures in place in terms of legislations and infrastructure to create the enabling environment for electronic banking to thrive in Ghana which will intend help to generate revenue for the country through the charges paid as VAT by the banks.

TABLE OF CONTENTS

TITLE PAGE	i
DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENT	iv
ABSTRACT	v
TABLE OF CONTENTS	vi
LIST OF TABLES	viii
LIST OF FIGURES	ix
CHAPTER ONE	1
INTRODUCTION	1
1.0 BACKGROUND OF THE STUDY	1
1.1 PROBLEM STATEMENT.....	4
1.2 OBJECTIVES OF THE STUDY.....	5
1.3 RESEARCH QUESTIONS	5
1.4 RELEVANCE OF THE STUDY	6
1.5 THE SCOPE AND LIMITATIONS OF THE STUDY	7
1.6 ORGANISATION OF THE STUDY	7
CHAPTER TWO	9
LITERATURE REVIEW	9
2.0 INTRODUCTION	9
2.1 THE CONCEPT OF E-BANKING	9
2.2 E-BANKING TOOLS	10
2.2.1 Internet Banking	10
2.2.2 Mail Banking	12
2.2.3 Mobile/Telephone banking	12
2.2.4 Point-of-Sale Transfer Terminals (POS)	14
2.2.5 PC Banking.....	14
2.2.6 Automated Teller Machine (ATM)	14
2.3 E-BANKING’S CONTRIBUTION TO BANKS’ PROFITABILITY.....	15
2.4 SERVICE DELIVERY.....	17

2.5 CHALLENGES OF E-BANKING ADOPTION	18
CHAPTER THREE.....	28
RESEARCH METHODOLOGY	28
3.0 INTRODUCTION	28
3.1 RESEARCH DESIGN.....	28
3.2 POPULATION OF THE STUDY	29
3.3 SAMPLING SIZE AND SAMPLING TECHNIQUE	30
3.4 DATA SOURCES AND COLLECTION	31
3.5 DATA ANALYSIS	32
3.6 RELIABILITY AND VALIDITY OF DATA	32
3.7 ORAGNISATIONAL PROFILE.....	33
CHAPTER FOUR	34
RESULTS AND ANALYSIS	34
4.0 INTRODUCTION	34
4.1 DEMOGRAPHICS	34
4.2 ELECTRONIC BANKING SERVICES OFFERED BY FBL	39
4.3 E-BANKING’S CONTRIBUTIONS TO FBL’S PROFITABILITY.	43
4.4 CHALLENGES FACED BY FBL IN INTRODUCING E-BANKING SERVICES .	47
4.5 CONTRIBUTION of e-banking TO service delivery of FBL.....	53
CHAPTER FIVE	57
SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION	57
5.0 INTRODUCTION	57
5.1 SUMMARY OF FINDINGS	57
5.2 CONCLUSION.....	58
5.3 RECOMMENDATIONS.....	58
REFERENCES	60
APPENDIX I.....	67
APPENDIX II.....	72

LIST OF TABLES

Table 3.1 Sample unit and size	31
Table 4.1 The electronic banking products provided.	42
Table 4.2 E-banking's contributions to FBL's profitability	43
Table 4.3 One-way Anova Analysis of contributions of e-banking services to FBL's profit.	46
Table 4.4 The challenges faced by FBL in introducing e-banking services.....	47
Table 4.5 Delivery of service through ATM	53
Table 4.6 Delivery of service through internet banking	54
Table 4.7 Delivery of service through mobile/telephone	55

LIST OF FIGURES

Figure 2: Internet banking model	12
Figure 4.1: Response rate	34
Figure 4.2 Marital status of respondents.....	35
Figure 4.3 Age of respondents.....	36
Figure 4.4 Educational level of respondents.....	37
Figure 4.5 Number of years worked by respondents.....	38
Figure 4.6 E-banking services provided by Fidelity Bank Limited.....	39
Figure 4.7 Importance of the electronic banking services offered by FBL	40
Figure 4.8: Mediums through which Fidelity advertise the e-banking products.....	41
Figure 4.9 E-banking services are more profitable than traditional banking services.....	45
Figure 4.10: Non-difference in profitability	45
Figure 4.11 The cost of adoption.....	49
Figure 4.12 The cost of e-banking services to the low income earner	49
Figure 4.13 The level of technological illiteracy among customers.....	50
Figure 4.14 Preference for traditional banking by customers.....	51
Figure 4.15 Adoption of e-banking by customers	51
Figure 4.16 Length of time in using e-banking products.....	52

CHAPTER ONE

INTRODUCTION

1.0 BACKGROUND OF THE STUDY

Banks play a vital and dynamic part in a country's financial and economic development. The development of a country is exceptionally affected by successful banking in the different areas of the economy. Specialists in the banking industry confront an expansive number of complex difficulties in the worldwide commercial center. It is vital for banks to better comprehend the changing needs of customers so as to receive the most recent data innovation framework in order to contend more adequately with other worldwide associations (Malhotra & Mukherjee, 2004).

The revolution of Information Technology (IT) has influenced every facet of life, among them is the financial sector. The presentation of electronic banking has revolutionized and redefined the way banks operate now. E-banking is a quick spreading service that permits clients to utilize the computer to access account-specific information and potentially direct exchanges from a remote area - for example, home or the workplace. ATM cards, credit cards ,debit cards, smart cards ,POS ,all these have eased up human life to an extent that today life without these happen to be hard and loaded with inconveniences. The financial business over time has opened to noteworthy change that can be called e-developments which is progressing quickly in all areas of financial intermediation and financial markets, for example, e-finance, e-money, electronic banking (e-banking), e-brokering, e-insurance, e-exchanges, and even e-supervision. The newly introduced technology is becoming the most vital element in the future of banking, influencing their marketing and business strategies. The appropriation of e-banking began to happen quite extensively as a channel of circulation for financial

services due to fast advances in technology and intensive competitive banking markets in recent years (Auta, 2010).

Onay *et al* (2008) states that “internet has changed the dimensions of competition in retail banking. The presentation of PC banking, ATMs and phone banking are the cornerstones of e-finance. The increased selection and penetration of Internet has added a new dispersion channel to retail banking: Internet/Online-banking”. Allen *et al* (2002) define E-finance as "the procurement of financial services and markets utilizing electronic communication and reckoning" and today retail banks are changing to multi-channel dispersion of financial services in half and half stages where the customary services of banks are provided through both "blocks and mortar" branches and Internet. Furthermore, industry analysis illustrating the potential effect of electronic banking depending on cost savings, income development and danger profile of the banks have additionally created significant premium and theory about the commitment of electronic saving on account management industry (Berger, 2003). According to Berger, “keeping money through electronics saves money, for occasion, and the web, has risen as a key asset for accomplishing higher effectiveness, operational control and cost savings by supplanting paper based and work escalated routines with automated process in this manner prompting higher productivity and profitability”.

In Ghana, the banking business has been undergoing fast changes as a result of technological innovations, increased awareness and demands from customers. In the 21st century, the banking business operates in a complex and competitive environment characterized by these changing conditions and profoundly unpredictable economic climate. As per Owusu (1997), “innovations in telecommunications, data processing, and

other related technologies (known collectively as "data technology") are often credited with helping to fuel solid development in many economies". It seems apparent then that, innovations in technology affect the banking and budgetary services, as well as an economy's direction and its ability for continued development. "Great service quality is generally regarded as an approach to retain existing customers and acquire new ones, reduce expenses, enhance great corporate image, generate positive recommendations, and improve profitability" (Kang & James, 2004).

The practice of excellent service delivery integrated with consumer items is a powerful generator to cater for customers' needs and also engage them. Considering the fact that numerous banks offer undifferentiated products in a rival marketplace, banks are giving careful consideration to service delivery in order to pick up a greater advantage over their competitors. "Banks that deliver quality services can pick up a competitive edge in terms of higher revenue hence benefit, customer loyalty and customer retention" (Kumar *et al.*, 2010). A number and dynamic money related sector is fundamental to every country to the extent of economic development and monetary solidness as far as the whole budgetary system is concerned. As a result, data and technological development by banks is significant to maximize returns and pull in more customers who are becoming complex and demanding for better and quality service. This change includes the usage of computer technology and interchanges to replace manual and paper operations with electronic operations; electronic banking (e-banking) is normally the method adopted by banks (Salhi & Alipour, 2010). The accessibility of e-banking is expected to affect the mixture of budgetary services produced by banks, the manner in which banks deliver these services and the resulting money related performances of these banks. This present study seeks to examine the commitment of Electronic banking to

banks' profitability and service delivery with emphasis on Fidelity Bank Ghana Limited (FBL).

1.1 PROBLEM STATEMENT

The Ghanaian banking industry has transformed tremendously over the last decade. Previously the banking industry was without simple electronics like ATM and SMS alert. This made all customers of banks to personally walk to the banking hall to be able to transact simple transactions like checking account balances, verifying deposits and making withdrawals. This led to long queues, energy exacting and time consuming, and on the whole it was costly (Appiah & Agyemang, 2005). Physical cash, long distant travelling and paperwork characterized most of the payment systems in Ghana. However the situation has changed in recent times due to the introduction of electronic banking services into the Ghanaian banking industry by various financial institutions. Technological follow ups like the ATMs, Electronic Funds Transfer at Point of Sale (EFTPOS), internet banking, SMS alert, credit cards and debit cards have graced the Ghanaian banking environment. They further argue that these highly economic innovations go a long way to decrease drastically the pressure on manual services to banks' customers which enhance services delivery and also improve banks profitability. Marfo-Yiadom & Ansong (2012) also stress that "the ATMs (Automated Teller Machines) have been the major or ultimate game changing electronic innovation in the country". The most important goals of managers of for-profit entities are to maximize shareholders' wealth and company profit and banks are of no exception. However, research on the contribution of electronic banking to a bank's profit is insufficient and the available studies are more of the Australian, European and US banking industry. To the best of the author's knowledge, there are just a few of such studies on electronic

banking's contribution to profitability and service delivery in Ghana. The problem of the study therefore is to investigate the electronic banking products and services, and the extent to which they contribute to the bank's profit and service delivery in the banking sector of Ghana.

1.2 OBJECTIVES OF THE STUDY

The general objective of the study is to examine e-banking's contribution to the profit and service delivery of Fidelity Bank Ghana Limited. The study specifically seeks to;

1. Ascertain the electronic banking services offered by FBL.
2. Examine the contributions of e-banking to the profitability of FBL.
3. Assess if the provision of these services has affected the service delivery of FBL.
4. Understand the challenges faced by FBL in the introduction of electronic banking services.

1.3 RESEARCH QUESTIONS

Based on the research objectives, the study will test the following questions:

1. What electronic banking services are offered by FBL?
2. How does electronic banking contribute to the profitability of FBL?
3. Has the provision of these services affected the service delivery of FBL?
4. What challenges are faced by FBL in the introduction of electronic banking services?

1.4 RELEVANCE OF THE STUDY

The utilization of ICT in the banking industry has affected service delivery as well as the banks' profits. Many banks are moving gradually from the traditional way of banking and are gradually introducing ICT into their service delivery. This work seeks to examine the contribution of the use of electronic services on the profitability and service delivery of banks with emphasis on FBL Ghana and it would be of great significance to FBL, other commercial banks, the Regulatory Body (Bank of Ghana), the government, customers of FBL and the academia. In the past decade, Ghana has experienced the springing up of a dozen of banks and each of them are having their unique brand and characteristics. This has created a high competitive level in performance, quality, and financial services prices. For these banks to be in competition they ought to be aware of the fast and ceaseless development of data technology and telecommunications which have encouraged the acquaintance of electronic services with the banking activities. The importance of this study comes from the way that it explores the current issues in the electronic banking services, and addresses the questions encompassing the commitment of e-banking to benefits and service delivery to banks in Ghana as this point has become one of the most essential subjects for the banking sector. It is further expected that this study will provide to Bank of Ghana, in this way the regulator, the needed evidence to further errand the banks to strengthen their area of operations in terms of technology in order to better serve their customers and hence earn benefit through revenue generation.

The outcome of this study will provide evidence for the other commercial banks to improve upon their electronic banking services so that prospective customers will have better experiences with the service and hence the bank's profit will be affected through the revenue generated. Again, the outcome of the study will bring out the importance of

electronic banking services to the customers and how service delivery has affected these customers. This study will be of great benefit to the government of Ghana in the area of policy making that concerns the financial sector of the economy. In recent times, the government has introduced VAT to the banking sector and through the charges from the e-banking services, the banks can raise revenue for the government. Finally, the study will add to literature in the area of academics whereby it will be a guideline to students who would be undertaken similar projects and to the public as a whole.

1.5 THE SCOPE AND LIMITATIONS OF THE STUDY

The scope of the study will be limited to the electronic banking services provided by Fidelity Bank Ghana Ltd. Investigation will focus on some selected branches of Fidelity Bank Ghana Ltd. in Kumasi in the Ashanti Region of Ghana.

The study is highly constrained to the researcher due to the fact that there is not a ready data available to the subject matter. Another case in point is the fact that the busy schedules of the branches of Fidelity Bank Ghana Ltd will make the study very cumbersome in that going for relevant information or data to aid the study would be stressful, and also due to the confidentiality clauses of FBL, data needed is not readily available. The administering of questionnaires to busy respondents will pose a limitation to the study.

1.6 ORGANISATION OF THE STUDY

The entire research was organized into five sections and the outline of each chapter is given as takes after: Chapter One discussed the Foundation of the Study, Statement of the problem, Specific and General Objectives of the Study, Research Questions related to

the objectives, Relevance of the Study and Scope/limitations of the study. Chapter Two: This was on Literature reviewed from relevant textbooks, diaries, websites and other referenced sources. It likewise included the theoretical framework used for the study. Chapter Three covered the organization profile and research methodologies used for the study. Chapter Four covered the presentation and investigation of information by method for figures, graphical presentation and insights. Chapter Five covered an outline of the research, conclusion and recommendation on the commitment of electronic banking to a bank's profitability and service delivery with FBL as the case study.

CHAPTER TWO

LITERATURE REVIEW

2.0 INTRODUCTION

This chapter examines the literature pertaining to the research topic. The chapter begins with a review of the concept of electronic banking and some analysis of certain key e-banking tools such internet banking, ATM, telephone banking and PC banking. The chapter continues with the concept of service delivery and how e-banking contributes to profits of banks. Lastly the challenges of adopting e-banking are discussed.

2.1 THE CONCEPT OF E-BANKING

According to Marsh (2005) “e-banking is having 24 hour access to banking operations such as through an Automated Teller Machine (ATM) with Personal Identification Number (PIN) or making a direct deposit into checking or saving accounts”. Additionally, Insely & Fleming (2000) argue that “e-banking is a general term for a process by which a customer may conveniently perform banking transactions electronically without visiting a brick and mortar institution”. Bhattacharjee (2001) expands this definition by stating that “e-banking is as an integrated system that can provide customers flexible, convenient and inexpensive platform with integrated services of online personal banking products including online checking and saving accounts, money market accounts, certificate of deposit, credit cards, home equity loan, home mortgage, insurance, investment services, portfolio management and other related financial services”. Thus the electronic platform eliminates the traditional way of banking whereby customers had no option than to walk to a bank to perform transactions. It means that with e-banking the

customer can conduct his/her transactions anytime, anywhere without having to walk to a bank.

2.2 E-BANKING TOOLS

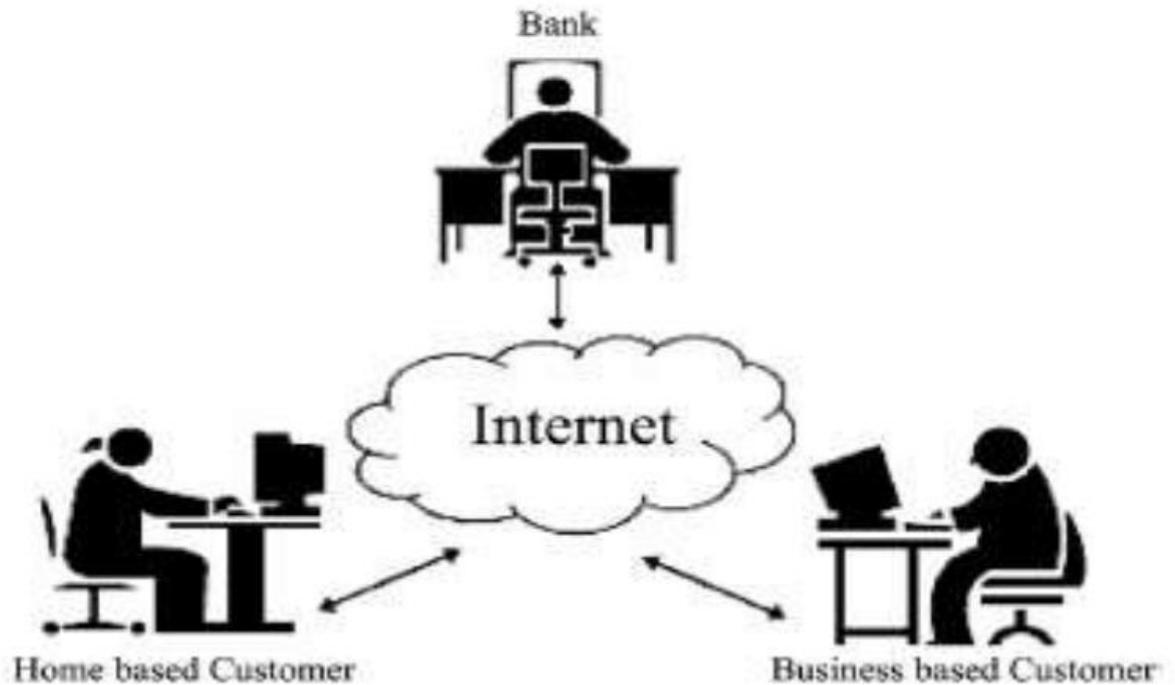
Information Technologies (ITs) have changed the approaches to directing business exchanges and meeting the developing demands of customers for most associations. The presentation of ICT into the banking business has led to a potential increase in the customer base, reduction in exchange costs, improvement in the quality and timeliness of response, enhanced opportunities for advertising and branding, facilitate self-service and service customization, and improvement in customer correspondence and relationship (Garau, 2002). The normal types of electronic banking services basically mentioned in the literature include SMS banking, mobile banking (m-banking), Automated Teller Machines (ATMs), telephone banking, personal computer banking, internet banking and electronic check clearing systems (Abor, 2004).

2.2.1 Internet Banking

“Internet banking refers to the use of the internet as a delivery channel for banking services, which includes every single customary service, for example, balance enquiry, statement of records requisition, trust transfer to other records, charges payment and a new banking service, for example, electronic bill presentment and payment” (Frust, Lang, & Nolle, 2000) without going to a bank (Mukherjee & Nath, 2003). As indicated by channel (Chau & Lai, 2003), “the quick development and notoriety of the internet service has created great opportunities and threats to companies in different business sectors, to endorse and deliver their items and services utilizing internet as a circulation

channel". As indicated by Pikkarainen, Karjaluoto & Pahlila, (2004) internet banking is a web entrance, through which clients can utilize various types of managing an account administrations running from bill installment to making speculations. "Aside from money withdrawal, web account management (internet banking) offers the client a complete access to any kind of keeping money exchange at the snap of a mouse" (De Young, 2001). In the perspective of Bill Entryways (2008) "saving money is fundamental, banks are most certainly not". Bill Entryways tries to recommend that the conventional bank is in the coliseum of annihilation in order to be supplanted with electronic keeping money which keeps on pulling in new clients. The money savings (banking) industry trusted that by receiving new innovation, they will have the capacity to enhance client administration level and attach their clients closer to the banks. Mia, Rahman & Debnath (2007) disclose that because of the development of progress in the business environment, banks have the capacity to place themselves in the Internet to use the force of the web keeping in mind the end goal to accomplish upper hand. As Karjaluoto *et al.* (2002) additionally contended that "managing an account (banking) is no more bound to time and topography, thus clients everywhere throughout the world have generally simple access to their records 24 hours a day and 7 days a week". The creator further contended that, with web account management (internet banking) benefits, the clients who felt that the block and mortar w of saving money (banking) took a lot of their time and exertion are currently ready to make exchanges at the snap of a mouse. "Web savings offers numerous advantages to the client, for example, simple entry, format, predictable subjects, simple route, exceptional substance, access through various media, higher intuitiveness, higher utilization of non-literary data, different dialects, plan and lower expense of exchange, and push". (Cai, Yang & Cude, 2008).

Figure 1: Internet banking model



Source: Johns & Perrott (2008)

As depicted by the above figure, the internet affords both individual and corporate customers of banks to simply and conveniently undertake banking transactions with their respective banks without having to walk to the banking hall.

2.2.2 Mail Banking

Mail banking is another form of e-banking service that gives customers the opportunity to communicate with their bankers through the use of the e-mail, Chovanová (2006). He argued that the frequent usage of mail banking is for customers to be able to receive their account statements from their bankers.

2.2.3 Mobile/Telephone banking

As indicated by Chovanová (2006) managing an account with a phone is the procurement of saving money administrations to clients utilizing an excellent phone

line. A customer of a bank can acquire the fundamental data on dialing a phone number determined ahead of time. Since versatile managing an account was presented, clients have possessed the capacity to utilize it to get exceptional administrations 24 hours a day without needing to visit the money keeping lobby (bank) for individual exchanges.

Ghana's versatile telecom industry is maybe one of the quickest developing divisions of the economy and there is a wild rivalry inside of the segment made up of six telecom administrators in particular, MTN, TIGO, Vodafone, Airtel, Expresso and Glo. The portable correspondence assumes a noteworthy part in the telecom business. Portable system goes under the administration part, which is encountering a quick advancement which thusly is supporting the development of the Ghanaian economy.

While Akpan (2009) contended that portable way of keeping money (M-saving money) is a utilization of versatile trade that empowers clients to bank basically at any advantageous time and spot, Medhi *et al* (2009) trusts that the foundation of M-business is constructed by M-saving money and numerous banks have exploited this advancement with a specific end goal to build the level of consumer loyalty, oversee expenses, expand benefits and after that realize positive change in the installment frameworks of the economy. Short Message Administration (SMS) Savings is the conveyance of saving money and budgetary administrations extending from securities exchange exchanges, organization of financial balances and getting to altered data by means of information transfers gadgets (Tiwari & Buse, 2007). The expanding use of remote innovations of which cellular telephones are only a case, has helped banks to give their administrations at whatever time, anyplace (Birch,

1999). Short Message Administration (SMS) is utilized to bolster versatile keeping money administration as the principle medium. Purposes behind portable and SMS use are to a great extent efficient, shifting area and accommodation (Venkatesh *et al*, 2003). It is fast and simple for clients to acquaint themselves with the versatile saving money administration.

2.2.4 Point-of-Sale Transfer Terminals (POS)

The POS system allows customers to make retail purchases with a check card. The card looks like credit card but does not function like it. The amount purchased is transferred immediately from the account of the debit card holder to that of the store. (Malak, 2007).

2.2.5 PC Banking

PC banking is another form of e-banking in which any authorized user can access and obtain financial services from a banking service provider using a personal computer which has been connected with the bank's network. (Easingwood & Storey, 1996).

2.2.6 Automated Teller Machine (ATM)

Among the noticeable budgetary touch-focuses, Automated Teller Machine (ATM) has been considered as a standout amongst the most critical segments of e-managing an account framework. ATM is a terminal conveyed by a bank or any money related establishment which empowers the clients to withdraw money, make offset enquiries, request bank statements, exchange stores furthermore store money. The ATMs are essentially self-overhauled saving money terminals and are gone for giving quick and advantageous administrations to the bank's clients (Rasiah, 2010). Basically, it is an

electronic terminal which gives clients the chance to acquire managing an account administration at whatever time. To withdraw money, make stores or exchange trusts between records, a purchaser needs an ATM card and an Individual Personal Identification Number (PIN). Rose (1999) describes ATMs as follows: “an ATM combines a computer terminal, record-keeping system and cash vault in one unit, permitting customers to enter the bank’s book keeping system with a plastic card containing a Personal Identification Number (PIN) or by punching a special code number into the computer terminal linked to the bank’s computerized records 24 hours a day”. With the presentation of an ATM, banks have the capacity to serve customers outside the banking corridor on the grounds that ATMs are put inside or close to the banks furthermore outside the banks, for example, shopping centers, eateries, airplane terminals or wherever that individuals may accumulate. ATM is intended to deal with the most imperative capacity of a bank. With the introduction of ATMs, some limitations such as time and geographic location has been resolved, Hazlina *et al* (2011).

2.3 E-BANKING’S CONTRIBUTION TO BANKS’ PROFITABILITY.

Hernando *et al.* (2006) analyzed the commitment of the reception of a transactional site to financial execution utilizing an example of 72 Spanish commercial banks over the time of 1994-2002 and discovered a positive effect on benefit, which was like De Young *et al.* (2007) who found that web banks are more beneficial than non-web banks, however no particular was set aside a few minutes of noteworthy reality. Likewise, Onay, Ozsoz & Helvacioğlu (2008) inspected the commitment of web banking to banks' benefit of Turkish over the period (1995-2005). They figured out that web banking begins adding to banks' ROE with a period slack of two years affirming the discoveries of Hernando *et al.* (2006) while a negative effect was

watched for one year slacked sham. Conversely, Malhotra & Singh (2009) analyzed the commitment of web banking to execution and danger following the experience of Indian commercial banks amid June 2007 and figured out that gainfulness and the offering of web banking does not have any noteworthy affiliation, which compared to the discoveries of De Young (2005) and Arnaboldi & Claeys (2010). Moreover, Mohammad & Saad (2011) inspected the commitment of electronic banking to the execution of Jordanian banks over the period (2000-2010) utilizing OLS regression and figured out that electronic banking has a noteworthy negative effect on banks execution which was like the discoveries of Delgado *et al* (2007) and Siam (2006).

Onay *et al* (2008) in their research on Turkish banks concluded that e-banking contributes positively to the profits of banks. As per their study, “Internet has changed the dimensions of competition in the retail banking sector. It has also provided opportunities for emerging countries to build up their financial intermediation infrastructure. Investment in e-banking is a gradual process. The internet banking variable has had a positive effect on the performance of the banking system in Turkey.” Siam (2006) examined the effect of e-banking on Jordanian banks and concluded that dominant part of the banks is giving services on internet through their websites. His discoveries showed that there is more attention on achieving e-banking than to fulfilling and satisfying customers' needs. He likewise concluded that there ought to be a well-articulated strategy in order to achieve success and acquire benefits over the long haul.

In their research, De Young *et al* (2007) analyzed the effect of e-banking on the performance of banks by examining the US group banks' markets furthermore compared the performance of virtual snap and mortar manages an account with block and mortar banks. Their discoveries concluded that e-banking improved the productivity of banks, hence increasing their overall revenues.

2.4 SERVICE DELIVERY

Technology has transformed the world of banking from traditional branch banking to a modern way of banking through the use of e-banking tools such as ATMs, e-utilities payments, e-loan applications among others, Sarokolaei *et al.* (2012); King (2012); Amadeh *et al* (2009). Avasthi & Sharma (2000-01) have analyzed in their study that advancement in technology are set to change the face of the banking business. Technology has transformed the delivery channels by banks in retail banking. It has additionally impacted the markets of banks. The study additionally explored the challenges that the banking business and its regulator face. According to Shetty (2000), technology is dramatically altering the ways in which financial services are delivered to customers and will continue to do so in the near future too. Electronic banking (the use of computers and electronic technology as a substitute for traditional paper based transactions), is here to stay. Again in Jalan's (2003) view, "the revolution of information technology has brought about fundamental transformation in the banking industry". Perhaps no other sector has been affected by advances in technology as much as the banking sector. It has the most important factor for dealing with the intensifying competition and the rapid proliferation of financial innovations. Thus the delivery of banking services has changed from traditional branch banking to electronic banking services.

Parasuraman *et al.* (1985) highlights the main requirements for delivering high services in order of their importance as follows: According to them, the service delivery must be reliable to the customer. They defined reliability as the ability to perform the promised service dependably and accurately. The second key requirement for service delivery is the concept of responsiveness which is the willingness to help customers and to provide prompt services. The third variable according to them is assurance. The authors defined assurance as the knowledge and courtesy of employees and their ability to convey trust and confidence. The fourth attribute of a quality service delivery is the element of empathy which is the provision of caring, individualised attention to customers. Parasuraman *et al.* (1985)'s last variable of good service delivery is the concept of tangibility. The authors define tangibility as the appearance of physical facilities, equipment, personnel, and communication materials.

2.5 CHALLENGES OF E-BANKING ADOPTION

Salehi (2013) puts forward that banks which are not willing to adopt electronic banking would end up losing customers and would realize that offering electronic banking services is far less costly than branch banking. However there are challenges for banks in integrating electronic banking into its overall corporate strategy and the customers also have their own challenges in adopting e-banking products. In relation to the challenges for banks in integrating electronic banking into its overall corporate strategy, Gardachew (2010) conducted research on the opportunities and challenges of E-banking in Ethiopia. The aim of his study was focused on analyzing the status of electronic banking in Ethiopia and investigates the main challenges and opportunities of implementing E-banking system. The author conducted a survey on the existing operating style of banks and identifies some challenges of using E-banking system such as, lack of suitable legal

and regulatory frame works for E-commerce and E-payments, political instability in neighboring countries, high rates of illiteracy and absence of financial networks that link different banks.

Wondwossen & Tsegai (2005) also studied on the challenges and opportunities of E-payments in Ethiopia; their objective was studying the E-payment practices in developing countries, Africa and Ethiopia. The authors employed interview and on site observation to investigate challenges to E-payment in Ethiopia and found out that, the main obstacles to the development of E-payments are, lack of customers' trust in the initiatives, unavailability of payment laws and regulations particularly for E-payment, lack of skilled manpower and frequent power disruption. According to Wondwossen & Tsegai (2005), an adequate legal structure and security framework could foster the use of E-payments, which is contradicting with the finding of the previous study.

Daghfous & Toufaily (2007) conducted a research on the success and discriminating variables in the reception of E-banking by Lebanese banks. The research was conducted on the elements that can lead to success of embracing E-banking and the other elements that can constitute as barrier to its selection. It focuses on the hierarchical, basic and strategic components which can accelerate or, actually, moderate the selection of this electronic mode of dispersion and correspondence by the banks, through dissecting the case of the Lebanese market. In order to test for the validity of the theoretical framework, structured survey was used, interview questionnaire that was given to E-banking managers or to information technology managers of all the banks on the official list of institutions operating on the Lebanese market, with a total of 57 banks, 31 of them operate internationally and 26 are strictly local, were used to gather the data. The results

of their study shows that the organizational variables (bank size, functional divisions, technical staff, technical infrastructure, perceived risks, decision makers' international experience and mastery of innovation) are variables which exert significant impact on the adoption of E-banking, among the structural characteristics. The result revealed that internal technological environment of the bank is a very important factor in determining the adoption of E-banking. Also the result showed that banks which are developing in the international scale are more likely to adopt E-banking innovations. Finally the result of the study indicated that the extent of penetration of E-banking to the growth phase of an emerging market has an important correlation with the improvement of commercial performance.

The investigation of Shah *et al.* (2005) on discriminating success elements in E-Banking conducted in United Kingdom, expects to determine the basic issues relating to budgetary sector associations when they establish businesses online. The survey method was used by researchers which target the money related sector in the UK. The study indicates that understanding the CSFs in E-banking is critical for senior management of banking related associations, because it would potentially help them improve their strategic arranging process. The investigation of the study indicated that two noteworthy types of measurable examination were conducted, descriptive factual investigation and variable investigation. In descriptive investigation, the elements (or variables) were ranked in order of their mean score, the highest score being the most critical etc. The main six elements in order of importance were: user-friendly website, systems security, support from top management, quick responsive customer service, advancement of electronic commerce inside of association, and untouched accessibility of services and fast delivery of services.

In relation to the challenges face by customers in adopting e-banking services, Gerrard *et al.* (2006) in their study in Singapore distinguished risk to be a vital component for Internet Banking reception. All respondents who did not utilize Internet Banking administrations had a negative impression of the security in Internet Banking. The respondents saw that there were numerous security risks when utilizing the web. They felt the privacy was a worry, feeling all their financial information could be in peril. Risk was one of the two most much of the time specified components in their study, “Concern about risk was mentioned by all respondents. An empirical investigation conducted by Sathye (1999) on the adoption of Internet Banking by Australian consumers also identified, security concerns as key factor in internet banking adoption. A report on Internet Banking in Australia finds that, security concerns among banks and customers are keeping both away from Internet Banking” Sathye (1999). The investigation of Kerem (2003) on the selection of electronic keeping money: “hidden customer conduct and discriminating achievement elements directed in Estonia, was expected to mull over the further comprehension of, how buyers see electronic managing an account in the prime of intelligent diverts in Estonia, as Estonia is globally known for being a pioneer in the acknowledgment of new advancements”. A progression of inside and out meetings were directed with driving industry specialists in Estonia. The choice standard for the respondent was primarily their association with the improvement of Web managing an account framework from the beginning of its development. The study directed for this exploration tended to six distinct issues affecting the reception of Web keeping money (Better costs, Proposals, Better administration, Showcasing endeavors, Better get to and higher privacy). The most critical components in beginning to utilize Web keeping money are as a matter of first importance better access to the administration’s (accommodation), better costs and higher privacy. Better administration (i.e. inclining

toward self-support of office administration) was additionally of over the normal significance. Two variables that the respondents did not consider significant to their selection choice were banks' showcasing exercises and individual proposals from companions and partners.

Stewart (1999) claimed that “the failure of the internet in retail banking is largely attributable to the lack of trust consumers have in the electronic channels”. Provision of infrastructural facilities is another factor that could lead to quicker diffusion of innovation. Another major challenge faced by the banks is the issue of security. Many people, especially in Ghana, do not have much trust in the level of cyber-security in the nation. The increasing numbers of cyber fraud cases adds up to this assertion and so most customers feel insecure conducting bank transactions on the internet. “Frequent slow response time and delay of service delivery causes customers to be unsure that the transaction has been completed” (Jun & Cai, 2001). Min & Galle (1999) found “the disruption of information access to be a common factor related to unwillingness to use internet channels for commerce”.

Lee (2009) notes that “apparent danger, as far as security/protection danger is concerned, is the best impediment to web account management selection”. Lockett & Litter (1997) show that “two negative properties of web savings are dangers and unpredictability, while the most vital and positive characteristic of web account management is its 24 hours and 7 days accessibility”. Moreover, Gerrard, Cunningham & Devlin (2006) utilized a substance examination method and found that eight variables clarify why purchasers are not utilizing web savings as a part of Singapore. All together of recurrence, they are: recognitions about danger, the need, lacking learning, dormancy,

detachment, human touch, estimating and IT weakness. Liao & Cheung (2002) observationally distinguish comfort as a critical quality characteristic in the apparent helpfulness of web savings, which emphatically impacts purchasers' ability to utilize web based account management. Wan, Luk & Chow (2005) affirm that “comfort has a noteworthy effect on clients' selection of managing an account divers in Hong Kong”. Lee *et al.* (2005) find that buyers see comfort to be a vital determinant of goal to receive web account management administrations. Moreover, Yu & Lo (2007) find that apparent comfort altogether impacts buyers' genuine conduct to bank on the web. Along these lines, the accompanying speculation is proposed. Padachi *et al.* (2007) observationally approve that an easy to use bank webpage is an imperative determinant of convenience, which thusly influences the appropriation of web savings administrations. Akinci *et al.* (2004) exhibit that “an easy to use site is viewed as one of the imperative criteria to impacts shoppers' choice and appropriation of web savings administrations”. Jaruwachirathankul & Fink (2005) presume that “it is crucial for banks to give an all-around planned and easy to understand site to draw in potential adopters' consideration”.

Mattila & Mattila (2005) recommend that “banks subscribed on internet savings should persuade their clients for starters that the web is secure as a medium”. Laforet & Li (2005) find critical security contrasts among those clients utilizing web savings and the individuals who are not, and stress that the programmers and misrepresentation angles are essential for the non-clients. “Programmers and extortion activities are identified as figuring environment unlawful acts” (Altintas & Gürsakal, 2007). Inside of these law violations, electronic trusts may be exchanged, or characters may be stolen, and in both circumstances the client's PC is both an objective and an apparatus (Madu, 2002). Kaynak & Harcar (2005) watch that security issues are the most vital reason given for

not utilizing internet account management by test respondents. Kaynak & Harcar (2005) demonstrate that “security issues, for example, programmers and misrepresentation are deciding components in selecting any internet administrations”. “Trust and security are essential components supporting a positive perspective of internet savings administration conveyance” (Altintas & Gürsakal, 2007).

In a review of web clients, Friedman, (2002) examined the worries about the potential dangers and damages of web utilization on purchasers and assessed the web practices of 72 members. Friedman's (2002) meetings on web security demonstrate four screen shots of a program interfacing with a site and inquires as to whether the association is secure or not secure and to insist the spurring variable for their evaluation. Friedman, (2002) find that each of the 72 members couldn't tell if an association was secure and that they were at danger.

Chiemeke, Evwiekpaefe, & Chete (2006) examine “the likelihood of internet savings appropriation and demonstrate that the primary components that repress the selection of internet account management are security and deficient operational offices which incorporate legitimate information transfers and influence supply”. Bauer & Hein (2006) affirm that “apparent danger is the most critical component that makes clients hesitant to embrace internet account management”. As per Al-Ghamdi (2009), “shoppers experience may influence trust when they buy items or administrations online in the United Kingdom”. In this connection, customers may not quickly embrace web account management because of an absence of comprehension and learning about the web (Corritore, Kracher & Wiedenbeck, 2003). Gerrard, Cummingham, & Devlin (2006) find that “clients who have never acquired items over the web are more inclined to keep on

utilizing customary methods for sourcing their account management administration”. Agarwal, Sambamurthy, & Stair (2000) contend that “the commonality with one product may expand buyers' confidence in her or his capacity to utilize another programming”.

Hoppe, Newman, & Muger (2001) came to the same conclusion and find that clients who are more experienced at utilizing the web are more prone to embrace innovation than those shoppers who have not had much introduction to the web. Furthermore, a basic absence of experience and learning can keep down reception; firms and people with higher use force of data innovation may have a higher likelihood to receive web account management than less experienced firms (Speece, 2000). Karjuoto *et al.* (2002) inferred that earlier PC experience, former innovation experience, and earlier individual savings encounter absolutely influence buyers' state of mind and conduct towards internet savings.

Young (2006) demonstrates that “well-off and profoundly taught amasses by and large acknowledge changes all the more promptly”. Along these lines profoundly taught consumers may be more prone to receive Internet banking administrations than low instructed consumers. What's more, utilizing Internet banking gives these consumers competition among their companions. It is additionally a piece of the social scene of today's technology driven society. Sarro (2002) contends that “client profiles of Internet banking clients are not considerably distinctive between one nation and another, as most customers are youngsters with school training, a stable employment and pay”. Value Waterhouse Coopers (2000) state that “the run of the mill Internet banking client is matured somewhere around 25 and 35 years, has medium to high salary, and likes to make his/her own particular financial choices”. Al-Somali, Gholami, & Clegg (2008)

found that “trust and instruction impact customers' states of mind towards utilizing Internet banking”. Likewise, Flynn and Goldsmith's (1993) study profiled the Internet consumer and found that “trend-setters typically have a place with the high salary bunch”. Kim, Widows, & Yilmazer (2005) asserted that “a few consumers have more capacity to utilize banking technology and computer software for overseeing money than different consumers”. Consumers with expanded reckoning capacity may embrace Internet banking all the more effectively and their capacity might likewise enhance their productivity in the utilization of Internet banking. What's more, they may need to contribute less time and money to learn Internet banking. Consumers who have no experience and aptitude in the utilization of banking technology and computer software may not perceive the advantages of Internet banking. In any case, these customers may delay in embracing Internet banking as they have to contribute extra time and money to learn it.

Chiemeke *et al.* (2006) “directed an experimental examination on selection of e-banking in Nigeria. The study distinguished the real repressing variables to Internet banking selection in Nigeria, for example, insecurity, inadequate operational facilities including telecommunications facilities and electricity supply, and made proposals on how Nigeria banks can contract the advanced separation. Additionally, the report uncovered that Internet banking is being offered at the essential level of intelligence with the greater part of the banks having mostly data destinations and giving little Internet value-based administrations”. Thus, Agboola (2006) researched electronic installment frameworks and telebanking administrations in Nigeria. The discoveries uncovered that there has been an extremely humble move far from money. Installments are presently being computerized and total volumes of money exchanges have declined. The after effect of

the study uncovered that tele-banking is fit for expanding the client relationship, hold client's steadfastness and empower banks to increase commanding stature of the piece of the pie if their orderly issues, for example, insufficiency of telecommunications administrations, epileptic supply of force, high cost, apprehension of false practices and absence of facilities vital for their operations were dealt with.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 INTRODUCTION

According to Cormack (2000), “research methodology refers to the adopted method that is followed by a set of procedures applicable for a particular study”. Thus this chapter shows the research approach and the process followed to obtain relevant data for the study. In view of that, this chapter focuses on the research design, the population, sampling procedure, sampling type, sampling technique, data collection and data analysis.

3.1 RESEARCH DESIGN

According to Mouton (2002) “research design is a set of guidelines and instructions to be followed in addressing the research problems”. This includes the aim of the research, the selection and the design of the particular method and participants and a consideration of trustworthiness. There are two methodologies in research science; qualitative and quantitative method (Ghauri & Grønhaug (2005). By using a qualitative method, the researcher does not primarily seek statistical results. The aim is to collect the quality and essence to capture a deeper understanding of underlying causes. In the quantitative method the researcher uses statistics, surveys and randomized trials to study given objects, with the aim to generalize the findings to a greater extent (Shiu *et al.* 2009).The study employed both the qualitative and quantitative approach with descriptive design applied to this study.

According to Ghauri & Gronhaug (2005), “depending on the nature of the problem the research could be exploratory, descriptive or casual”. According to Zinkmund (2000), “the purpose of exploratory research include, diagnosing a situation, screening alternatives and discovering new ideas”. Ghauri & Gronhaug (2005) stated that exploratory research is mostly used when the research problem is unstructured i.e. badly understood, not well known or the other knowledge is not absolute. According to Ghauri & Gronhaug (2005), in casual research, the problems are also structured. Causal research has to do with cause and effect relations. The main purpose in casual research is to isolate causes and tell whether and to what extent causes result in effects. Brink (2000) states that “descriptive studies are about obtaining accurate information about a particular phenomenon through description and observation”. The purpose of the study is to examine e-banking’s contribution to the profitability and service delivery of Fidelity Bank Ghana Limited. Thus the study seeks to provide information about the use of electronic banking by Fidelity Bank through description. The study adopted the descriptive approach.

3.2 POPULATION OF THE STUDY

According to Saunders *et al.* (2007), “population is the complete set of cases or group from which a sample is taken”. The population comprise of all the branches of Fidelity Bank Limited. According to the 2014 Annual report of Fidelity Bank Ltd the total number of branches was 50 with a total staff of 1116 which was made up of 705 permanent staff and 411 contract staff.

3.3 SAMPLING SIZE AND SAMPLING TECHNIQUE

According to Maylor & Blackmon (2005) “sample represents part of the study population that will be studied, in order to understand the population from which the sample was drawn”. Brink (2000) explain that “the sample is a subset of a larger population, selected by the researcher to participate in a research project”. In choosing the branches of Fidelity Bank for this study, convenience sampling technique was used to select branches which are nearer to the researcher. As a result the following branches of Fidelity Bank were chosen for this study: Santasi, Stadium Post, Adum Post and Ahodwo. As far as this study is concerned, purposive, stratified random and random sampling were used. Purposive sampling allows respondents to be selected based on the fact that they can answer specific research questions based on the study (Twumasi, 2001). In selecting respondents from the employee category, stratified random sampling was used to get a fair representation from all the departments within the bank. Saunders et. al (2007) explain that “stratified random sampling is a modification of random sampling in which you divide the population into two or more relevant and significant strata based on one or a number of attribute (in this study the department is considered). In fact, the sampling frame is divided into a number of subsets”. A random sample is then drawn from each of the subsets (strata). Purposive sampling was used to select management members. Purposive sampling allows the researcher to select respondents based on the fact that they can answer specific research questions on the study (Twumasi, 2001). Management members are responsible for the strategic planning of the bank and the decision to introduce e-banking is of strategic nature. Thus they are in a better place to answer questions relating to the contribution of e-banking to the profitability of Fidelity Bank Ltd.

Table 3.1 Sample unit and size

	Sample size	Sampling Method	Data Collection Method
Management	5	Purposive	Semi-Structured Interview
Marketing	30	Stratified Random	Questionnaire
Finance	20	Stratified Random	Questionnaire
Operations	20	Stratified Random	Questionnaire
Customers	150	Random sampling	Questionnaire
TOTAL	225		

Source: Researcher's own concept

Sample size refers to the number of elements to be included in the research (Malhotra & Bries, 2005). Normally, the sample size is taken from the whole population that the research is conducted from. For the purpose of this study, a sample size of 225 was chosen for this study.

3.4 DATA SOURCES AND COLLECTION

According to Macnee & McCabe (2007) "data collection is a process of gathering information from identified respondents to answer the research questions". According Ghauri & Gronhaug (2005) "research relies on two set of data: primary and secondary data. They further state that primary data sources include observations, experiments, social surveys like questionnaires, and interviews. While secondary data sources are the ones from where we collect the information contributed by others towards the study, Secondary data sources comprise of books, journals, articles and web-based data about the specific subject (Ghauri & Gronhaug, 2005)". Semi-structured interviews and questionnaire was used to gather the primary data.

3.5 DATA ANALYSIS

“Data analysis involves the reduction of accumulated data to a manageable size, developing summaries, looking for patterns and applying statistical techniques. It also includes the interpretation of research findings in the light of the research questions, and determines if the results are consistent with the research hypotheses and theories” (Cooper & Schindler, 2003). The study employed the use of the inferential analysis including chi-square and t-test analysis (independent) to analyse the data.

3.6 RELIABILITY AND VALIDITY OF DATA

“The validity and reliability of the data collected and the response achieved depend, to a large extent on the design of the questions as a valid question will enable accurate data to be collected and one that is reliable will mean these data are collected consistently” (Saunders *et al* 2009). Polit & Beck (2006) and Gillis & Jackson (2002:26) define “validity in terms of whether the measuring instrument measures what it is supposed to measure”. For Langford (2001:52, 95) the measuring instrument should be “dependable and trustworthy in providing information”. In developing the measuring instrument for this study, relevant questions and alternatives were considered to address e-banking to ensure validity and reliability. For Polit & Beck (2006:325) reliability means to “test the accuracy of a measuring instrument”, whereas for Brink (2000:171), De Vos (2006: 86), Parahoo (2006:36) and Gillis & Jackson (2002:27) reliability refer to a “measuring instrument yielding the same results under comparable circumstances if repeated on the same person or used by two different researchers”. According to Cooper and Schindler (2001), “a researcher may choose to use a panel of experts to judge how well the instrument meets standards or use his own judgement”. In this study, the researcher used

experts and also studied literature (books, journals, dissertations, theses) to determine how well the research instrument meets standards.

3.7 ORAGNISATIONAL PROFILE

Fidelity Bank Limited gained its universal banking license on the 28th day of June, 2006 making it the 22nd bank to be licensed by the regulator, Bank of Ghana under the new Banking Act, 2004 (Act 673). The Bank is owned by Ghanaian individuals and institutional investors which includes Africa Capital, SIC Life, SSNIT, and also by its senior executives. The Bank was initially Fidelity Discount House and the leading discount house as such. After operating profitably for 8 years, the investors had an idea to set up a bank due to the attractive business environment in Ghana.

Fidelity Bank Limited has got a great team of high calibre professionals with various skills and experiences. Fidelity bank Limited has invested heavily in technology and continues to highly invest in training of staff to ensure that it is at par with the finest in the world. The Bank offers a comprehensive range of products and services to meet the banking and financial needs of existing and potential customers. The Bank has two corporate partners: Fidelity Asia Bank Limited (FABL), and Fidelity Securities Limited (FSL). FABL was established in July 2012 as a wholly owned Asian subsidiary in Malaysia. FABL embarks on the business of offshore banking and Fidelity Securities Limited (FSL), a fully owned subsidiary of the bank, is the investment banking arm of the FBL. Previously known as Fidelity Asset Management, FSL's business involves providing advisory services, issuing of securities, raising of capital and undertaking portfolio investment management for clients.

CHAPTER FOUR

RESULTS AND ANALYSIS

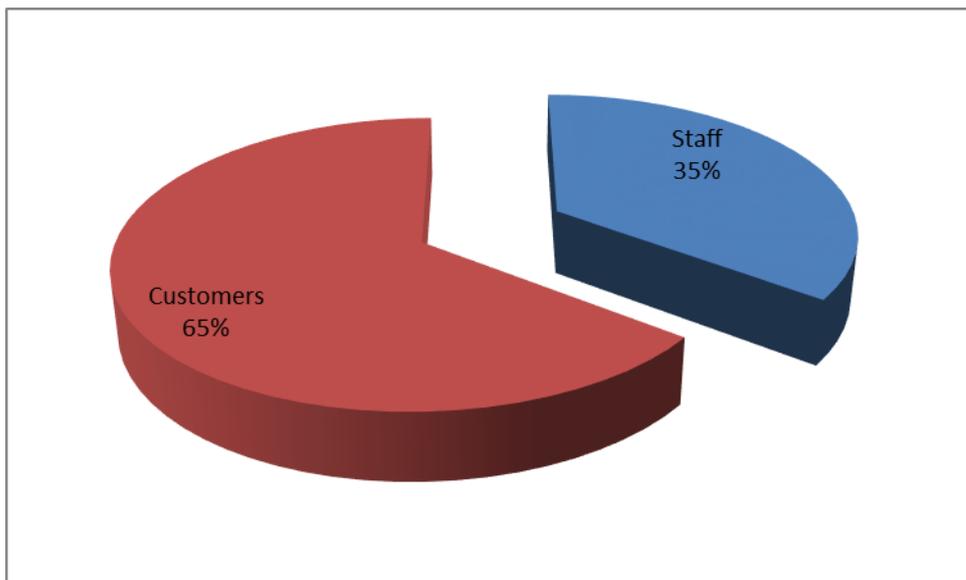
4.0 INTRODUCTION

This section of the study details the results analyzed from responses of the respondents. It is presented largely descriptively in the form of tables and graphs and organized according to the objectives of the study.

4.1 DEMOGRAPHICS

According to Proctor (2000) “demographic data are essential to acquire fundamental information about the respondents”. It provides identification material about the respondents such as age, gender, educational levels etc. This information is very vital as it shows whether the respondents have the capacity and credibility to answer the questions in relation to the objectives of the study.

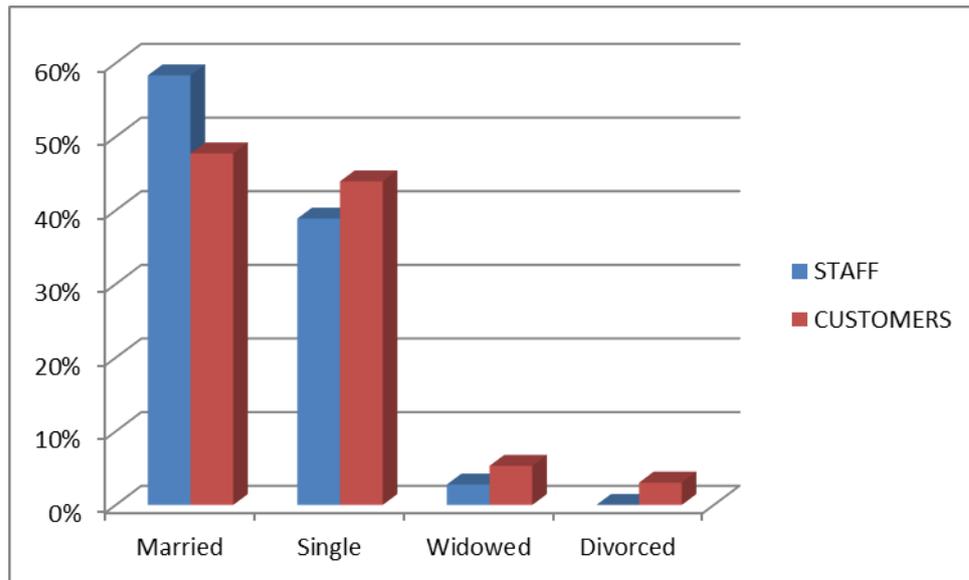
Figure 4.1: Response rate



Source: Researcher's own concept

Out of the sample size of 225, 204 answered and returned the questionnaires. Thus the response rate was 90%. Out of the 204 respondents, 65% of them were customers while 35% were staff of Fidelity Bank as indicated by the above figure.

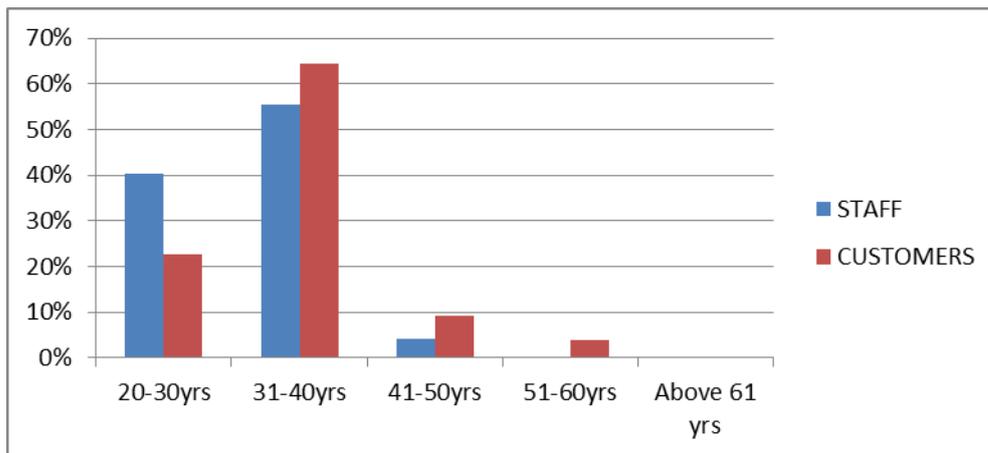
Figure 4.2 Marital status of respondents



Source: Researcher's own concept

As indicated in the above figure, concerning the marital status of the respondents, 58% and 48% of the staff and customers respectively were married while staff and customers who were single were 38% and 44% respectively. Again only 3% of the staff were widowed and 5% of the customers were also widowed. In relation to respondents who were divorced, none of the staff members were divorced while only 3% of the customers were divorced.

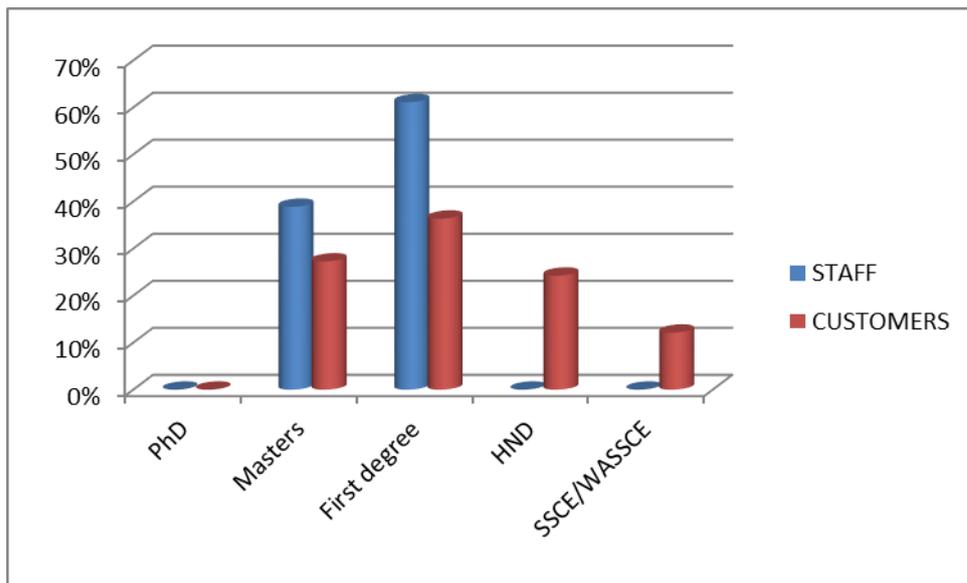
Figure 4.3 Age of respondents



Source: Researcher's own concept

The above figure shows that 40% of the staff were between the ages of 20 and 30 years while in relation to the customers 22% belong to the category of 20-30 years. Between the ages of 31 and 40 were 64% of the customers and 56% of the staff. Again the figure indicates that 8% and 4% of the customers and staff respectively were between the ages of 41 and 50 years. None of the staff members were more than 51 years while 3% of the customers were between 51 and 60 years. The above findings show that the working population of FBL is a young population as none of the staff were more than 51 years. The majority of the respondents were less than 40 years and this clearly shows that majority of the respondents were within what is normally perceived as the most productive age range where employees would be in their prime in terms of job performance. This implies that they belong to the new generation who are known to be familiar with the new media and digital technologies. Hence, they are able to use and understand the electronic banking platform with ease.

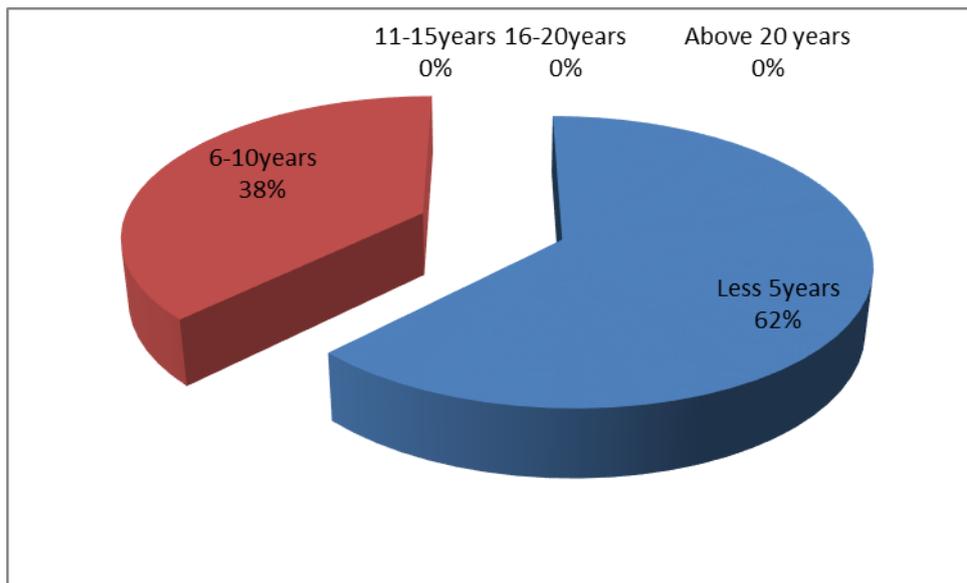
Figure 4.4 Educational level of respondents



Source: Researcher's own concept

As indicated by the figure 4.4, while 38% of the staff had masters' degree, only 26% of the customers were masters' degree holders. Again 60% and 44% of the staff and customers respectively were first degree holders. None of the staff respondents were either HND holders or SSCCE/WASCCE holders however 22% of the customers were HND holders while 10% were also SSCE/WASSCE holders. This indicates that all the respondents both the staff and customers have some level of educational capacity to share their views on the issue of electronic banking and this makes the answering of the questionnaires easier and objective answers given. Also the high level of education of the majority of the respondents makes it easier for them to understand and use the electronic banking platform of the bank without causing any challenges. "The highly educated consumers may be more likely to adopt to electronic banking services than low educated consumers", Young (2006).

Figure 4.5 Number of years worked by respondents



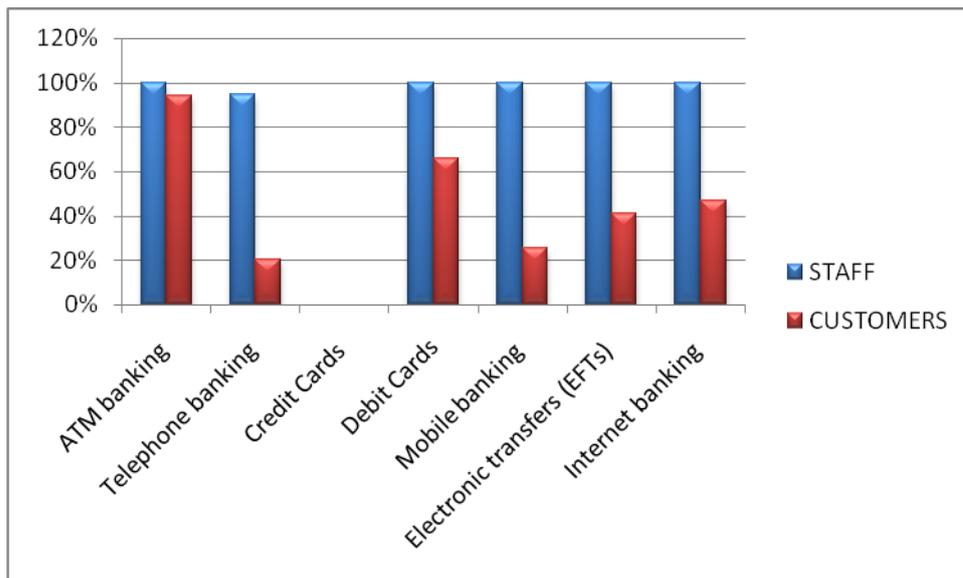
Source: Researcher's own concept

This section applies to only the respondents who were staff of Fidelity Bank Limited. As indicated by the figure above, as many as 62% of the respondents had worked for less than 5 years in the Bank while 38% of them had been with the bank for between 6 and 10 years. None of the respondents had worked with the bank for more than 10 years. This is true in the sense that FBL obtained its universal banking license on the 28th day of June, 2006, making FBL, the 22nd bank to be registered by the Bank of Ghana under the new Banking Act, 2004 (Act 673). The Bank is owned by Ghanaian individuals, other institutions who are investors and its senior executives. The Bank was previously called Fidelity Discount House, the leading discount house as at that time. After operating profitably for 8 years, the investors had an idea to set up a bank due to the attractive business environment in Ghana.

4.2 ELECTRONIC BANKING SERVICES OFFERED BY FBL

The study examines the various electronic banking products offered by FBL to its customers. Examples of these services as discussed earlier are ATM, internet banking, mobile banking, telephone banking, debit and credit cards.

Figure 4.6 E-banking services provided by Fidelity Bank Limited

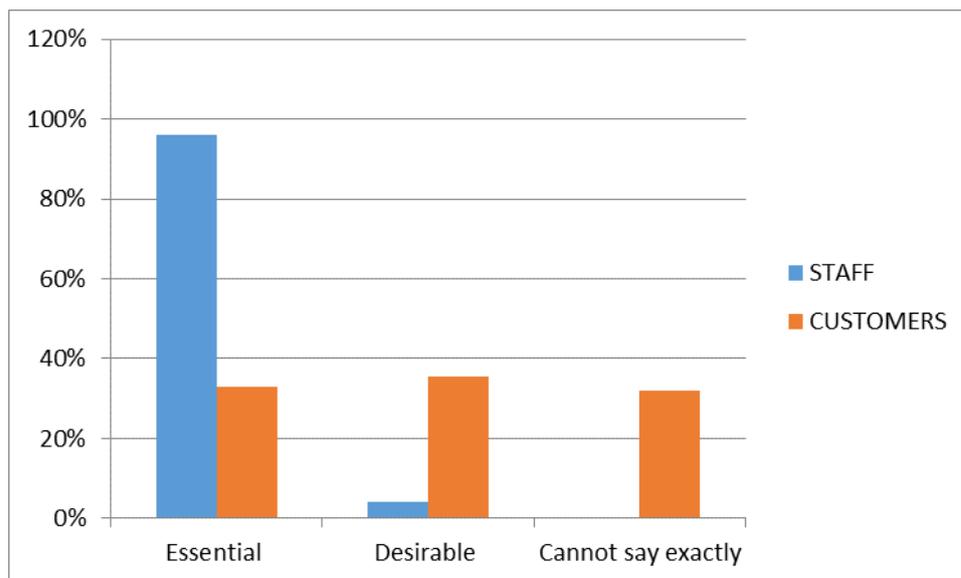


Source: Researcher's own concept.

The study sought to ascertain the various e-banking products available to both staff and customers of Fidelity Bank Limited and also the level of awareness of these products to both staff and customers of the bank. In relation to ATM banking all the staff respondents indicated that they are aware of the Fidelity Banking ATM banking while 94% of the customers stated that they are aware of Fidelity Bank's ATM banking facility. Thus it suggests that 6% of the customers stated that they are not aware of the ATM banking facility offered by Fidelity Bank. In relation to telephone banking, 94% and 20% of the staff and customers respectively stated that they are aware of the telephone banking facility by Fidelity Bank. Surprisingly it means that 6% of the staff

are not aware that Fidelity Bank has a telephone banking facility. In relation to debit cards, mobile banking, electronic transfers and internet banking, all the staff respondents indicated their awareness of such e-banking facilities offered by Fidelity Bank. However in relation to the customers only 66%, 26%, 41% and 47% of the customers are aware of debit cards, mobile banking, electronic transfers and internet banking respectively. This implies that a chunk of the customers are not aware of most of the e-banking platforms offered by Fidelity Bank Limited. Hence, management of FBL must step up their educational campaigns to educate the customers about their various e-banking products.

Figure 4.7 Importance of the electronic banking services offered by FBL



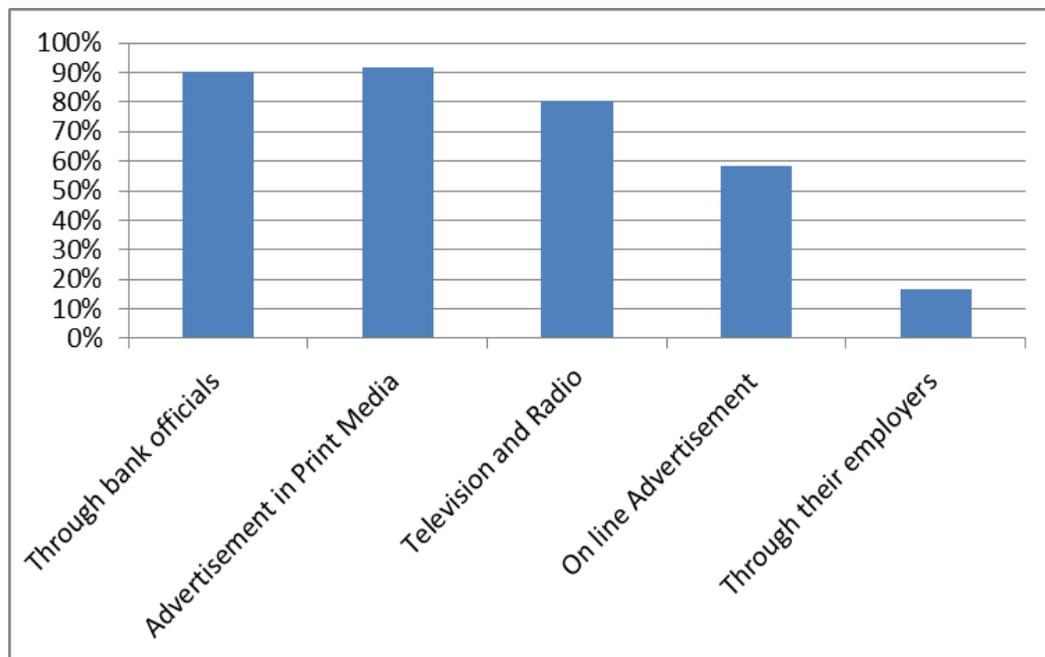
Source: Researcher's own concept.

This sought to assess how both staff and customers perceived the relevance of the electronic banking offered by Fidelity Bank. As indicated by the figure above, 90% of the total respondents (staff) stated that the e-banking services offered by Fidelity Bank were essential. However only 33% of the customers shared the same view as the staff. In relation to the desirability of the e-banking services offered by Fidelity Bank, 6% of the

staff stated that the e-banking services are desirable while as many as 36% of the customers also indicated that the e-banking products are desirable. Again as many 32% of the customers were indifferent as to the importance of e-banking services offered by Fidelity Bank and thus could not say whether the e-banking products are good or not.

The findings paint a picture of a well-informed staff who appreciates the importance of the e-banking services offered by Fidelity Bank. However the same cannot be said of the customers, as many of them could not even state whether the e-banking products were good or not. It implies that management of FBL must put some measures in place to help educate the customers on the importance of e-banking and also ensure that the customers are motivated to adopt the various e-banking products that the bank has in stock.

Figure 4.8: Mediums through which Fidelity advertise the e-banking products



Source: Researcher's own concept

The study further probe into the mediums through which customers are informed about the various e-banking facilities provided by Fidelity Bank. The results show that as many as 90% of the respondents(staff) confirmed that officials of the bank inform customers of the various e-banking products while 92% and 80% also indicated that through advertisement in the print media and television/radio respectively customers are informed of Fidelity Bank's e-banking products. A further 58% and 17% indicated that through online advertisement and customers employers respectively customers are made aware of Fidelity Bank's e-banking products. This implies that Fidelity Bank must invest more in adverts on radios and televisions.

Table 4.1 The electronic banking products provided.

	ATM	Internet banking	Mobile banking	Telephone banking
a) Cash withdrawal	YES	NO	NO	YES
b) Cash and cheque deposits	NO	NO	NO	YES
c) Balance enquiry	YES	YES	YES	YES
d) Cheque book requisition	NO	YES	NO	YES
e) Utility bills payments	NO	YES	YES	YES
f) Check and print bank statement	YES	YES	YES	YES
g) Call credit top up	NO	NO	YES	NO
h) Funds Transfer	NO	YES	YES	YES

Source: Researcher's own concept

In assessing the various services offered through the different e-banking platforms, the table above reveals that the ATM platform is capable of assisting customers to withdraw cash, check balances and print bank statements. However in using the ATM, customers cannot deposit cash, request cheque books, pay utility bills, top up call credit and transfer funds. In relation to the internet banking, customers can do the following: checking of

balance, requisition of cheque books, payment of utility bills and printing of statements. However with regard to withdrawal of cash, deposit of cash and topping up call credit, the internet banking platform cannot perform them. With respect to mobile banking, customers can only use it to check balance, pay utility bills, printing statements, top up call credits and transfer funds but it cannot withdraw cash or deposit cash and requesting of cheque book. Telephone banking can be used for all the services mentioned in table 4.1 except top up call credits. Thus it means that at the moment one e-banking platform cannot comprehensively offer all the banking services but the usage of two or more e-banking products can ensure a very convenient banking for the customer since he/she can do virtually everything without necessarily going to the bank. In relation to figure 4.7, most of the customers are not aware of all these services that the e-banking products can perform, so they always have to go the banking hall in person to transact some basic banking services which could have been done using the right e-banking product.

4.3 E-BANKING’S CONTRIBUTIONS TO FBL’S PROFITABILITY.

This sections brings to light the contributions of the e-banking services provided by FBL to its profitability.

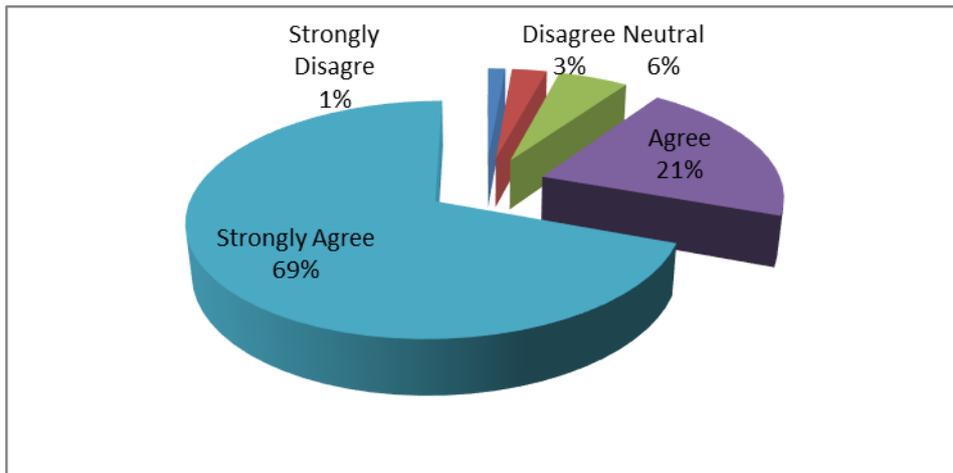
Table 4.2 E-banking’s contributions to FBL’s profitability

	MEAN	SD
No difference in profitability as compared to branch banking	1.86	1.31
E-banking services are more profitable than traditional banking services.	4.54	0.84
E-banking services are generally cheaper than traditional banking at the branch as the cost of providing them is less.	3.31	1.49

Source: researcher’s own concept.

Table 4.2 reports the mean statistic of the contributions of e-banking services to FBL's profitability. According to the table, the assertion that E-banking services are more profitable than traditional banking services had the highest mean of 4.54 with a standard deviation of 0.84. This means majority of the respondents cumulatively agreed that E-banking services are more profitable than traditional banking services. That resulted in the high mean of 4.54. This is confirmed by figure 4.9. The assertion that there is no difference in profitability as compared to branch banking had the lowest mean of 1.86 with a standard deviation of 1.31. This indicates that majority of the respondents cumulatively disagreed to the assertion that there is no difference in profitability as compared to branch banking and this is confirm by figure 4.10. Thus in other words majority of respondents believe that there is a difference in profitability as compared to branch banking. The assertion that E-banking services are generally cheaper than traditional banking at the branch had a mean of 3.31 with a standard deviation of 1.49. This implies that since e-banking has a positive effect on the profitability of Fidelity Bank, management of the bank must ensure that more of their customers hooked onto the e-banking platform as the cost of providing them is cheaper. This will be a source of revenue generation which will help reduce their cost of operations and hence, increase their profits.

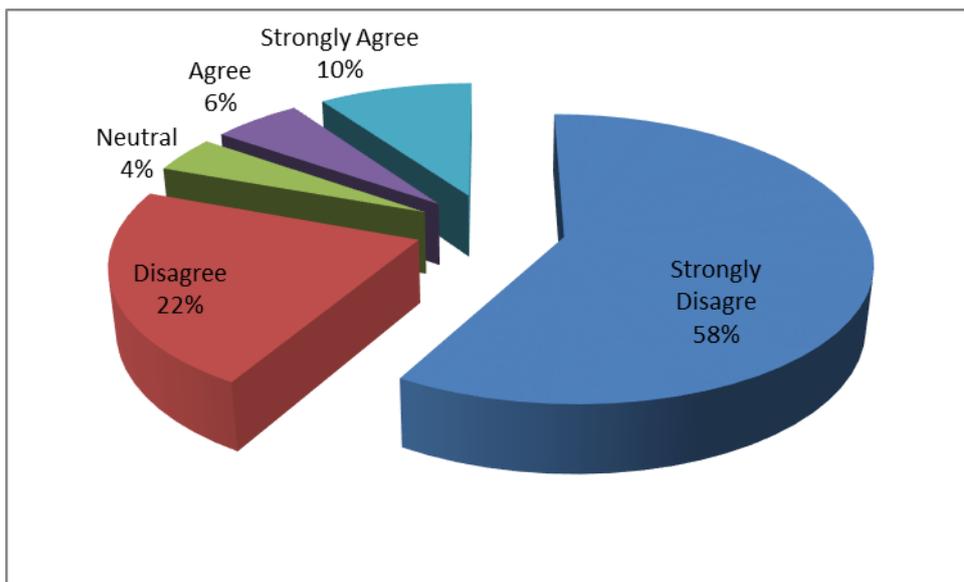
Figure 4.9 E-banking services are more profitable than traditional banking services



Source: Researcher's own concept

The above figure indicates that as many as 90% of the respondents cumulatively agreed to the assertion that E-banking services are more profitable than traditional banking services. However 4% of the respondents disagreed to the above assertion while 6% were neutral.

Figure 4.10: Non-difference in profitability



Source: Researcher's own concept

Figure 4.10 indicates that 80% of the respondents cumulatively disagreed to the assertion that there is no difference in profitability as compared to branch banking while 16% of the respondents cumulatively agreed that there is no difference in profitability as compared to branch banking. 4% of the respondents were indifferent.

Table 4.3 One-way Anova Analysis of contributions of e-banking services to FBL's profit.

ANOVA							
<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>	
Between Groups	262.8451	2	131.4225	88.77005	1.15E-28	3.038877	
Within Groups	310.9014	210	1.480483				
Total	573.7465	212					

Source: Researcher's own concept

Since $F > F_{crit}$, it means that the means of the three assertions are not the same as confirmed by the table.

The findings on the contributions of e-banking to profitability agrees with the findings of Onay *et al* (2008), Hernado *et al.* (2006) and a few others who also found out that e-banking has a positive effect on the financial performance of banks. Kent & Lee, 1999; Grover & Ramanlal, 2000; Fergusson, 1999 also found out that e-banking reduces the operational cost of banking. However the findings disagree with the work of Malhotra & Singh (2009), Arnaboldi & Claeys (2010) and Mohammad & Saad (2011). These authors found out that electronic banking has a significant negative impact on banks performance.

4.4 CHALLENGES FACED BY FBL IN INTRODUCING E-BANKING SERVICES

Table 4.4 The challenges faced by FBL in introducing e-banking services

The cost of adopting is very high.	4.15	1.25
The services are simply too expensive for the low earning customers.	4.51	0.84
There is technological illiteracy among customers.	4.39	1.13
Most of the customers prefer face to face banking.	2.06	1.40
Customers fear using E-banking because electronic crimes are arising greatly.	2.03	1.34
Traditional banking still remain the best option for our clients	3.89	1.30
Many banks fear risk management challenges like reputation risk, operational and capital adequacy risk.	1.97	1.23
Security concerns is the most discouraging factor in using E-banking because customer feel insecure as they do not know where electronic transaction pass and whom they meet.	1.97	1.17
Most of the customers do not know how to use and are not aware of some E-banking services provided by their banks.	2.03	1.16
Technology becomes obsolete within a short time	1.54	0.71

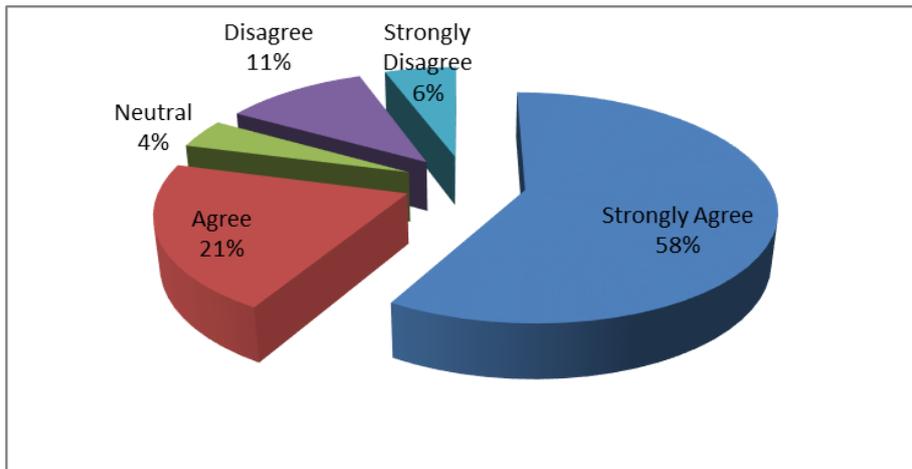
Source: Researcher's own concept

Table 4.4 reports the mean statistic of the challenges faced by FBL in introducing e-banking services to its customers. According to the table " The services are simply too expensive for the low earning customer" was the highest ranked challenge faced by FBL in the introduction of electronic banking services, with a mean score of 4.51 (SD .84). The high mean demonstrates that majority of the respondents cumulatively agreed to the assertion that e-banking services are simply too expensive for the low earning consumer. This is confirmed from figure 4.12. Similarly the "There is technological illiteracy among bankers", "The cost of adopting is very high" and "Traditional banking still remain the best option for our clients" respectively had means of 4.39 (SD .71), 4.15 (SD

1.25) and 3.89 (SD 1.30) indicating the major challenges faced by FBL in the introduction of electronic banking services. Also, “Most of the customers prefer face to face banking” had a mean of 2.06 (SD 1.40), and “Customers fear using E-banking because electronic crimes are arising greatly” 2.03 (SD 1.34), were all ranked as less important challenges faced by FBL in the introduction of electronic banking services. Meanwhile, “Most of the customers do not know how to use and are not aware of some E-banking services provided by their banks”, 2.03 (SD 1.16); “Security concerns is the most discouraging factor in using E-banking because customers feel insecure as they do not know where electronic transactions pass and whom they meet”, 1.97 (SD 1.17); and “Technology becomes obsolete within a short time”, 1.54 (SD .71) were deemed as unimportant challenges faced by FBL in the introduction of electronic banking services.

The findings of the study are in consonance with the studies of Lee (2009) and Galle (1999). They found out that the main challenges with e-banking was security and trust issues. However, Enos (2001) argued that security, which may include protection of consumers' personal data and safe transactions to prevent fraud, is paramount for the growth of any kind of online trade.

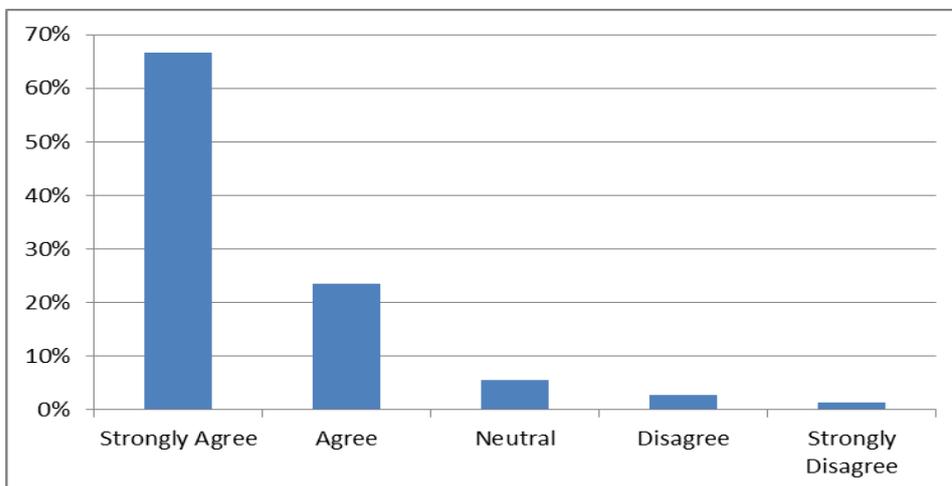
Figure 4.11 The cost of adoption.



Source: Researcher's own concept

As indicated by the above figure, as many as 79% of the total respondents cumulatively agreed that the cost of adopting the e-banking platform is very high while only 17% of the respondents disagreed to the issue of cost. Only 4% were neutral.

Figure 4.12 The cost of e-banking services to the low income earner

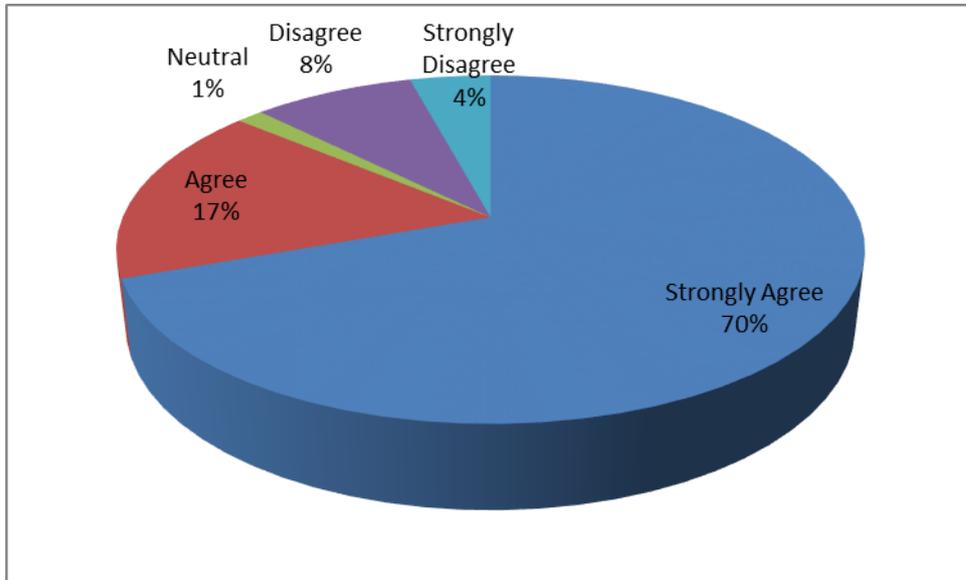


Source: Researcher's own concept

As indicated by the above table, 91% of the respondents cumulatively agreed to the assertion that the e-banking services are simply too expensive for the low earning customer. However only 3% of the respondents disagreed to the above assertion while

6% were neutral. The high percentage of respondents agreeing to the above assertion explains its high mean in table 4.4

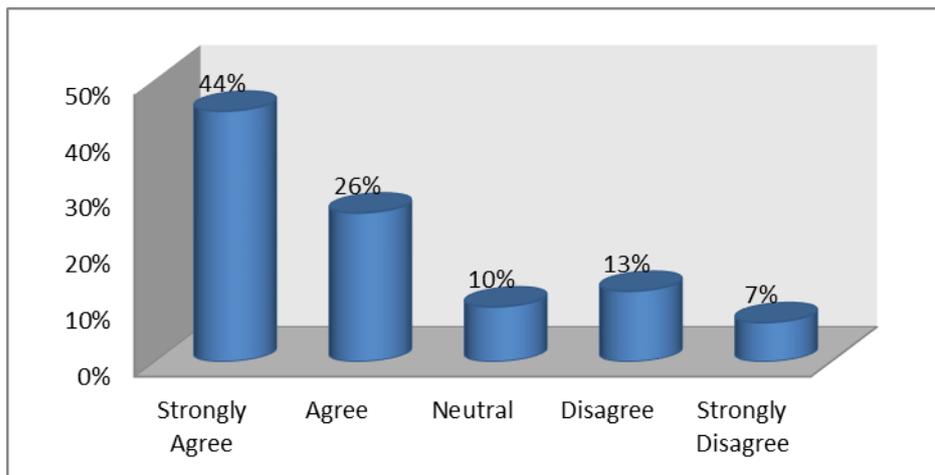
Figure 4.13 The level of technological illiteracy among customers



Source: Researcher's own concept

In relation to the challenge of technological illiteracy among customers, the above figure shows that, 87% of the total respondents cumulatively agreed that it acts as a barrier to the adoption of e-banking products. However 12% of the respondents were of the opposite view.

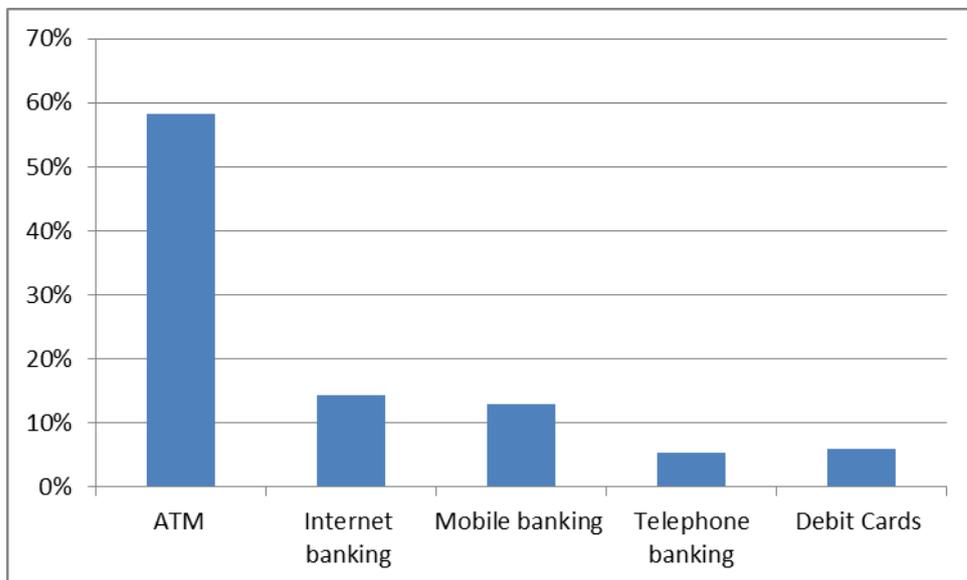
Figure 4.14 Preference for traditional banking by customers



Source: Researcher's own concept

Figure 4.14 indicates that 70% of the respondents stated that there is a high preference for traditional banking by customers. 10% of the respondents were neutral while 20% completely disagreed to the assertion that customers prefer traditional banking.

Figure 4.15 Adoption of e-banking by customers

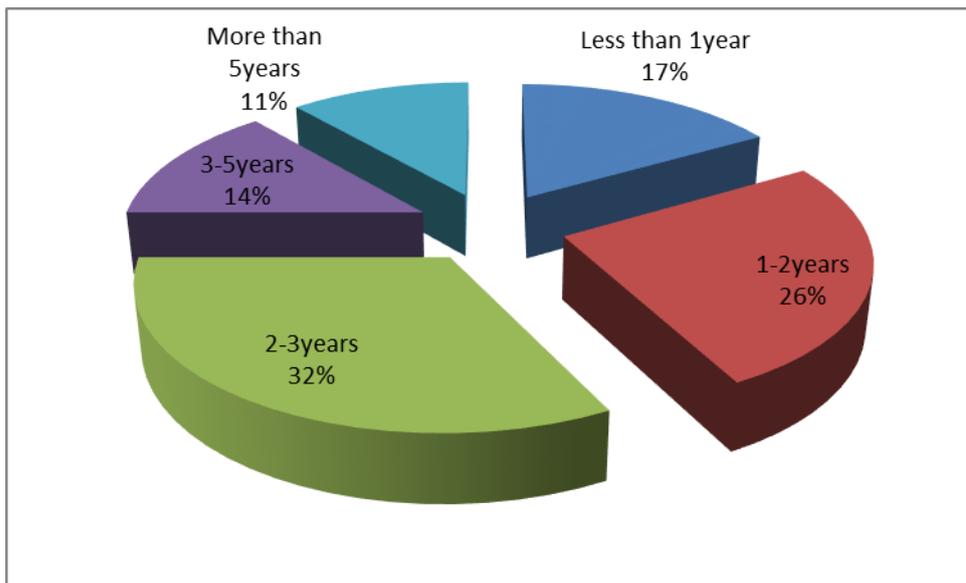


Source: Researcher's own concept

In assessing the specific e-banking products used by customers, customers were asked which of the e-banking products they used. As indicated by the above figure, 68% of the

total respondents stated they used ATM cards in the banking operations while only 17% indicated their usage of internet banking. Again 13% and 5% indicated their usage of mobile banking and telephone banking respectively. A further 6% indicated their usage of debit cards.

Figure 4.16 Length of time in using e-banking products



Source: Researcher's own concept

In relation to the length of time that customer have used the various e-banking products, 17% of the respondents stated that they have used e-banking products for less than twelve months while 26% of the respondents indicated they have used e-banking products between 1 and 2 years. A further 32% and 14% have used it between 2-3 years and 3-5 years respectively. Respondents who had use it for more than 5 years were 11%.

4.5 CONTRIBUTION of e-banking TO service delivery of FBL

Table 4.5 Delivery of service through ATM

ATM	MEAN	SD
The ATM makes cash withdrawal very convenient	4.55	0.84
There is less queuing using the ATM	3.74	1.45
Transaction on the ATM is secured	4.61	0.81
The ATM template is very easy to use	3.56	1.34
Transactions on the ATM is reliable	4.55	0.90
This ATM does not share my personal information with others	4.65	0.74

Source: Researcher's own concept

Table 4.5 reports the mean statistic of the delivery of e-banking service through the ATM. As indicated by the above table, the assertion that “ATM does not share my personal information with others” had the highest mean of 4.65 with a standard deviation of 0.74. This is a clear demonstration that most of the respondents agreed to the above assertion. This was followed closely by the assertion that “Transaction on the ATM is secured” which recorded a mean of 4.61 with a standard deviation of 0.81. The assertions “The ATM makes cash withdrawal very convenient” and “Transactions on the ATM is reliable” both had a mean of 4.55. The assertion with the lowest in relation to the delivery of banking services through the ATM was “The ATM template is very easy to use” which recorded a mean of 3.56 and a standard deviation of 1.34. The overall average mean for the delivery of banking services through ATM was 4.28.

Table 4.6 Delivery of service through internet banking

INTERNET BANKING	MEAN	SD
Internet banking makes banking very convenient	4.63	0.76
There is less queuing using internet banking	4.47	0.96
Transaction on the internet banking is secured	3.31	1.49
The internet banking is very easy to use	4.16	1.26
Transactions on the internet banking is reliable	3.68	0.95
Internet banking does not share my personal information with others	4.37	1.01

Source: Researcher's own concept

Table 4.6 reports the mean statistic of the delivery of electronic banking services through internet banking. According to the table " Internet banking makes banking very convenient" was the highest ranked service delivery aspect of internet banking, with a mean score of 4.63 (SD .76). The high mean demonstrates that majority of the respondents cumulatively agreed to the assertion that Internet banking makes banking very convenient. Similarly the "There is less queuing using internet banking", "Internet banking does not share my personal information with others" and "The internet banking is very easy to use" respectively had means of 4.47 (SD 0.96), 4.37 (SD 1.01) and 4.16 (SD 1.26) indicating the state of banking service delivery through the internet. Also, "Transaction on the internet banking is secured" had the lowest mean of 3.31 (SD 1.4). The overall average mean for the delivery of banking services through the internet was 4.10.

Table 4.7 Delivery of service through mobile/telephone

MOBILE/TELEPHONE BANKING	MEAN	SD
Mobile/Telephone banking makes banking very convenient	4.47	1.01
There is less queuing using Mobile/Telephone	3.82	1.33
Transaction on the Mobile/Telephone is secured	4.65	0.79
The Mobile/Telephone is very easy to use	4.06	1.39
Transactions on the Mobile/Telephone is reliable	4.47	0.62
Mobile/Telephone does not share my personal information with others	4	0.87

Source: Researcher's own concept

Table 4.7 reports the mean analysis of the delivery of e-banking service through telephone/mobile banking. As indicated by the above table, the assertion that “Transaction on the Mobile/Telephone is secured” had the highest mean of 4.65 with a standard deviation of 0.79. This is a clear demonstration that most of the respondents agreed to the above assertion. This was followed by the assertion that “Mobile/Telephone banking makes banking very convenient” and “Transactions on the Mobile/Telephone is reliable” which recorded a mean of 4.47 each with standard deviations of 1.01 and 0.62 respectively. The assertion with the lowest in relation to the delivery of banking services through telephone/mobile banking was “There is less queuing using Mobile/Telephone” which recorded a mean of 3.82 and a standard deviation of 1.33. The overall average mean for the delivery of banking services through telephone/mobile was 4.25. It can be concluded from the above assertions that the delivery of banking services through ATM had the highest average mean, followed by telephone/mobile and lastly internet banking.

The findings of this study concerning service delivery through e-banking platform agrees with the findings of Hannon (1998) and Winner (1997). This implies that financial institutions in Ghana with FBL being a part together with the Bank of Ghana who is their Regulator should embark on a massive educational campaign on the need for using the ATM, Mobile/telephone banking and the internet banking among others in order to encourage more people to enroll on them. This will help boost the services delivered by the banks.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION

5.0 INTRODUCTION

This chapter presents the summary of findings, recommendations aimed at addressing the contribution of electronic banking in the Ghanaian banking industry as well as the conclusion from the findings.

5.1 SUMMARY OF FINDINGS

The study found out that the following e-banking products are offered by FBL to its customers: ATM, internet banking, debit cards, mobile banking, electronic transfers and telephone banking. It also came to light through the study that majority of the staff are fully aware of the e-banking products and they also appreciate the importance of the e-banking services offered by FBL. However the same cannot be said of the customers, as many of the customers could not even state whether the e-banking products were good or not. The study also revealed that electronic banking contributes to the profitability of banks since offering e-banking is quite cheaper than the traditional branch banking. The overhead expenses involved in the traditional banking is higher than e-banking. Again the study found out that E-banking services are more profitable than traditional banking services.

In relation to the challenges faced by Fidelity Bank Limited in rolling out the various e-banking products, the study found out that the bank is besiege with some challenges. Among the key challenges the study found out were: The cost of adopting is very high, the services are simply too expensive for the low earning customer, there is technological illiteracy among customers, traditional banking still remain the best option for our

clients, most of the customers prefer face to face banking. The study also found out that e-banking products makes delivery of banking services very convenient with less queuing unlike the traditional branch banking. Again e-banking transaction are secured, the e-banking products are very easy to use and the various e-banking products do not share the personal information of customers with others.

5.2 CONCLUSION

Based on the above findings the study can conclude that electronic banking is gradually changing the face of banking in the Ghanaian industry. Most financial institutions including Fidelity Bank Ltd has suite of electronic banking products for its customers to choose from with the major ones been ATM, internet banking, debit cards, mobile banking, electronic transfers and telephone banking. The effective delivery of electronic banking by financial institutions has the capacity to reduce the cost of operations thereby impacting positively on the overall profit of the bank. Delivery of service through electronic banking is also improved as there is less queuing unlike the traditional branch banking and customers can transact with the bank in a more convenient manner. However there are some challenges in the introduction of these electronic banking.

5.3 RECOMMENDATIONS

It is recommended that financial institutions should embark on an intense educational campaign to educate its customers on the real benefits of electronic banking. The bank should run campaigns, promotions and adverts which aim at educating their customers on the need to adopt electronic banking services. Also, the campaign must aim at boosting customer confidence in the electronic banking services they provide and assure them of the security and privacy for the need to patronize these services. This will

remove the mystique surrounding e-banking and will encourage more customers to adopt the e-banking platform. Hence, more revenue will be generated as they patronize which will intend add up to the profit margins.

The Government of Ghana should provide the necessary measures in place in terms of legislations and infrastructure to create the enabling environment for electronic banking services to thrive in the country. This will help the financial institutions in raising more funds to be in the better position to contribute their quota of the VAT service introduced by the government.

Banks' staff and officials should be adequately trained in e-banking products and services to be able to help enroll more customers on the platform and also to address customers' needs and challenges when the need arises which will lead to boosting the customer's confident in their usage. By so doing, the banks can earn more revenue from the usage of the e-banking services which adds to their profit margins.

REFERENCES

- Agarwal, R., Sambamurthy, V., & Stair, R. (2000). Research Report: The evolving relationship between general and specific computer self-efficacy—An empirical assessment. *Information Systems Research*, 11(4), 418-430
- Agboola, A. (2006). *Information and communication technology (ICT) in banking operations in Nigeria: An evaluation of recent experiences*. Retrieved June 25, 2015, from <http://unpan1.un.org/intradoc/groups/public/documents/AAPAM/UNPAN026533.pdf>
- Akpan, E.O. (2009) "Oil Price Shocks and Nigeria's macro economy" *Paper presented at CSAE Conference, Oxford University, Oxford, UK. 21st-23rd March 2009.*
- Akinci, S., Aksoy, S., and Atilgan, E. (2004). Adoption of Internet banking among sophisticated consumer segments in an advanced developing country, *The International Journal of Bank Marketing*, 22 (2/3), pp. 212-232.
- Al-Ghamdi, S. (2009), "Influence of Organizational Commitment & Islamic work ethics on attitudes towards organizational change." *Journal for Global Business Advancement*, Vol. # 4, Issue # 4. (C)
- Al-Somali S.A, Gholami R and Clegg B (2008). Internet Banking Acceptance in the Context of Developing Countries: An Extension of the Technology Acceptance Model..
- Altintas, M. H. and Gürsakal, N. (2007), Phishing Attacks and Perceptions of Service Quality: A Content Analysis of Internet Banking in Turkey. *Journal of Internet Banking and Commerce*, 12 (2).
- Allen, A. P., Brown J. H. and Gillooly J.F. (2002), Global biodiversity, biochemical kinetics and the energy equivalence rule. *Science* 297:1545–1548
- Amadeh, H. and Jaafarpour, M. (2009), "Studying the obstacles and strategies of developing electronic banking in private banks of our country", *Administrative management Research Journal*, Year 9, No. 2, PP: 13-38.
- Auta P. (2010). Ebanking in Developing Economy: Empirical Evidence from Nigeria. *Journal of applied quantitative methods*, 5(2)
- Avasthi G.P, Sharma M (2000-01). 'Information Technology in Banking: Challenges for Regulators', *Prajanan* 29(4): 17

- Bauer, K. and Hein, S. E. (2006), “The effect of heterogeneous risk on the early adoption of Internet banking technologies”, *Journal of Banking and Finance*, 30(6), 1713-1725.
- Bhattacharjee, A. (2001) Understanding information systems continuance: an expectation-confirmation model. *MIS Quarterly*, **25**, 351–370
- Berger, R. (2003). In the footsteps of nature. *Horizons*, 22, 27–32
- Cai, Y., Yang, Y. & Cude, B. (2008). ‘Inconsistencies in US consumers’ attitudes toward and use of electronic banking: an empirical investigation’, *Journal of Financial Services Marketing*, 13(2): 150–163
- Chau, K.Y, Patrick & Lai, S., K, Vincent. (2003). An empirical investigation of the determinants of user acceptance of Internet Banking. *Journal of Organizational Computing and Electronic Commerce*, 13(2),123-145
- Chiemeké S. C, Ewwiekpaefe A. and Chete F (2006). The Adoption of Internet Banking in Nigeria: An Empirical Investigation, *Journal of Internet Banking and Commerce*, December 2006, vol. 11, no.3 (<http://www.arraydev.com/commerce/jibc/>)
- Cooper, D.R., & Schindler, P.S. (2003). *Business Research Methods*. (8th ed.). Boston
- CHOVANOVÁ, A. 2006. Formy elektronického bankovníctva. In BIATEC [online]. 2006, vol. 14, no. 6, [cit. 2013-12-21]. Dostupné na internete :<http://www.nbs.sk/img/Documents/PUBLIK_NBS_FSR/Biatec/Rok2006/BIATEC_2006.pdf>. ISSN 1335 – 0900
- Corritore, C.L., Kracher, B., & Wiedenbeck, S. (2003). On-line trust: Concepts, evolving themes, a model. *International Journal of Human-Computer Studies*, 58, 737758. [doi:10.1016/S1071-5819\(03\)00041-7](https://doi.org/10.1016/S1071-5819(03)00041-7).
- Cormack, D. F. S. (2000). Reviewing and evaluating the literature. In D. F. S. Cormack (Ed.) *The research process in nursing* (4th Ed.). Oxford: Blackwell Sciences Ltd
- Cunningham, Gerrard, P., J.B. and Devlin, J.F. (2006), “Why consumers are not using Internet banking: a qualitative study”, *Journal of Services Marketing*, Vol. 20 No. 3, pp. 160-16
- C.N. Madu, and A.A. Madu,(2002) “Dimensions of e-quality”, *International Journal of Quality & Reliability Management*, Vol. 19, No. 3, pp. 246-259

- Daghfous, N. & Toufaily, E. (2007). The adoption of E-banking by Lebanese banks: success and critical factors, research paper, Universte du Quebec a Montreal Retrieved from <http://www.esg.uqam.ca/recherche/document/2007/02-2007.pdf>
- Delgado, M. R. (2007) Reward-related responses in the human striatum. *Ann. NY Acad. Sci.* 1104, 70–88. ([doi:10.1196/annals.1390.002](https://doi.org/10.1196/annals.1390.002))
- Devos, T. (2006). Implicit bicultural identity among Mexican American and Asian American college students. *Cultural Diversity and Ethnic Minority Psychology*, 12, 381-402. [Journal Citation Reports 2012 Impact Factor: 1.603; Ranking: 24/60 (Psychology Social); Rejection rate: 80%
- De Young R. (2001). The internet's place in the banking industry. *Chicago Fed letter* no. 163. http://www.chicagofed.org/publications/fedletter/2001/cflmar2001_163.pdf
- De Young , R. (2005) “The performance of Internet-based business models: evidence from the banking industry”, *Journal of Business*, 78(3), p. 893-947
- De Young, C. G., Quilty, L. C., & Peterson, J. B. (2007). Between facets and domains: 10 aspects of the Big Five. *Journal of Personality and Social Psychology*, 93, 880–896.
- Furst, Karen, William W. Lang, and Daniel E. Nolle (2000). “Internet Banking: Developments and Prospects,” *Economic and Policy Analysis Working Paper* 2000-9, Office of the Comptroller of the Currency (September)
- Flynn, L. R., and Goldsmith, R. E. (1993), Application of the Personal Involvement Inventory in Marketing, *Psychology and Marketing*, 10 (4), pp.357-336.
- Ghauri, P. N., Grønhaug, K. & Kritianslund, I. (2005). *Research methods in business studies: A practical guide*. Prentice Hall: Dorchester
- Gardachew, W. (August, 2010). Electronic-banking in Ethiopia- practices, opportunities and challenges. *Journal of Internet Banking and Commerce*, vol. 15, no.2
- Garau, C. (2002) Online banking in transition economies: The implementation and development of online banking systems in Romania, *International Journal of Bank Marketing*, 20 (6), 285296
- Gerrard, P., Cunningham, J.B. and Devlin, J.F. (2006). Why consumers are not using internet banking: a qualitative study. *Journal of Services Marketing*, 20 (3), 160-8
- Gillis, A. & Jackson, W. (2002): *Research for Nurses – Methods and Interpretation*. Philadelphia: F. A. Davis Company

- Hazlina, T. *et al* (2011), Impacts of Service Quality on Customer Satisfaction: Study of Online Banking and ATM Services in Malaysia. *International Journal of Trade, Economics and Finance*, Vol.2, No.1, pp 023
- Hernando M.D., M. Mezcua, A.R. Fernández-Alba and D. Barceló. (2006). Environmental risk assessment of pharmaceutical residues in wastewater effluents, surface waters and sediments. *Talanta* 69:334-342.
- Kang, G.D. and James, J. (2004), “Service quality dimensions: an examination of Gronroos’s service quality model”, *Managing Service Quality*, Vol. 14 No. 4, pp. 266-77
- Jaruwachirathanakul, B., and Fink, D. (2005). Internet banking adoption strategies for a developing country: the case of Thailand, *Internet Research*, 15 (3), pp. 295-311
- Karjaluoto, H., Mattila, M. & Pentto, T. (2002). Electronic banking in Finland –consumer beliefs and reactions to a new delivery channel. *Journal of Financial Services Marketing* 6 (4), forthcoming. Factors underlying attitude formation toward Internet banking. Paper under review with the *European Journal of Marketing*
- Kaynak, E. and Harcar, T. D. (2005). Consumer attitudes towards online banking: a new strategic marketing medium for commercial banks. *Int. J. Technology Marketing*, 1 (1), 62-78
- Kim, B. M., Widdows, R. and Yilmazer, T. (2005), The Determinants of Consumers’ Adoption of Internet Banking. *Proceedings of the Consumer Behavior and Payment Choice 2005 Conference, Boston, MA*
- Laforet, S., Li, X., (2005). Consumers' attitudes towards online and mobile banking in China. *The International Journal of Bank Marketing* 23 (4/5), 362-380
- Lee, D.S., Owen, B., Graham, A., Fichter, C., Lim, L.L., Dimitriu, D., (2005). Allocation of International Aviation Emissions from Scheduled Air Traffic – Present Day and Historical (Report 2 of 3). Manchester Metropolitan University, Centre for Air Transport and the Environment, Manchester, UK. http://www.cate.mmu.ac.uk/project_view.asp?chg1/4projects&chg2/42&id/42 CATE-2005-3(C)-2See(accessed18.02.09).
- Liao, Z. and Cheung, M.T. (2002). Internet-based E-Banking and Consumer Attitudes: An Empirical Study. *Information and Management*, Vol. 39, pp. 283–295
- Lockett, A. and Litter, D. (1997) ‘The Adoption of Direct Banking Services,’ *Journal of Marketing Management*, 13, 791-811

- Macnee, C. and McCabe, S. 2007. *Understanding nursing research, reading and using research in evidence-based practice* (2nd ed).Wolters Kluwer, Lippincott, Williams and Wilkins: Philadelphia, Pennsylvania, USA
- Malhotra, N., & Mukherjee, A. (2004). The relative influence of organizational commitment and job satisfaction on service quality of customer-contact employees in banking call centres. *Journal of Services Marketing*, 18(3), 162–174.
- Malhotra , P. & Singh, B. (2009). The impact of internet banking on bank performance and risk : The Indian experience. *Eurasian Journal of Business and Economics*, 2 (4), 43-62
- Marfo-Yiadom, E., & Ansong, A. (2012). Customers’ Perception of Innovative Banking Products in Cape Coast Metropolis, Ghana. *International Journal of Business and Management*, 7(3), 162–172. <http://dx.doi.org/10.5539/ijbm.v7n3p162>
- Maylor, H. and Blackmon, K. (2005) *Researching Business and Management: A Roadmap for Success*, Basingstoke: Palgrave Macmillan
- MEDHI, I., GAUTAMA, S. N. N., AND TOYAMA, K. (2009). A comparison of mobile money transfer is for non-literate and semi-literate users. In *proceedings of the ACM Conference on Human Factors in Computing Systems (CHI)*
- Mia, Md. Abdul Hannan, Rahman, Mohammad Anisur and Debnath, Nitai Chandra (2007). “Consumer behaviour of On-line Banking in Bangladesh”, *Journal of Business Studies*, Vol. XXVII, No. 2, December
- Min, H., & Galle, W.P. (1999). Electronic commerce usage in business-to-business purchasing. *International Journal of Operations & Production Management*, Vol. 19 No.9, pp.909-21
- MUKHERJEE, A. & NATH, P. (2003) A model of trust in online relationship banking. *International Journal of Bank Marketing*, VOL.21, No.1, 5-15.
- Onay, C.; Ozsoz, E.; Helvacioğlu, & Ash, D. (2008). *The Impact of Internet Banking on Banks Profitability- The Case of Turkey*, *Oxford Business and Economics Program*. Available at:www. Papers .ssrn .com /sol3 /Delivery .cfm? abstractid=1698783. date: 10.02.2013
- Ozsoz, E., Onay, C. and A.D. Helvacioğlu (2008), “The Impact of Internet-Banking on Bank Profitability- The Case of Turkey”, *Proceedings of 2nd Oxford Business and Economics Conference* , pp.1-16, 22-24 June 2008, St. Hugh’s College, Oxford University, UK

- Parahoo, K. (2006): *Nursing Research – Principles, Process and Issues*. 2nd Edition. London: Palgrave MacMillan
- Padachi, K., Rojid, S., and Seetanah, B. (2007). Analyzing the factors that influence the adoption of internet banking in Mauritius, *Paper presented at the Proceedings of the 2007 Computer Science and IT Education Conference*.
- Parasuraman, A., Zeithaml, V. and Berry, L.L. (1985), “A conceptual model of service quality and its implications for future research”, *Journal of Marketing*, Vol. 49, Autumn, pp. 41-50.
- Pikkarainen, T., Pikkarainen, K., Karjaluoto, H., & Pahnla, S. (2004),”Consumer acceptance of online banking: An extension of the technology acceptance model”. *Journal of Internet Research*, Vol. 52 No. 2, pp. 67-83.
- Polatoglu, V. N., & Ekin, S. (2001). An empirical investigation of the Turkish consumers' acceptance of internet banking services. *International Journal of Bank Marketing*, 19 (4), 156-65
- Polit D, Beck C (2006) *Essentials of Nursing Research: Methods, Appraisal and Utilization*. 6th edn. Lippincott Williams and Wilkins, Philadelphia
- Raechel Johns, Bruce Perrott, (2008) "The impact of internet banking on business-customer relationships (are you being self-served?)", *International Journal of Bank Marketing*, Vol. 26 Iss: 7, pp.465 – 482
- Rasiah, R.—. 2010. “Industrialization in the second-tier NIEs”, in R. Rasiah; D.J. Schmidt (eds): *The new political economy of Southeast Asia* (Cheltenham, Edward Elgar), pp. 44–102
- Rose, P. S. (1999). *Commercial bank management*. Boston, Irwin/McGraw-Hill.
- Salhi, M., & Alipour, M. (2010). E-Banking in emerging economy: empirical evidence of Iran. *International Journal of Economics and Finance*, 2(1), 201-209
- Sarokolaei, M. A. *et al.* (2012) —A comparative study of activity-based costing system and the traditional system: A case study of Refah Bank|| *African Journal of Business Management* Vol.6 (45): 11221-11230
- Sathye, M. (1999). Adoption of internet banking by Australian consumers: an empirical investigation. *International Journal of Bank Marketing*, 17 (7), 324-34
- Shah, D. V., Cho, J., Eveland, W. P., & Kwak, N. (2005). Information and expression in a digital age: Modeling Internet effects on civic participation. *Communication Research*, 32, 531–565

- Shetty, Prakash S. (2000). Diet and life-style and chronic non-communicable diseases: What determines the epidemic in developing societies? In *Nutrition Research: current scenario and future trends*, Kamala Krishnaswamy, ed. Oxford and IBH, New Delhi, pp. 153-168.
- Stewart C., Myers 1999. "Financial Architecture." *European Financial Management*. 5:2, pp. 133-41
- Speece, M. and Suwannaporn, P., (2000) "Continuous Learning Process in New Product Development: The Case of the Thai food Industry", *British Food Journal*, 102(8) : 598-614
- Tiwari, R. and S. Buse, *The Mobile Commerce Prospects: A Strategic Analysis of Opportunities in the Banking Sector*, unpublished.
- Twumasi P. A (2001). Social research in rural communities. Accra, Ghana: Ghana Universities Press.
- Venkatesh, V., Morris, M. G., Davis, G. B., and Davis, F. D. (2003). "User Acceptance of Information Technology: Toward a Unified View," *MIS Quarterly* (27:3), pp. 425-478
- Wan, W.W.N.; Luk, C.L.; and Chow, C.W.C. (2005), Customers Adoption of Banking Channels in Hong Kong, *International Journal of Bank Marketing*, Vol. 23, No. 3, pp. 255-272
- Wondwossen, T and Tsegai, G (2005), 'E-payment: challenges and opportunities in Ethiopia', Economic commission for Africa, Addis Ababa, Ethiopia

APPENDIX I

QUESTIONNAIRE FOR STAFF

I am a postgraduate student of The KNUST School of Business. I am conducting this research as part of preparation for a Master's Degree Programme. Your organisation has been chosen for a study for academic purposes and as such I would appreciate your voluntary cooperation to complete the questionnaire. All information provided by respondents will be treated confidentially.

***Instruction:* Please tick your response in the space provided. In all such cases where more than one responses is necessary under the same Question, please tick as many responses as are applicable**

SECTION A: GENERAL PROFILE OF RESPONDENTS:

1. Age of respondent:

20 – 30years [] 31– 40years [] 41 – 50years []

51– 60years [] 61years and above []

2. Gender; Male [] Female []

3. Marital Status: Married [] Single [] Divorced [] Widow []

4. Highest level of education: PhD [] Master's Degree []

First Degree [] HND[] SSCE/WASSCE []

others (please specify).....

5. How long have you been working in the organisation:

0 – 5 years [] 6 – 10 years [] 11 – 15 years []

16 – 20 years [] above 20 years []

SECTION B: The electronic banking services offered by FBL

1. In general, what do you feel about E-Banking as a new system of delivering banking services?

- a) Essential
- b) Desirable
- c) Cannot say exactly
- d) Any other (Please specify).....

2. Which of the following E-banking services are provided by your bank?

- a) ATM banking
- b) Telephone banking
- c) Credit Cards
- d) Debit Cards
- e) Mobile banking
- f) P.C. banking
- g) Electronic transfers (EFTs)
- h) Internet banking

3. How do you let your customers know about E-banking services you provide?

(Tick applicable one(s))

- a) Through bank officials
- b) Advertisement in Print Media
- c) Television and Radio Advertisement
- d) On line Advertisement
- e) Through their employers
- f) Any other (Please specify).....

.....

4. Indicate by ticking the services offered through the various e-banking platforms in your bank

	ATM	Internet banking	Mobile banking	Telephone banking	PC banking
a) Cash withdrawal					
b) Cash and cheque deposit					
c) Balance enquiry					
d) Cheque book requisition					
e) Utility bills payments					
f) Statement requisition					
g) Call credit tops					
h) Funds transfers					

5. What are methods you use to encourage your bank clients to use E-banking?
(Tick as many as applicable)

- a) Make them cheaper by reducing charges and fees
- b) Incentives to E-banking users
- c) Intensive advertisement
- d) Contacting every customer personally
- e) Keep on reminding customers through written communication
- f) Demonstrating on how to use services to them
- g) Giving them guarantee of security and privacy
- h) Giving the technological knowledge to customers through seminars

SECTION C: The contributions of e-banking to FBL’s profitability.

No difference in profitability as compared to branch banking			
E-banking services are more profitable than traditional banking services.			
E-banking services are generally cheaper than traditional banking at the branch as the cost of providing them is less.			

SECTION D: The challenges faced by FBL in introducing e-banking services

Indicate your level of Agreement on the following statements by ticking the appropriate number using the key given below: 5 = strongly agree 4= Agree 3=Neutral 2 = Disagree 1= strongly Disagree

In your own opinion what are the challenges facing the adoption of E-banking technologies? (Please give your opinion to the following statements in the appropriate column.)

STATEMENTS	1	2	3	4	5
The cost of adopting is very high.					
The services are simply too expensive for the lower earning customer					
There is technological illiteracy among customers					
Lack of infrastructure is the main hurdle/problem					
Many banks fear cross-border risk since the laws are different from one country to another					

Most of the customers prefer face to face banking					
Customers fear using E-banking because electronic crimes are arising greatly.					
Traditional banking still remain the best option for our clients					
Many banks fear because there are no proper laws and regulations regarding E-banking					
Many banks fear risk management challenges like reputation risk, operational and capital adequacy risk.					
Security concerns is the most discouraging factor in using E-banking because customer feel insecure as they do not know where electronic transaction pass and whom they meet.					
Most of the customers do not know how to use and are not aware of some E-banking services provided by their banks.					
Technology becomes obsolete within a short time					

THANK YOU.

SECTION B: The electronic banking services offered by FBL

1. In general, what do you feel about E-Banking as a new system of delivering banking services?

- a) Essential []
- b) Desirable []
- c) Cannot say exactly []
- d) Any other (Please specify)-----

2. How did you come to know about E-Banking services? (Tick as many as applicable)

- a) From bank officials []
- b) Advertisement in Print media []
- c) Television and Radio Advertisement []
- d) On line Advertisement []
- e) From your family members []
- f) From your Friends []
- g) Any other (Please specify).....

3. (i) Which among the following E-Banking services are provided by your bank? (Tick as many as applicable)

- a) ATM []
- b) Internet banking []
- c) Mobile banking []
- d) Phone Banking []
- e) Internet banking []
- f) Debit Cards []
- g) Credit cards []

h) Any other (Please specify)

3. (ii). Which one (s) among the E-Banking services below have you personally adopted?

a) ATM []

b) Internet banking []

c) Mobile banking []

d) Phone Banking []

e) Internet banking []

f) Debit Cards []

g) Credit cards []

h) Any other (Please specify)

.....

3.(iii) Since when have you been using E-banking services?

(a) Less than 1 year [] (b) 1-2 years [] (c) 2-3 years []

(d) 3-5 years [] (e.) More than 5 Years []

4. Rank the following channels from most preferred to less preferred in Numerical Number 1 to 6

a) Automatic Teller Machines (ATMs)/debit cards []

b) Home /Office /PC banking []

c) Branch (face to face) banking []

d) Telephone banking []

e) Mobile banking []

f) Internet banking []

g) Any other (Specify)

SECTION C: The delivery of e-banking services

Indicate your level of Agreement on the following statements by ticking the appropriate number using the key given below: 5 = strongly agree 4= Agree 3=Neutral 2 = Disagree

1= strongly Disagree

STATEMENTS	1	2	3	4	5
ATM					
The ATM makes cash withdrawal very convenient					
There is less queuing using the ATM					
Transaction on the ATM is secured					
The ATM template is very easy to use					
Transactions on the ATM is reliable					
This ATM does not share my personal information with others					
INTERNET BANKING					
Internet banking makes banking very convenient					
There is less queuing using internet banking					
Transaction on the internet banking is secured					
The internet banking is very easy to use					
Transactions on the internet banking is reliable					
Internet banking does not share my personal information with others					
MOBILE/TELEPHONE BANKING					
Mobile/Telephone banking makes banking very convenient					
There is less queuing using Mobile/Telephone					
Transaction on the Mobile/Telephone is secured					
The Mobile/Telephone is very easy to use					
Transactions on the Mobile/Telephone is reliable					
Mobile/Telephone does not share my personal information with others					

THANK YOU.