THE IMPACT OF ELECTRONIC BANKING ON SERVICE DELIVERY TO CUSTOMERS OF GHANA COMMERCIAL BANK LIMITED.

A STUDY OF GHANA COMMERCIAL BANK LTD, HO POLY TECHNIC BRANCH.

by

Kwashie Wisdom (B.Com)

(PG 4123210)

A Thesis submitted to the Institute of Distance Learning, Kwame Nkrumah University of Science and Technology in partial fulfillment of the requirements for the degree of

COMMONWEALTH EXECUTIVE MASTERS OF BUSINESS ADMINISTRATION

JULY 2012
DECLARATION

I hereby declare that this thesis is my own work towards the Executive Masters of 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 acknowledgment has been made in the text.

Wisdom Kwashie ........................................ ............................... .............................

Signature Date

Certified by:

.................................................. .............................

Dr Oliver E. Dzogbede Signature Date

Certified by:

Prof. I.K. Dontwi. Dean, IDL ................................. .............................

Signature Date
ABSTRACT

The study investigated the impact of electronic banking on service delivery to customers of Ghana Commercial Bank Limited using the Ho polytechnic branch as a case study. One hundred and sixty six customers were sampled using non – probability sampling techniques. The study employed a case study approach and data was collected using closed ended questionnaire. The study found the kinds of electronic banking services that are available at Ghana Commercial Bank. This includes ATM services, SMS (Mobile) Banking, Internet Banking, E_Zwich Card. The benefits of these services to customers and the impact on service delivery. The results specifically, showed a positive correlation between electronic banking and service delivery which implies that there is a positive impact of electronic banking on service delivery. The findings further suggested that customer negative perception about service delivery of the bank has significantly changed given the introduction of electronic banking products. Its been recommended that management of Ghana Commercial Bank Ltd invest massively in IT in order to further promote efficient and smooth service delivery. There is also the need to extensively develop more E-banking products and to do extensive customer education to enable more customers patronize.
DEDICATION

I DEDICATE THIS THESIS TO GOD ALMIGHTY. THE ALPA AND THE OMEGA
ACKNOWLEDGEMENTS

My first appreciation goes to God almighty for his divine guidance and abundant grace. Indeed great is thy faithfulness.

My second appreciation goes to Dr Oliver E. Dzogbede my supervisor for his tremendous contribution to this study. May God reward him abundantly.

I am also indebted to Mr Innocent Bedi, Delle Eric and Kportosu Edem for their help and support.

My sincere gratitude also goes to my wife Peace Dzah-Smith for her support, understanding and sacrifice. God bless you

And to you my lovely daughter Stephanie Yayra Afari .thank you and God bless you abundantly.
TABLE OF CONTENTS

TITLE PAGE ......................................................................................................................... i
DECLARATION ..................................................................................................................... ii
DEDICATION ....................................................................................................................... iii
ACKNOWLEDGMENT .......................................................................................................... iv
ABSTRACT ............................................................................................................................ v
TABLE OF CONTENTS ......................................................................................................... vi
LIST OF TABLES .................................................................................................................. vii
LIST OF FIGURES ............................................................................................................... viii

CHAPTER ONE .................................................................................................................... 1

1.0 INTRODUCTION ............................................................................................................ 1

1.1 BACKGROUND OF THE STUDY .............................................................................. 1
1.2 STATEMENT OF THE PROBLEM ........................................................................... 3
1.3 OBJECTIVES OF THE STUDY ................................................................................ 4
1.4 RESEARCH QUESTIONS ........................................................................................... 5
1.5 SIGNIFICANCE OF THE STUDY ............................................................................. 5

CHAPTER TWO ................................................................................................................... 7
LITERATURE REVIEW .......................................................................................................... 7

2.0 INTRODUCTION .......................................................................................................... 7

2.1 COMMERCIAL APPLICATION OF ICT IN THE BANKING INDUSTRY ................... 7
2.2 ELECTRONIC BANKING SERVICES ..................................................................... 8
2.3 RELATED STUDIES ..................................................................................................... 10

2.4 BENEFITS OF ELECTRONIC BANKING ................................................................. 13
2.5 RISK ASSOCIATED WITH E- BANKING ................................................................. 16
2.6 SERVICE DELIVERY AND CUSTOMER SATISFACTION ...................................... 18
CHAPTER THREE .................................................................................................................. 24
METHODOLOGY .................................................................................................................. 24
3.0 INTRODUCTION ............................................................................................................. 24
3.1 THE STUDY OF AREA – GCB ....................................................................................... 24
3.2 RESEARCH DESIGN ..................................................................................................... 25
3.3 POPULATION ............................................................................................................... 26
3.4 SAMPLE SIZE AND SIMPLING TECHNIQUE ............................................................. 27
3.5 DATA COLLECTION INSTRUMENT .............................................................................. 28
3.6 PILOT STUDY .............................................................................................................. 28
3.7 DATA COLLECTION PROCEDURE ............................................................................. 28
3.8 DATA ANALYSIS ....................................................................................................... 30

CHAPTER FOUR .................................................................................................................. 30
DATA PRESENTATION, ANALYSIS AND INTERPRETATION ............................................ 30
4.0 INTRODUCTION ............................................................................................................ 30
4.1 DEMOGRAPHIC CHARACTERISTICS OF PARTICIPANTS ....................................... 31
4.2 ELECTRONIC BANKING SERVICES OF GHANA COMMERCIAL BANK ................. 35
4.3 ELECTRONIC BANKING SERVICES AND SERVICE DELIVERY OF GHANA COMMERCIAL BANK ........................................................ 35
4.4 CUSTOMER PERCEPTION BEFORE AND AFTER THE INTRODUCTION OF E-BANKING SERVICES ............................................................ 39
4.5 BENEFITS OF E-BANKING SERVICES .................................................................... 40
4.6 INTERPRETATION OF RESULTS .............................................................................. 44

CHAPTER FIVE .................................................................................................................. 47
SUMMARY, CONCLUSION AND RECOMMENDATION .................................................. 47
5.0 INTRODUCTION ............................................................................................................ 47
5.1 SUMMARY OF FINDINGS .......................................................................................... 47
5.2 CONCLUSION ............................................................................................................. 48
5.3 RECOMMENDATION ................................................................................................. 49

REFERENCE ..................................................................................................................... 50

APPENDIX ........................................................................................................................ 51
QUESTIONNAIRE
**LIST OF TABLES**

4.1.1 SEX OF RESPONDENTS........................................................................................................31
4.1.2 AGE OF RESPONDENTS......................................................................................................32
4.1.3 EDUCATIONAL LEVEL OF RESPONDENTS.......................................................................32
4.1.4 NUMBER OF YEARS WITH GCB.........................................................................................33
4.2.1 BANKING SERVICES PATRONIZED BY CUSTOMERS..........................................................34
4.2.2 USE OF E-BANKING SERVICES..........................................................................................35
4.3.1 CORRELATION ANALYSIS....................................................................................................36
4.5.1 E-BANKING SAVES TIME....................................................................................................41
4.5.2 E-BANKING SERVICES ARE USEFUL..................................................................................42
4.5.3 E-BANKING SERVICES QUICKENS SERVICE DELIVERY....................................................45
LIST OF FIGURES

4.3.1 SATISFACTION WITH E-BANKING SERVICES ................................................................. 37
4.3.2 DEGREE OF SATISFACTION WITH E-BANKING SERVICE ........................................... 38
4.3.3 IMPACT OF E-BANKING ON SERVICE DELIVERY ....................................................... 39
4.4.1 HOW THE INTRODUCTION OF E-BANKING HAS CHANGED THE PERCEPTION ABOUT SERVICE DELIVERY IN GCB ................................................................. 40
4.5.1 ELECTRONIC BANKING SERVICES ARE CONVENIENT ............................................. 43
CHAPTER ONE

INTRODUCTION

1.0 Introduction

The upsurge in Information Communication Technology (ICT) in the present world has affected the delivery of service in most if not all organisations. The Ghana Commercial Bank (GCB) like other service industries has its own share of ICT influence. This study examines the impact of Electronic Banking on service delivery to customers of Ghana Commercial Bank. This chapter thus presents the introduction, discussing the background of the study, stating the aims of the study, the problem statement and the relevance of the study among others.

1.1. Background of the study

The rapid changes in business operations in contemporary times in the form of technological improvement require banks in Ghana to serve their customers electronically. Traditionally, banks have been in the forefront of harnessing technology to improve their products and services. The banking industry and its environment in the 21st century is highly complex and competitive and therefore the need for information and communication technology to take centre stage in the operations of banks (Stevens, 2002).

E-banking is critical in the transformation drive of banks in areas such as products and services and how they are delivered to customers. Thus, it is seen as a valuable and powerful tool in the development, growth, promotion of innovation and enhancing competitiveness of banks (Gupta, 2008; Kamel, 2005). Given the significant role of e-
banking in the developmental drive of banks, information technology has been found to lead to improvement in business efficiency and service quality and hence attract customers as well as retain them (Kannabiran & Narayan, 2005).

According to Chang, (2003), e-banking contributes significantly to the distribution channels of banks such as automated teller machine (ATM), Phone–banking, Tele-banking, PC-banking and now internet banking (Chang, 2003). In addition, transfer of funds, viewing and checking savings account balances, paying mortgages, paying bills and purchasing financial instruments and certificates of deposits processes have improved significantly as a result of internet banking (Mohammed et al., 2009). This implies that, e-banking has resulted in efficiency in service delivery in the banking sector because customers can transact business from one side of the country to another and from both long and short distance.

Other scholars argued that, e-banking has transformed traditional banking practices to the extent that it has been found to create a paradigm shift in marketing practices resulting in positive performance in the banking sector (Gonzalez, 2008; Maholtra & Singh, 2007). This shows that the delivery of efficient and quality service is facilitated by information technology. Similarly, Christopher et al. (2006) indicated that e-banking provides an important channel to sell products and services of banks and is perceived to be a necessity for banks to be successful. Therefore, service quality and efficiency in the banking industry has increased tremendously worldwide in the world due to the integration of information technology into banking operation. The present study seeks to
investigate the extent to which the e-banking concept has influence service quality in the service delivery of Ghana Commercial Bank.

1.2. Statement of problem

In the past, customers’ demand for banking services was driven basically by safety of their monies as well as interest accruing from such savings. However, the present day customers’ demand has shifted from just safety of money to how banks deliver their services. The reason is that the present day customer requires efficient, fast and convenient services.

Ghana Commercial bank is the biggest bank in Ghana in terms of number of customers, number of branches and even banking services. Since its establishment, the bank has remained a bank of choice for urban and rural dwellers, rich and poor, ordinary and privileged, and active workers and pensioners. It is of little wonder that the bank has a presence in virtually every district of the country. These numerous branches coupled with its predisposition and the needs of the poor in particular have increased exponentially its customer base throughout the country. So big is the customer base of the bank that daily visits to the bank’s banking halls reveal long winding queues of people waiting to transact business of all kind.

Occasionally, many of the customers out of frustration and unnecessary delays do complain of the bank’s operations. Some customers who are in need of quick and fast service delivery leave GCB for other banks which they usually described as providing fast-track banking services.
It appears operational challenges in the form of delay in service delivery made the bank unattractive to the Ghanaian public. In response to this concern, the bank began automation in order to remain competitive.

The financial market has become so competitive in recent times due largely to the liberalisation of the banking industry. Also due to information communication technology (ICT) advancement, the bank has ceased the opportunity to automate its processes and introduce E-banking products. Although the bank’s own business culture has seen some changes, it appears long queues and system failure still exists and remains a major issue to be resolved.

Thus the study seeks to investigate the impact of E-banking on services delivered to customers of Ghana Commercial bank Ltd. Further the study investigated the relationship or impact on service delivery and customer satisfaction considering the electronic banking services available in Ghana Commercial Bank Ltd.

1.3. Objectives of the study

The general purpose of the study is to investigate the influence of e-banking on service delivery in Ghana commercial bank. However, the study specifically seeks to:

1. Identify the e-electronic banking services offered by GCB and its usage by customers

2. Examine the impact of e-banking on service delivery;

3. Identify customers’ level of satisfaction with service delivery given the introduction of e-banking services.
4. Determine how the introduction of e-banking has changed customers’ perception about the bank.

5. Identify the benefits to customers for using e-banking services.

1.4. Research questions

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

1. What are the electronic banking products of Ghana Commercial Bank?

2. Has the introduction of e-banking significantly affected service delivery of Ghana Commercial Bank?

3. Has e-banking positively affected service delivery in GCB?

4. Has E-banking significantly changed customer’s perception about Ghana Commercial Bank?

5. Given the usage of Electronic banking services, how satisfied are customers of the bank?

1.5. Relevance/Significance of the study

The introduction of ICT into the banking industry has affected service delivery in the service industry. Many banks are shifting gradually from the traditional way of banking and are gradually introducing ICT into their service delivery. This work seeks to examine the impact of the use of ICT services on service delivery to customers and it would be of great significance to the banks, the regulatory body, the consuming public and to business world at large.
In the first place the study will help the bank identify the perception the consuming public have about the electronic banking services they are providing. The satisfaction of the customer is the prime occupation of the bank, thus this study will provide evidence for the improvement of these services. Also, the study through the examination of service quality will enable the bank judge its performance in the light of how customers judge it.

It is further expected that the study will provide the needed evidence to the Bank of Ghana, the regulatory body and the Consumer Protection Agency to further strengthen their resolve in ensuring that customers or the banking public enjoys the best of services.

The study is also of significance to the customer and the business world in general. The outcome of the study will provide evidence for banks to improve their service delivery and the performance of customer care units which are geared towards the satisfaction and comfort of the customer.

Finally, the study will add to literature in the area of marketing, customer satisfaction and quality service delivery in the banking industry.
CHAPTER TWO
LITERATURE REVIEW

2.0 Introduction
This chapter presents a review of previous studies related to the present study. The chapter constitutes examination of studies related to service delivery and customer satisfaction in the service industry. It also examines the relationship between customer satisfaction, customer retention and service delivery. The chapter also outlines the Electronic banking services available in the Ghana Commercial Bank.

2.1 Commercial Application of ICT in the Banking Industry
The rapid advancement in ICT has had a profound effect on the banking industry and the wider financial sector over the last 2 decades. ICT is now a tool that facilitates the bank’s organizational structures, business strategies and customer services (Jayamaha, 2008). ICT enables the development of sophisticated products, better market infrastructure, and implementation of reliable techniques for control of risks and helps the banks to reach geographically distant and diversified markets.
Today, the effective use of ICT is assisting banks to be more customer centred in their operations by building a solid foundation for customer relationship management. The system also helps to grow a range of products or services while mitigating fraud levels and improving risk management, reduce transaction and operational cost and to remain competitive. In sum, Khanna (2003) noted that technology has changed the contours of the three major functions performed by banks: access to liquidity, transformation of assets and monitoring risks.

2.2 Electronic Banking Services

E-banking has been defined differently by researchers partly because e-banking services vary (Daniel, 1999; Sathye, 1999). For instance, Salehi and Zhila, (2008) indicated that e-banking involves an electronic connection between bank and customer in order to prepare, manage and control financial transactions of the customer by the bank. This type of banking has been found to be driven through the following channels:

- Internet banking (or online banking),
- Telephone banking,
- TV-based banking, and
- Mobile phone banking (or offline banking).

Applications of ICT within the banking sector are the development of products and service such as: networked branches, ATM’s, internet banking, SMS and Telephone Banking, Electronic Bill Payment among others. The Ghana Commercial Bank has under
their electronic banking models the following: Internet banking, Mobile banking and Cards and ATM’s (Master Card, E-Zwich and Ready Cash). These developments have enabled the bank to provide more diversified, secured and convenient financial services.

**GCB Internet Banking**

This is a service that gives the customer of the bank access to their account always at any time and any place that the service is available through the internet. The services enable customers to transfer funds, download and print statements, request for cheque book and savings withdrawal booklet, establish and modify standing orders and make payments through the internet.

**GCB Mobile Banking**

This is an innovative service that allows the customer to perform banking transactions via the mobile phone. The service offers the customer the opportunities such as: transaction alert (informing customers of account activity), account enquiries, mini statement, requesting for cheque books or savings withdrawal books, account to account transfer and even top – ups of mobile phone credits.

The GCB Mobile Banking is secured. The bank has ensured that adequate security through the issuing of Personal Identification Number (PIN) which the customer is admonished not to share with a third party.
**GCB Readycash Card**

The GCB Readycash card like the others allows the customer to withdraw cash from their accounts anytime and anywhere that the service is available. The customer can conveniently transact banking business around the clock. Service such as: cash withdrawal, checking account balance, printing of last five transactions, statement request is some of the services under this service.

**E-Zwich Card**

This is a National Switch that links the payments systems of all licensed banks and non-bank financial institutions. The smart card stores money for transaction purposes. It is a secured way of paying for goods and services throughout the country, based on biometric identification. The card performs all banking transactions within Ghana.

**GCB Master Card**

The GCB Master card is an international electronic card that allows the card holder to transact business through MasterCard branded terminals. GCB offers two types of MasterCard depending on the preference of the customer. These are the Gold Debit Card and the Standard Debit card. The Gold card offers higher personal spending limits, local and international usage, purchases and cash withdrawals directly from an account, travel information privileges, access to internet banking services and a secured flexible transactions. The Standard Card also offers what the Gold Card offers but with a secured and a lower spending limits.
2.3 Related Studies

According to literature, some researchers limit the concept of e-banking to internet banking while others limit it to retail banking (Daniel, 1999; Aladwani, 2001) and yet others define e-banking to include both retail and corporate banking (Simpson 2002). Also, the Basel Committee Report on Banking Supervision (1998) advanced that e-banking involves the provision of retail and small value banking products and services (e.g. deposit-taking, lending, account management, the provision of financial advice, and electronic bill payment) through electronic channels.

Karjaluoto, et. al., (2002) argued that banks have the prerogative to determine among the numerous e-banking services, the most suitable for their operations. Additionally, they stressed that Internet technology is the main electronic distribution channel in the banking industry. Similarly, Wang, et. al., (2003) postulated that e-banking was underutilized in the 1990s primarily because organizations limited it to the marketing of their products and services. The assertion that e-banking has been underutilized could be due to lack of knowledge or the high illiteracy level of a section of the banking population. In Ghana for instance, several people especially the rural folks have not benefited from e-banking services even when such services are incorporated into the operations of the banks.

Further, Thornton and White (2001) in a study of customer orientations and usage of financial distribution channels in the Australian financial industry, revealed that due to the competitive pressure following the deregulation in the 1980s, most financial institutions adopted Information Technology (IT). In addition, Rafiu (2007) asserted that
the challenge to expand and maintain banking market share has influenced many banks to invest more in making better use of the Internet. The emergence of e-banking had made many banks rethink and review their IT strategies in the competitive markets. This translates to the fact that e-banking services have significant effect on banking operations. The adoption of e-banking services has led to significant reduction in long queues in some Ghanaian banks and hence the reputation of such banks has increased.

In support of the above findings, Jasimuddin (2004) demonstrated in a Saudi Arabia study that the majority of Saudi banks took advantage of Internet technology to establish web sites but few offered e-banking services. Banking services should be tailored towards the needs of the banking population. In line with this, it is important that e-banking services are designed in such a way that both literate and illiterate customers can use them without one being assisted to use them.

Ayo (2006) investigated the prospects of e-commerce based on Ability, Motivation and Opportunities (AMO) model and observed that virtually all companies have online presence. The paper reported the motivation and opportunities for e-commerce as low based on lack of e-Payment infrastructure and access to Information and Communication Technology (ICT) facilities. Also, in an empirical assessment of customer acceptance of Commerce carried out in Germany, Buse and Tiwari (2006) observed that: the highest mobile users are top management, followed by self-employed, salaried class, students and others. Government employees were found not to patronize mobile banking; the most favoured reason for carrying out mobile banking is ubiquity, next is overview of bank
account, followed by immediacy; and the highest fear of customers about mobile banking is that of insecurity, next is cost, and uncomfortably. This implies that, e-banking services generally focus on the formal sector workers as well as the educated who patronize banking services. Does it mean therefore that, the unbanked do not work or the banking sector is meant for only the educated workers and students, who can read, interpret and write things? In line with this reasoning, it is not surprising that, e-banking services are being underutilized in most parts of the world especially Africa when illiteracy levels are extremely high.

Banks normally assign their managers responsibility for the promotion of the use of electronic channels to customers (Lymperopoulos & Chaniotakis, 2004). It is also the manager’s responsibility to ensure that branch staff is professional, well-trained and knowledgeable about the range of services provided by the bank (Moutinho, 1997).

Moutinho and Phillips (2002) found that Scottish bank managers considered efficiency and enhancement of customer service to be two perceived advantages of Internet banking. Similarly, Aladwani (2001) highlighted faster, easier, and more reliable service for customers, and improvement of the bank’s competitive position to be the most important drivers of online banking among bank and IT managers in Kuwait.

2.4. Benefits of Electronic Banking

Benefits to the banks, customers and employees
The technological innovation has brought about several gains to the banking industry. Some of these can be identified as convenience to banking, enhanced customer access and awareness, speedy or faster process and transmission of information, reduction of fraud levels and improved risk management. Other benefits are global compliance that is, adopting trends to provide seamless and standardized services worldwide and easier marketing of banking services among others.

Howcroft et al., (2002) in a study, found that the most important factors encouraging consumers to use online banking are lower fees followed by reducing paper work and human error, which subsequently minimize disputes (Kiang et al., 2000). Byers and Lederer, (2001) concluded that it was changing consumer attitudes rather than bank cost structures that determines the changes in distribution channels; they added that virtual banks can only be profitable when the segment that prefers electronic media is approximately twice the size of the segment preferring street banks.

Convenience of conducting banking outside the branch official opening hours has been found significant in cases of adoption of e-banking. Banks provide customers convenient, inexpensive access to the bank 24 hours a day and seven days a week. Moutinho et al., (1997) pointed out that each ATM could carry out the same, essentially routine, transactions as do human tellers in branch offices, but at half the cost and with a four-to-one advantage in productivity. Given that the ICT is now creeping into the banking industry in Ghana, its functions could not be completely regarded as substitute for tellers
in the banking hall. There are a number of times where the ATMs fail to function thus making the customer unable to access the service.

Gerrard and Cunningham (2003) found a positive correlation between convenience and online banking and remarked that a primary benefit for the bank is cost saving and for the consumers a primary benefit is convenience. Multi-functionality of an IT based services may be another feature that satisfies customer needs (Gerson, 1998).

A reduction in the percentage of customers visiting banks with an increase in alternative channels of distribution will also minimize the queues in the branches (Thornton and White, 2001). Increased availability and accessibility of more self-service distribution channels help bank administration in reducing the expensive branch network and its associate staff overheads. Bank employees and office space that are released in this way may be used for some other profitable ventures (Birch & Young, 1997). This ultimately leads towards improved customer satisfaction and the institution’s bottom line (Thornton & White, 2001).

Internet banking also increases competition within the banking system and also from non-bank financial institution (ECB, 1999). The Internet increases the power of the customer to make price comparisons across suppliers quickly and easily. As a consequence, this pushes prices and margins downward (Devlin, 1995).

Institutional encouragement of the use of IT-based services and IT service fees are another important dimension (Zhu at al., 2002). Cantrell (1997) conducted a banking
survey in the US and found that increases in service fees were one of the main driving forces behind the move of some large bank customers to smaller community banks.

Yakhlef (2001) pointed out that banks are responding to the Internet differently, and that those which see the Internet as a complement and substitute to traditional channels achieved better communication and interactivity with customers. Robinson (2000) argued that the online banking extends the relationship with the customers through providing financial services right into the home or office of customers. The banks may also enjoy the benefits in terms of increased customers loyalty and satisfaction (Williams, 2000). Nancy et al. (2001) viewed the same situation differently and argued that customers like to interact with humans rather than machines. They found more possibilities for asking questions and believe that bank clerks are less prone to errors. It is thus essential that any face-to-face transactions are carried out efficiently and courteously. This increases the possibility of selling the customer another service that they need and also promotes a good image and enhances customer loyalty. The findings obtained by Nancy et al. (2001) suggest that, attitude is an important variable which influence the usage of e-banking services such as telephone banking and ATM services. Therefore, customers who have negative attitude towards e-banking services especially individuals who cannot read and write, are less likely to use such services than those with positive attitude.

Polatoglu and Ekin (2001) found that low levels of email usage and a preference for doing over-the-counter transactions at bank branches are the main reasons for not using
e-banking in Turkey. The opportunity to conduct a trial may help to convince reluctant customers (Black et al., 2001).

Boon and Ming (2003) concluded that banks in Malaysia should concentrate on enhancing their operation and product management through a mixture of branch banking and e-channels, like ATMs, phone banking and PC banking.

2.5. Risks Associated with Electronic Banking

Although, electronic banking provides many opportunities for the banks, it is also the case that the current banking services provided through Internet are limited due to security concerns, complexity and technological problems (Sathye, 1999; Mols, 1999). Hewer and Howcroft (1999) used the term trust to describe a measure of risk. Suganthi et al., (2001) viewed risk in the context of security concerns and risk in the context of trust in one’s bank. Finally, a number of studies found that trust and perceived risks have a significant positive influence on commitment (Bhattacherjee, 2002; Mukherjee and Nath, 2003) and ultimately leads towards overall satisfaction (Rexha et al., 2003).

Reputation of a service provider is another important factor affecting trust. Doney and Cannon (1997) defined reputation as the extent to which customers believe a supplier or service provider is honest and concerned about its customers. Tyler and Stanley (1999) argued that banks can build close and long lasting relationships with customers only if trust, commitment, honesty and cooperation is developed between them.
Nancy et al.’s (2001) study found that customers’ complain about computer logon times which are usually longer than making a telephone call. In addition, respondents felt that they have to check and recheck the forms filled in online, as they are worried about making mistakes.

Frequent slow response time and delay of service delivery cause customers to be unsure that the transaction has been completed (Jun & Cai, 2001). Min and Galle (1999) found the disruption of information access to be a common factor related to unwillingness to use Internet channels for commerce.

Liao and Cheung (2002) found that individual expectations regarding accuracy, security, transaction speed, user friendliness, user involvement and convenience are the most important attributes in the perceived usefulness of Internet-based e-retail banking.

Confidentiality of consumer data is another important concern in the adoption of online banking (Gerrard & Cunningham, 2003). Customers fear that someone will have unlimited access to their personal financial information.

White and Nteli (2004) conducted a study that focused on why the increase in Internet users in the UK had not been paralleled by increases in Internet usage for banking purposes. Their results showed that customers still have concerns with the security and the safety aspects of the Internet.

Lack of specific laws to govern Internet banking is another important concern for both the bankers and the customers. This relates to issues such as unfair and deceptive trade practice by the supplier and unauthorized access by hackers. Larpsiri et al., (2002) argued
that it is not clear whether electronic documents and records are acceptable as sufficient evidence of transactions. They also pointed out that the jurisdiction of the courts and dispute resolution procedures in the case of using the Internet for commercial purposes are important concerns. Disputes can arise from many sources. For instance, websites are not a branch of the bank. It is difficult for the court to define the location of the branch and decide whether they have jurisdiction (Rotchanakitumnuai & Speece, 2003). Other risks associated with electronic banking are job losses, lack of opportunities to socialize and the development of a lazy society (Black at al., 2001).

2.6. Service Delivery and Customer Satisfaction

The impact of e-banking on service delivery of banks has also been noted by researchers. In Ghana, long queues which used to be the norm in Ghana Commercial Bank branches appear to have reduced drastically due to e-banking.

The advancement in Technology has played an important role in improving service delivery standards in the Banking industry. In its simplest form, Automated Teller Machines (ATMs) and deposit machines now allow consumers carry out banking transactions beyond banking hours. With online banking, individuals can check their account balances and make payments without having to go to the banking hall. This is gradually creating a cashless society where consumers no longer have to pay for all their purchases with hard cash. For example: bank customers can pay for airline tickets and subscribe to initial public offerings by transferring the money directly from their accounts, or pay for various goods and services by electronic transfers of credit to the sellers account. As most people now own mobile phones, banks have also introduced mobile banking to cater for customers who are always on the move. Mobile banking
allows individuals to check their account balances and make fund transfers using their mobile phones (Amedu, 2005).

Customer expectation, in terms of service delivery and other key factors have increased dramatically in recent years, as a result of the promise and delivery of the internet. The growth in the application and acceptance of internet-driven technologies means that delivering an enhanced service is more achievable than ever before. However it is also more complex and fraught with potential costs and risk. The internet introduces customers to a new perception of business time as always “on available 24/7, and demanding an urgent and rapid response. The challenge for managers is to reconcile their business and their own personal perceptions of time with the perceived reality of internet time. The internet has decisively shifted the balance of power to the customer (Shittu, 2010).

Jayawardhena and Foley (2000) posits that e-banking as a new service delivery channel has provided banks with a clear cut solution to the inherent disadvantages of traditional bank service delivery practices. Specifically, large volumes of transactions are successfully carried out because of e-banking in contemporary times. Further, Birch and Young (1997) intimated that the internet may be exploited as a new delivery channel by the financial services industry to completely reorganize the structure of banks.

Similarly, Agboola (2006) investigated electronic payment systems and tele-banking services in Nigeria. The findings revealed that there has been a very modest move away
from cash. Payments are now being automated and absolute volumes of cash transactions have declined. The result of the study revealed that tele-banking is capable of broadening the customer relationship, retain customer’s loyalty and enable banks to gain commanding height of market share if their attendant problems such as, ineffectiveness of telecommunications services, epileptic supply of power, high cost, fear of fraudulent practices and lack of facilities necessary for their operation were taken care of. This translates to the fact; tele-banking has change service delivery patterns of banks positively as direct cash transactions have reduced significantly as a result.

In a study, many online customers still chose pure internet-based suppliers with basic customer services yet demanded various services available through conventional channels (Yang and Fang, 2004). Various researches have been carried out in order to identify conventional service quality dimensions that may significantly impact upon quality assessments (Parasuraman et al., 1985, 1988; Pitt et al., 1995; Zeithaml et al., 1985).

Oghenerukevbe, (2008), internet banking provides alternatives for faster delivery of banking services to a wider range of customers. The increasing popularity of internet banking has attracted the attention of both legitimate and illegitimate online banking practices. Criminals focus on stealing user's online banking credentials because the username and password combination is relatively easy to acquire and then relatively easy to use to fraudulently access an internet banking account and commit financial fraud. To alert users, many banking sites are now including Security Indicators (SI) to their sites.
Hua (2009) conducted an experiment to investigate how users’ perception about online banking is affected by the perceived ease of use of website and the privacy policy provided by the online banking website. In this study, it also investigated the relative importance of perceived ease of use, privacy, and security. Perceived ease of use is of less importance than privacy and security. Security is the most important factor influencing user’s adoption.

Wise and Ali (2009) also argued that many banks in Bangladesh wanted to invest in ATMs to reduce branch cost since customers prefer to use them instead of a branch to transact business. The financial impact of ATMs is a marginal increase in fee income substantially offset by the cost of significant increases in the number of customer transactions. The value proposition however, is a significant increase in the intangible item ‘customer satisfaction’. The increase translates into improved customer loyalties that result in higher customer retention and growing organization value. Internet banking is a lower-cost delivery channel and a way to increase sales. Internet banking services has led to the increased retention of highly valued customer segments.

Despite the positive effect of e-banking on service delivery and banking services in general, some major setbacks have been noted by researchers. For instance, Chiemeke et al. (2006) conducted an empirical investigation on adoption of e-banking in Nigeria. It was observed that, negative effects following adoption of internet banking, a component of e-banking are insecurity, inadequate operational facilities including
Telecommunications facilities and electricity supply, and made recommendations on how Nigeria banks can narrow the digital divide. Also, the report revealed that Internet banking is being offered at the basic level of interactivity with most of the banks having mainly information sites and providing little Internet transactional services.

Within the arena of marketing research, a plethora of literature on customer satisfaction exists. Customer satisfaction is referred to as an evaluative judgment a customer makes before making a choice on purchase decision (Oliver, 1980; Churchill & Surprenant, 1982). Following from the above definition, customer satisfaction is perceived to be an attitude customer form by making comparison in their pre-purchase expectation to their subjective perceptions of actual performance (Oliver, 1980).

Central to the satisfaction literature is the theory of disconfirmation which has been used extensively in marketing research to explain the subject matter of satisfaction. The theory posits that, satisfaction is established when the customer evaluates the gap between suppose performance and his/her cognitive standards such as wishes and expectation of the product or service delivered (McKinney et al., 2002; Liu & Khalifa, 2003).

According to Robinson (2000), online banking ensures customer satisfaction as it extends financial services to customers outside the banking hall. Similarly, e-banking has provided banks with a large customer base as it has resulted in increased customer loyalty and satisfaction (Oumlil & Williams, 2000).
Iranian based study investigated the impact of e-banking. Chi-square analysis from the customer’s perspective showed that, e-banking contributed positively to Iranians. Further, the result revealed that, Iran banks provided services that the customers are deriving satisfaction from with particular reference to e-banking (Mahdi & Mehrdad, 2010).
CHAPTER THREE
METHODOLOGY

3.0. Introduction
This chapter presents the research strategy of the present study. Included in this chapter is information on population and sample of research participants, research design and sources of data. In addition, data collection instrument, procedure and data analysis technique was presented.

3.1 The Study Area - Ghana Commercial Bank
The research focused on Ghana Commercial Bank. Ghana Commercial Bank established some decades ago has remained one of the greatest pillars in the banking sector of Ghana.

The bank has a large customer base and branches in the country. The services of the bank continue to be felt in every community in the country. With regard to its large deposit base, there is ever-growing pressure on its service delivery across the country. Thus the need to introduce e-banking products becomes paramount. Ghana Commercial Bank like every responsive organization is dynamic to changing trends in business transactions.

Apart from the traditional bank products such as savings, current accounts, fixed term deposits which were sourced through traditional practices such as going to the bank premises to transact business, technology has changed the practice of this bank significantly. Now Ghana Commercial Bank has products or services such as the Ready Cash, MasterCard, Commernet Plus, SmartPay, Tansflow and SMS banking, and E–Loans, technologically-driven products or services which are affecting the way the bank carries out its business.
Personal banking is now mobile, thanks to wireless technology and cellular phones, which were introduced into the system a couple of years ago. An individual can now access his or her account any time anywhere. Investors can now buy and sell stocks and other securities using their mobile phones and Personal Computers without even facing their bankers or brokers.

3.2. Research design

As indicated by Kvale (1996) and Mikkelsen (1995), the overall success of research is determined by the choice of research method. Also, a research design is considered as a "blueprint" for research which directs, which questions to study, which data are relevant, what data to collect, and how to analyze the results (Adèr, Mellenbergh, & Hand, 2008).

Research design is divided into fixed and flexible research designs (Robson, 1993). Others have referred to this distinction as ‘quantitative research designs’ and ‘qualitative research designs,’ respectively. In fixed designs, the design of the study is fixed before the main stage of data collection takes place. Fixed designs are normally theory driven; otherwise it’s impossible to know in advance which variables need to be controlled and measured. Often, these variables are measured quantitatively. Flexible designs allow for more freedom during the data collection process. One reason for using a flexible research design can be that the variable of interest is not quantitatively measurable, such as culture. In other cases, theory might not be available before one starts the research.

Examples of quantitative designs include experimental designs, non-experimental designs and quasi experimental designs. In an experimental design, the researcher actively tries to change the situation, circumstances, or experience of participants (manipulation), which
may lead to a change in behavior or outcomes for the participants of the study. Non-experimental research designs however, do not involve a manipulation of the situation, circumstances or experience of the participants. Quasi research designs on the other hand are research designs that follow the experimental procedure, but do not randomly assign people to (treatment and comparison) groups.

Regarding qualitative research designs examples include ethnographic study, grounded theory study and case study. Ethnographic study is a research kind which is involved with a group, organization, culture, or community. Normally the researcher shares a lot of time with the group to observe events. For Grounded theory research, it is a systematic research process that works to develop "a process, and action or an interaction about a substantive topic" (Creswell, 2012). In a case study, one single unit is extensively studied. This can be a case of a person, organization, group or situation. Bell (1999) states “a case study approach is particularly appropriate for individual researchers because it gives an opportunity for one aspect of a problem to be studied in some depth within a limited time scale”.

Given the nature of this study, it fits into case study design. A single unit, Ghana Commercial Bank is being examined to determine the impact of electronic banking on service delivery.

3.3. Population
The study population comprised customers of Ghana Commercial Bank, Ho Polytechnic branch. The Ho Polytechnic branch was chosen because of proximity and convenience in terms of data accessibility to the researcher. The branch has about 2000 customers who
operate the traditional accounts such as Current Account, Savings Account, Corporate Accounts and customised accounts such as ‘Kidistar Account’ among others.

3.4. Sample size and sampling techniques

A total of 166 individuals, who are customers of Ghana Commercial Bank, Ho Polytechnic branch were randomly selected to participant in the study. These customers were selected using accidental sampling technique, a non-probability sampling method. Non-probability sampling is any sampling method where some elements of the population have no chance of selection, or where the probability of selection cannot be accurately determined. It involves the selection of subjects based on assumptions regarding the population of interest, which forms the criteria for selection. This strategy was chosen because sampling participants using the list of customers of the bank was a challenge. The accidental sampling (sometimes known as convenience or opportunity sampling) used is a type of non-probability sampling which involves the samples being drawn from that part of the population which is close to hand. That is, a participant is selected because it is readily available and was convenient to be selected. It may be through meeting the person or including a person in the sample when one meets him / her. In this study, the participants were approached as they enter the banking hall for business and they agreed to participate in answering the questions on the questionnaire.
3.5. Data Collection Instruments

A research questionnaire containing carefully framed questions was used to collect data for the study. The questionnaire was in three parts. The first part aimed at the collection of demographic information on the participants. This included age, sex, educational level and number of years transacting business with Ghana Commercial Bank. This is to determine the category of individuals who bank with the bank and their academic qualification. Academic level is most important because without minimum education, one cannot access the electronic banking services. Part Two focused on E-banking services provided by the bank. It gathered information on the satisfaction of customers with services delivery quality regarding available E-banking services and the benefits that customers derived from using E-banking services. This was meant to find out whether the introduction of the electronic banking services has influence on service delivery and their satisfaction with the services. The last part is a 10-item likert scale instrument which measures Service Delivery. Participants were requested to indicate their level of agreement or disagreement with the statements.

3.6. Pilot Study

A pilot study was conducted using customers of Ghana commercial Bank, Ho Market branch. The responses from the pilot study revealed some of the items were not clear. The researcher thus revised these items in the main study.

3.7. Data Collection Procedure
Permission to conduct the study sought from the Branch Manager of Ghana Commercial Bank, Ho Polytechnic Branch. In addition, the consent of participants was sought before questionnaires were delivered to them for completion. The customers who agreed to complete the questionnaire were seated in the banking hall and while they wait to be served, they complete the items. The respondents returned the questionnaire as soon as it was completed. This was so because of the sampling technique adopted.

3.8. Data Analysis

The collected data was analysed using the Statistical Package for Social Sciences (SPSS) version 16.0 for windows. The data collected was quantitative so descriptive analysis was conducted to generate graphs, charts and tables to explain and answer the research questions. In generating the actual results, frequency tables were generated to determine the number of respondents who expressed their opinion on a particular item. Granting that the study is quantitative in nature, correlational analysis was also used to determine the relation between electronic banking services and service delivery.

The next chapter present the analysis of the data collected
CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.0. Introduction

This study examined the impact of electronic banking on service delivery to customers of Ghana Commercial Bank, using the Ho Polytechnic branch as a point of reference. In the first place, the study aimed at identifying electronic banking services offered by Ghana Commercial Bank and how popular these services are with customers. Secondly, the study examined the effect of electronic banking on service delivery and was to find out if customers are satisfied with service delivery of the bank given the introduction of electronic banking products. The next was to determine whether the perception of customers prior to the introduction of electronic banking services has changed for the better. Lastly, this study aims at identifying the benefits of electronic banking to customers.

In this chapter, the data collected for the study were analyzed and interpreted. The data is presented in tables beginning with demographic variables and then research questions that are formulated to guide the research. The first part of the chapter considered the demographic background of the respondents, focusing on sex, level of education and numbers of years with the bank. The second part presented the findings from the study in relation to the research question. Regarding the nature of the data collected, majority of items were closed ended with some measured on a 5-point likert scale.
4.1. Demographic Characteristics of Participants

The study collected information on demographic characteristics. Detailed results on each of the demographic characteristics are presented.

Sex of Respondents

The analysis revealed that most of the respondents were men. Specifically, the data showed that 87 of the respondents representing 52.4% were men while a total of 79 representing 47.6% were female. Table 4.1.1 below presents the result.

Table 4.1.1: Sex of Respondents

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Per cent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>87</td>
<td>52.4</td>
</tr>
<tr>
<td>Female</td>
<td>79</td>
<td>47.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>166</td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Age of Respondents

The next demographic variable of the participants examined was their age. The results showed that, the majority of respondents were in the age bracket of 18 – 25 years. This was followed by 26 – 33 year group representing 26.5 per cent of the respondents and 8 representing 4.8 per cent were between the ages of 34 to 41 years. Interestingly, the number age 42 years plus were only 2 representing 1.2 per cent of the respondents. This
could be as a result of the bank being on a tertiary institution campus where majority of the customers are students. This is shown in Table 4.1.2 below.

Table 4.1.2: Age of Respondents

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Number</th>
<th>Per cent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 – 25 years</td>
<td>112</td>
<td>67.5</td>
</tr>
<tr>
<td>26 – 33 years</td>
<td>44</td>
<td>26.5</td>
</tr>
<tr>
<td>34 – 41 years</td>
<td>8</td>
<td>4.8</td>
</tr>
<tr>
<td>42 years plus</td>
<td>2</td>
<td>1.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>166</td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

*Educational Level of Respondents*

The next sample characteristic examined was the educational level of the respondents. Analysis showed that, the majority of the respondents were on Diploma/HND/DBS programmes. There were 132 Diploma / HND programmes representing 79.5 per cent while 18 representing 10.8 per cent were First Degree holders. In addition, 5.4 per cent were Senior High graduates and 3 representing 1.8 per cent were Second Degree holders. This could be the lecturers on campus. This is shown in Table 4.1.3 below.
### Table 4.1.3: Educational Level of Respondents

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Number</th>
<th>Per cent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior High School</td>
<td>9</td>
<td>5.4</td>
</tr>
<tr>
<td>On Diploma/HND/DBS</td>
<td>132</td>
<td>79.5</td>
</tr>
<tr>
<td>First Degree</td>
<td>18</td>
<td>10.8</td>
</tr>
<tr>
<td>Second Degree</td>
<td>3</td>
<td>1.8</td>
</tr>
<tr>
<td>Others</td>
<td>4</td>
<td>2.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>166</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

**Number of years with Ghana Commercial Bank**

The last sample characteristic examined was the number of years that the respondents have been with the bank. The results showed that, 115 respondents representing 69.3 per cent have been customers of the bank for the period of 5 years and below while a total of 37 representing 22.3 per cent have been with the bank for the periods ranging from 6 to 10 years. It was also found that, 14 respondents representing 8.4 per cent have been customers of the bank for the past 11 years and beyond. See Table 4.1.4 below for details.
Table 4.1.4 Number of years with GCB

<table>
<thead>
<tr>
<th>Years with bank</th>
<th>Number</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 5 years</td>
<td>115</td>
<td>69.3</td>
</tr>
<tr>
<td>6 - 10 years</td>
<td>37</td>
<td>22.3</td>
</tr>
<tr>
<td>11 years plus</td>
<td>14</td>
<td>8.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>166</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

4.2. Electronic Banking Services of Ghana Commercial Bank

The researcher in this section wants to find out the banking services provided by GCB - Electronic Banking or manual banking services and what Electronic Banking services are available and patronize by customers. It was observed that the bank provides both manual and electronic banking services. Regarding the usage of these services, the result revealed that 68 respondents representing 41 per cent use manual banking services while 98 respondents representing 59 per cent use Electronic Banking service provided by the bank.

Table 4.2.1: Banking Services Patronized by customers

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Per cent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual Banking</td>
<td>68</td>
<td>41.0</td>
</tr>
<tr>
<td>Electronic Banking</td>
<td>98</td>
<td>59.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>166</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Further examination revealed that, the bank provides electronic banking services in the form of ATM services, SMS (mobile) banking and E-zwich services. The data revealed
that 140 respondents, representing 84.3 per cent use the ATM services while 26 respondents, representing 15.7 per cent do not use ATM services. Further, it was observed that the use of other Electronic Banking services provided by the bank is equally high. That is the use of internet banking, SMS (mobile) banking and E-zwich services, are equally highly patronize by customers. Specifically, while 23 respondents, representing 13.9 per cent do not use internet banking services, 143 representing 86.1 per cent use it. Also, while 66 respondents representing 39.8 per cent do use SMS banking services, 100 respondents representing 60.2 per cent said they patronize the service. Finally, it was revealed that very few customers do not patronize E-zwich services. The data showed that 37 respondents representing 22.3 per cent do not use the service while 129 representing 77.7 per cent use the service. From the results, it could be concluded that majority of the bank’s customers use Electronic Banking service and highly patronize the electronic banking products offered by the bank. Lastly, a total of 143 representing 84.3 per cent use Internet Banking services while the rest 26 representing 15.7 per cent do not use the service. The results are presented in Table 4.2.2 below

<table>
<thead>
<tr>
<th>Use of ATM Services</th>
<th>Frequency</th>
<th>Per cent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>140</td>
<td>84.3</td>
</tr>
<tr>
<td>No</td>
<td>26</td>
<td>15.7</td>
</tr>
<tr>
<td>Use of Internet Banking Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>143</td>
<td>86.1</td>
</tr>
<tr>
<td>No</td>
<td>23</td>
<td>13.9</td>
</tr>
</tbody>
</table>

Table 4.2.2: Use of E-banking Services
Use of SMS (Mobile) Banking Services

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>100</td>
<td>66</td>
<td>166</td>
</tr>
<tr>
<td>No</td>
<td>100</td>
<td>66</td>
<td>166</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>132</td>
<td>332</td>
</tr>
</tbody>
</table>

Use of E-zwich Banking Services

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>129</td>
<td>37</td>
<td>166</td>
</tr>
<tr>
<td>No</td>
<td>129</td>
<td>37</td>
<td>166</td>
</tr>
<tr>
<td>Total</td>
<td>258</td>
<td>74</td>
<td>332</td>
</tr>
</tbody>
</table>

4.3.0 Electronic Banking Services and Service Delivery of Ghana Commercial Bank

The researcher explored the extent to which electronic banking has impacted on service delivery of GCB. In performing the analysis, Pearson Product Moment Correlation was computed to establish the relationship between uses of electronic banking service with service delivery by the GCB. The sum of responses of participants on the Electronic banking scale represents the score on Electronic Banking and the sum of responses on the Service delivery scale represents the total score on service delivery. From the correlation analysis, the result revealed a significant positive relationship between service delivery and electronic banking \([r=0.34, n = 166, p<0.05]\). This means that service delivery has improved significantly as usage of electronic banking services. The result is presented in the table below

Table 4.3.1: Correlation

<table>
<thead>
<tr>
<th>E-Banking score</th>
<th>Service Delivery Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-Banking score</td>
<td>Pearson Correlation</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>1</td>
</tr>
<tr>
<td>N</td>
<td>166</td>
</tr>
<tr>
<td>Service Delivery Score</td>
<td>Pearson Correlation</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.343(***), .000</td>
</tr>
<tr>
<td>N</td>
<td>166</td>
</tr>
</tbody>
</table>
** Correlation is significant at the 0.01 level (2-tailed).

Satisfaction with E-banking Services

Further, the satisfaction of customers with electronic banking services provided by the Bank was investigated. The study found that, the majority of respondents are satisfied with the services provided by the bank. From the analysis 100 respondents representing 60.2 per cent expressed their satisfaction with the e-banking services provided by Ghana Commercial Bank while 66 respondents representing 39.8 per cent expressed contrary views. The result is shown in Figure 4.3.1

Are you satisfied with Electronic Banking Services?

![Bar Chart]

Figure 4.3.1: Satisfaction with E-banking Services

Next the researcher, sought to find out the degree of satisfaction expressed by the customers. In the item, satisfaction was graded as excellent, very good and good and the
respondents were requested to indicate their degree of satisfaction. Out of the 100 respondents who were satisfied with the electronic banking services rendered by the bank, 24 representing 24 per cent expressed excellent satisfaction with the service, while 70 per cent said the service is just very good and 6 per cent grade their satisfaction as good. See details in Figure 4.3.2.

![Figure 4.3.2: Degree of Satisfaction with E-banking Service](image)

**Impact of E-banking Services on Service Delivery**

The next item examined was the impact of electronic banking on service delivery. The analysis revealed that, e-banking services have positively affected service delivery of GCB. Empirical data showed that, 131 respondents representing 79 per cent indicated that e-banking services had a direct positive effect on service delivery of the bank. However, 35 respondents representing 21 per cent thought otherwise. This result further
confirms the positive correlation between e-banking and service delivery. See Figure 4.3.3 below

E – Banking has positively affected Service Delivery of Ghana Commercial Bank

![Figure 4.3.3: Positive Impact of E-Banking on Service Delivery](image)

**4.4 Customer Perception Before and After the Introduction of E-banking Services**

The study also determined the nature of service delivery of GCB before and after the introduction of e-banking services. Specifically, the study sought to find out whether the introduction of e-banking services have change customers perception about the bank. The analysis found that, hitherto customers spent several hours in the banking hall to be
attended to. This is basically because of the long queue and the manual operations of the bank at the time. The respondents described the banking operations at that time as ‘go slow’ and inefficient among others.

However, the introduction of e-banking services has changed significantly the negative perceptions customers held about the service delivery of the bank. Majority of the respondents, 127 (76.5%) said e-banking services had changed tremendously their perception about the service delivery of the bank. However, 39 (23.5%) said it has not changed their perception of the service delivery. This could be acceptable because some of the respondents do not use electronic banking service. See Figure 4.4.1

**HAS THE INTRODUCTION OF E-BANKING CHANGED YOUR PERCEPTION ABOUT SERVICE DELIVERY IN GCB?**

![Figure 4.4.1: Change in perception of Customers towards service delivery in GCB](image)

4.5 Benefits of E-banking Services
Lastly, the study investigated the benefits of electronic banking to customers. E-banking services have been found to contribute significantly to the service delivery of GCB. This is evident in the areas of its usefulness, convenience, time saving and quick service among other benefits.

*Electronic Banking Saves Time*

In the first place it was revealed that e-banking services save time. It drastically reduces time that would have been spent in the banking hall to transact business. Specifically, 79 respondents representing 47.6 per cent strongly agree with the statement that ‘Electronic Banking services saves time’ while 57 representing 34.3 per cent of respondents agree to the statement. In sum 81.9 per cent of the respondents accepted that electronic banking saves time much more than manual banking. On the other hand, 14 respondents representing 8.4 per cent disagree with the statement with 9.6 per cent remaining neutral. See Table 4.5.1 below.

**Table 4.5.1: E-banking Saves Time**

<table>
<thead>
<tr>
<th>Number</th>
<th>Per cent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>Number</td>
</tr>
<tr>
<td>----------------</td>
<td>--------</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>59</td>
</tr>
<tr>
<td>Agree</td>
<td>78</td>
</tr>
<tr>
<td>Neutral</td>
<td>17</td>
</tr>
<tr>
<td>Disagree</td>
<td>8</td>
</tr>
</tbody>
</table>

_E-banking Services are Useful_

In examining the benefits of electronic banking to customers, the research also sought to find out whether the services have been useful to customers at all. From the responses, it was observed that the introduction of e-banking services have been very useful to customers who patronize the service. The results showed that a total 127 respondents representing 82.5 per cent agreed and strongly agreed that the services offered by e-banking have been useful to them. On the other hand, a total of 12 participants representing 7.2 per cent disagreed and strongly disagreed while 10.3 per cent remain neutral. Given the result, it is evident that e-banking services have been useful to customers of Ghana Commercial Bank; especially customers who patronize the service.

See details in **Table 4.5.2** below.

**Table 4.5.2: E-banking Services are Useful**

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>59</td>
<td>35.5</td>
</tr>
<tr>
<td>Agree</td>
<td>78</td>
<td>47.0</td>
</tr>
<tr>
<td>Neutral</td>
<td>17</td>
<td>10.3</td>
</tr>
<tr>
<td>Disagree</td>
<td>8</td>
<td>4.8</td>
</tr>
</tbody>
</table>
Strongly disagree  4  2.4

| Total   | 166 | 100.0 |

_E-banking Services are convenient and quick_

Further, it was found that, e-banking services make banking service very convenient to customers. This view was expressed by majority of respondents. The result showed that 127 respondents representing 76 per cent agree that electronic banking have been convenient while 15 respondents representing 9 per cent disagree that the services have been useful and 15 per cent could not tell whether the services have been convenient or not. In sum, it is evident that electronic banking services have been convenient to customers. See **Figure 4.5.1** below.

**ELECTRONIC BANKING SERVICE IS CONVENIENT**

![Pie chart showing the percentage of respondents for each opinion on electronic banking service being convenient.]

**Figure 4.5.1: Electronic Banking is convenient**

_**Electronic Banking Quickens Service Delivery**_

Lastly, the study revealed that e-banking services ensure quick banking services delivery. The majority of respondents representing 73.5 per cent mentioned that the availability of
e-banking products lead to quick banking services while some of the respondents, about 12.6 per cent said it did not lead to quick banking services. Network failure which is unpredictable could account for the few who mentioned that the Electronic Banking did not lead to quick service delivery. However, with increase investment in technology this could be addressed. See Table 4.5.3 below

Table 4.5.3 Electronic Banking Services Quickens Service Delivery

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>59</td>
<td>35.5</td>
</tr>
<tr>
<td>Agree</td>
<td>63</td>
<td>38.0</td>
</tr>
<tr>
<td>Neutral</td>
<td>23</td>
<td>13.9</td>
</tr>
<tr>
<td>Disagree</td>
<td>14</td>
<td>8.4</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>7</td>
<td>4.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>166</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

4.6 Interpretation of Results

The first aim of this study is to identify the electronic banking products that are available and patronized by customers of Ghana Commercial Bank with specific reference to Ho Polytechnic branch. The analysis revealed that a number of electronic banking products have been introduced by Ghana Commercial Bank and are being used by customers. These products include, Automated Teller Machine (ATM), Internet banking, SMS banking or Mobile banking and E – Zwich point of sales. From the analysis, the most widely patronized products are the ATM and SMS banking. This result was presented in Table 4.5.
The second objective of the study is to determine the effect of electronic banking on service delivery in Ghana Commercial Bank. Here, the relationship between service delivery and electronic banking usage was computed. The result showed a significant positive relationship. This implies that as more investment is made into the provision of electronic banking products, service delivery by the bank equally increases. This can be found in Table 4.6. Further, a specific question was asked the respondents regarding their satisfaction with the electronic banking products they patronized. The result indicated that majority of the customers are satisfied with the usage of the electronic banking products. In fact, 60.2 per cent of the respondents confessed their satisfaction with the products and of the number that are satisfied with the products, 70 per cent judge the services as very good. This further go to support the literature that introduction of technology into the banking business promotes efficiency of service delivery. This result thus means, customers are satisfied with the electronic banking products of Ghana Commercial Bank.

The next objective of this study is to determine whether the perception of customers prior to the introduction of electronic banking services has changed for the better. The result revealed a significant positive shift in the perception held by customers before the introduction to electronic banking products. The result displayed in Table 4.4 over 50 per cent of the respondents agreed that their perception about service delivery have changed drastically. Specifically, 127 respondents representing 76.5 per cent indicated this fact. This thus mean the negative perception regarding service delivery, that customers have of the bank have now changed with the introduction of electronic banking services.
Lastly, study sought to identify the benefits of electronic banking to customers. The analysis revealed that, the provision of electronic banking products saves customers time, makes banking more convenient and quick for them. These results were presented in section 4.4.

In sum, the introduction of electronic banking products has brought a great relief to the banking public. From the results, if financial institution should continue investment into Information Technology, there would be a time when most banking transactions will take place outside the banking hall. The banking halls would thus be free of queues.

The next chapter presents a summary of the major findings of the study, recommendations and conclusion.
CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATION

5.0. Introduction

The study investigated the impact of electronic banking on service delivery of Ghana Commercial Bank. In accordance with the general purpose, the study sought to find out e-banking services offered by GCB and their usage, examined the effect of e-banking on service delivery; ascertained whether customers were satisfied with service delivery following introduction of e-banking services; determined how e-banking has changed customers perception about the bank, and finally, explore the benefits of e-banking services.

This chapter comprises of the summary and conclusion of all that have been discovered and the findings from the study. Lastly, very important recommendations that would further the cause of quality service delivery in the banking sector have been given.

5.1. Summary of findings

Based on the research objectives, a number of research questions were proposed. In the first place the researcher wants to find out if the electronic banking products introduced by Ghana Commercial Bank are being patronized by customers. It was found that ATM services, SMS banking, Telephone Banking and Internet Banking are the electronic banking products being offered by GCB and patronized by customers. Further the study revealed that ATM services and SMS banking are the most used electronic banking products. The rest of the products though being used, the proportion of patronage is not comparable to the two mentioned above.
Next, Pearson Product Moment correlation was computed to find out whether the introduction of electronic banking has significantly impacted positively on service delivery. This was to answer the research question ‘has the introduction of electronic banking services significantly affected service delivery?’ It was discovered that the use of electronic banking has positively affected service delivery in Ghana Commercial Bank. This was evident by the positive relationship discovered. Further, 60.2 per cent of the respondents expressed satisfaction with service delivery of the bank with 70 per cent rating their satisfaction as very good while 24 per cent rate their satisfaction as excellent.

In sum the study discovered that electronic banking has significantly improved service delivery which majority of customers are satisfied with.

The study also discovered that the negative perception of customers about the bank has significantly changed. Many customers now see the Ghana Commercial Bank as a serious business entity which respects and value of time. Over 76 per cent of the respondents agreed strongly to this assertion while rest do not. This could however, be due to the fact, they do not use the electronic banking services provided by the bank.

Lastly, the study provided further evidence to the fact that use electronic banking products saves time, makes banking services more convenient and quickens service delivery among others.

5.2. Conclusion

The chapter outlined the objectives and the research questions that were proposed and answered by the evidence gathered through the data collected and analysed. The findings significantly, indicate that electronic banking products have impacted positively on the
service delivery of the Ghana Commercial bank and that customer perception has greatly changed as a result of these products. Clearly, all the objectives stated for the study were achieved. It is thus the expectation of the researcher the recommendations made based on these findings should be implemented by the Bank to increase productivity and become a leader in financial service sector of the Ghanaian economy.

5.3. Recommendation

Following the findings of this study, the under listed recommendations have be proposed for practice.

1. The place of Information Technology (IT) in the financial sector cannot be over stated. It is thus paramount that the management of Ghana Commercial Bank invest massively in IT in order to further promote efficient and smooth service delivery via e-banking services.

2. There is the need to educate customers extensively on the use of electronic services such as internet banking, SMS (mobile) banking and e-zwich banking services which are not well patronized.

3. E-banking services should be developed extensively in the face of competition in the banking industry to sustain the pressure and maintain profits.

4. It is important that, the bank create an e-banking unit that will monitor progress and challenges of such services. This will ensure effective and efficient e-banking services.
Reference


Natalie Anderson. pp. 11 – 36.


Sathye, M. (1999). Adoption of Internet Banking by Australian Consumers: An

Appendix A: Questionnaire

Kwame Nkrumah University of Science and Technology
Kumasi

Commonwealth Executive Master of Business Administration
WISDOM KWASHIE

IMPACT OF ELECTRONIC BANKING ON SERVICE DELIVERY TO CUSTOMERS OF GHANA COMMERCIAL BANK LIMITED: A STUDY OF GHANA COMMERCIAL BANK, HO POLYTECHNIC BRANCH

SURVEY QUESTIONNAIRE

Dear survey participant,

This survey is aimed at understanding the impact of E-Banking on Service delivery. In meeting this objective, you have been duly selected as a member of the sample to provide relevant and objective data needed to satisfy the quest for this knowledge. This questionnaire will take approximately 15 minutes to be completed. Your answers will be treated in strict confidence and used for academic purpose only.

Part I: Demographic Information

Please respond to the following statements by ticking (√) one answer from each question that applies to your circumstances.

(a) Sex: Male ( ) Female ( )
(b) Age:
   18 – 25yrs ( )
   26 – 33yrs ( )
   34 – 41yrs ( )
   42 yrs and above ( )
(c) Educational level:
   SHS ( )
   Diploma ( )
   Degree ( )
   Masters Degree ( )
   Other, please specify........................................................

(d) Tenure with the bank:
   5yrs and below ( )
   6 – 10yrs ( )
   11yrs and above ()

Part II: E – Banking Items

Please respond to the following items by selecting the appropriate response suitable for you.

1. Which of these banking services do you mostly use?
   (a) Manual banking [ ]
   (b) Electronic banking [ ]

2. Which specific Electronic banking service have you been using or heard of? ...........................................................................................................................

3. Are you satisfied with the Electronic banking service of GCB?
   (a) Yes [ ]
   (b) No [ ]

4. If yes, indicate your level of satisfaction.....
   (a) Excellent [ ]
   (b) Very good [ ]
   (c) Good [ ]
   (d) Bad [ ]

5. The introduction of E – Banking by GCB has positively affected service delivery:
   (a) Yes [ ]
   (b) No [ ]
6. Before the introduction of E-Banking services, how do you perceive service delivery in GCB?

……………………………………………………………………………………………………

……………………………………………………………………………………………………

……………………………………………………………………………………………………

……………………………………………………………………………………………………

7. Has the introduction of E-Banking services by GCB changed your perception about service delivery in GCB?
   (a) Yes [   ]
   (b) No [   ]

8. If yes, state how you now perceive the bank.

……………………………………………………………………………………………………

……………………………………………………………………………………………………

……………………………………………………………………………………………………

9. Is there any problem with the E-Banking services?
   (a) Yes [   ]
   (b) No [   ]

10. If yes, What suggestions do you think would help improve the situation?

……………………………………………………………………………………………………

……………………………………………………………………………………………………

……………………………………………………………………………………………………

……………………………………………………………………………………………………

11. If you have the opportunity, would you leave GCB because of service delivery?
   (a) Yes [   ]
   (b) No [   ]
Now please indicate the degree to which you agree or disagree with the following statements regarding E-Banking services in your bank. Use the scales below as a guide.

Strongly Agree (5)
Agree (4)
Neutral (3)
Disagree (2)
Strongly agree (1)

1. Using E-Banking service saves time. 1 2 3 4 5
2. I find E-Banking services useful. 1 2 3 4 5
3. I find E-Banking a convenient service. 1 2 3 4 5
4. Using E-Banking service enable me to accomplish my banking activities more quickly. 1 2 3 4 5
5. E-banking has impacted positively on service delivery of the bank. 1 2 3 4 5

Part III: Service Delivery Items

Please indicate the extent of your agreement or disagreement with the following items. Use the scales below.

Strongly Agree (5)
Agree (4)
Neutral (3)
Disagree (2)
Strongly agree (1)

1. My bank always keep me informed of things that I need to get for the best use of E-banking service. 1 2 3 4 5
2. Staff of my bank makes an effort to explain things in a simple way. 1 2 3 4 5
3. My bank delivers best of services. 1 2 3 4 5
4. I spent less time banking due to good service delivery. 1 2 3 4 5
5. My bank staff are courteous when serving customers.
   4  5

6. Whenever something goes wrong, my bank takes corrective
   action without delay.
   4  5

7. It is easy to contact my bank whenever necessary.
   4  5

8. My bank understands my needs best.
   4  5

9. My bank is concerned about my safety.
   4  5

10. My bank’s services are reliable (i.e. service is available anytime).
    4  5

11. My bank offers all the services I expect.
    4  5