FACTORS FOR ADOPTION AND BENEFITS OF ELECTRONIC BANKING TO CUSTOMERS - CASE OF CRDB BANK, MOROGORO

By

Ulaya, Paul L.

A Dissertation Submitted in Partial/Fulfillment of the Requirements for Award of the Degree of Master of Science in Accounting and Finance (MSC A&F) of Mzumbe University

2016

CERTIFICATION

We, the undersigned, certify that we have read and hereby recommend for acceptance by the Mzumbe University, a dissertation entitled **Factors for adoption and benefits of electronic banking to customers, Case of CRDB Bank, Morogoro,** in partial/fulfillment of the requirements for award of the degree of Master of Science in Procurement and Supply Chain Management of Mzumbe University.

Signature

_____

Major Supervisor

Signature

_____

Internal Examiner

Accepted for the Faculty Board

_____

Signature

_____

DEAN/DIRECTOR, FACULTY/DIRECTORATE/SCHOOL/BOARD

DECLARATION AND COPYRIGHT

I, Paul Leopold Ulaya, declare that this thesis is my own original work and that it has not been presented and will not be presented to any other university for similar or any other degree award.

Signature _____

Date _____

ACKNOWLEDGEMENTS

The study has been challenging but truly an exceptional experience to me. It has consumed most of my time, planning, and writing, consulting, conducting field survey and finalizing the results. More than just an academic contribution the study has been a genuine learning experience in the world of banking today. However the study would not have been complete without the assistance given by various people. I would like to express my sincere appreciations to them for their contributions.

I firstly thank God the almighty for the gift of life and making everything being possible.

I am much thankful to my supervisor Dr Haruna Mapesa for his time, valued guidance, and constructive suggestions and endless patience in assisting with any problem I encountered in the course of completing this study.

I would like to thank CRDB Bank's staffs in Morogoro Branch, for their time, guidance, suggestions and assistance during the conduction of field work

I would like to extend my heartfelt appreciation to my family including my lovely father Mr. Leopold Ulaya and my lovely mother Mary Ngelezi, my brothers' and sisters for their support and guidance in my life time.

Lastly, to many people who participated in this study, without whom this study would not have taken place.

DEDICATION

I dedicate this thesis to my exceptional parents Leopold C Ulaya and Mary A Ngelezi for their love, support, prayers, encouragement, guidance and sacrifice that I have been able to reach this goal, to my dearest brothers Adolf, Alex, Peter and Gilbert for their endless love, support and directions towards accomplishing my goals. Thank you for being part of my life and you mean a lot to me. I lastly dedicate to all friends of mine.

ABBREVIATIONS

ATM	Automated teller machine
BOT	Bank of Tanzania
ICT	Information and communication technology
EY	Ernest Young
WAP	Wireless Application protocol
TRA	Tanzania Revenue Authority
EFT	Electronic Fund Transfer
PIN	Personal Identification Number
SMS	Short Message Service
TAM	Technology Acceptance Model
PEU	Perceived ease of use
PU	Perceived usefulness
MFI	Micro finance institution
SACCOS	Social and cultural corporative organization societies
KPMG	Klynveld Peat Marwick Goerdeler
SPSS	Statistical Package for social sciences
TCRA	Tanzania Communication Regulatory Authority
NGO	Non Government Organization

ABSTRACT

The study investigated the factors for adoption and benefits of electronic banking to customers using CRDB Bank Morogoro Branch; as a case study, specifically it aimed at assessing the factors determining the customer's adoption in electronic banking, to analyze the extent to which customers use Electronic banking and assessing the benefits of using electronic banking in conducting banking financial services to customers

One hundred customers were sampled using non probability technique and structured questionnaires were administered to sampled customers. The study used chi-square test to show the relationship between demographic factors and customers' adoption in electronic banking, while descriptive analysis was used to show the extent of usage of electronic banking services by customers and showing how users perceived the transactional benefits of using electronic banking to conduct banking financial services.

The results of chi-square test indicated that demographic attributes, age, income, education level and occupation had significant influence in the adoption of electronic banking by customers. The results of descriptive analysis showed that most of the users of electronic banking are patronized mostly to ATM, SIM Banking and less to internet banking while frequently using the channels in conducting banking services including viewing bank's balances, viewing bank statements, fund transfers and bills payment. Lastly the results of descriptive analysis showed that most of the users of electronic banking agreed on the transactional benefits with electronic banking as being convenient, time saving, anytime and anywhere banking facility, efficient transactions, lower transactional costs and a 24 hours service. The study recommended that the CRDB Bank should make electronic banking more useful and usable through increasing customer's awareness, building customers' recognition of electronic banking through emphasizing the advantage of e banking and sophistication and improvement of mobile and internet banking.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE

INTRODUCTION

1.0 Introduction

Electronic banking involves the provision of different banking products and services to customers through the use of electronic channels. Banks like CRDB Bank provides a many of banking products and services through electronic channels like ATM, Mobile phone and internet in an efficient way and enhances the convenience, ease of use and cost saving to customers. This study examines the factors for adoption and benefits of electronic banking to customers of CRDB Bank. This chapter thus presents the introduction, discussing the background of the study, stating the aims of the study, the statement of the problem and the relevance of the study among others.

1.1 Background of the Study

Advanced technology allows banks to handle its operations with cost cutting effectively and efficiently in order to enhance daily banking activities through electronic banking; customers are being promoted as it enables reduction of their visits in banks and doing banking transactions through internet, ATM and mobile phone rather than individual visitation in the branches. Thus The advent of electronic banking allows banking customers, individuals or businesses to access bank's accounts and transact business or obtain information on banking products and services through the electronic channels like Automated teller machines (ATMs), Mobile phone (SIM) Banking and internet banking. Enable ling the customers to perform banking transactions without visiting a brick and mortar banking institution. Hence resulting to transaction costs reduction to customers as well as for the bank, improved customer services and flexibility in fulfilling customer changing needs and lifestyles with the bank's adoption to the electronic banking

Prior to the inception of the electronic banking, in the banking industry the banks operated in a traditional way (manual system), in which it was characterized by branch networking over some decades now. The manual system have been resulting to the high

transactional cost to customers in terms of the time consumption to complete the banking transaction and costs involved with the bank's transaction as the result there has been congestion, less speedy and inefficiency and inaccurate services in the banking halls. Since then the commercial banks have been making the efforts to improve their services through the increase use of the banking technological innovation as for electronic banking adoption.

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 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 and Narayan, 2005).

E- Banking enhances provision of distribution channels to banks including automated teller machine (ATM), Phone –banking, Tele banking, PC banking and internet banking (Chang, 2003). further, services like transfer of funds, viewing and checking savings account balances, paying mortgages, paying bills and purchasing financial instruments and certificates of deposits processes have improved electronically because of internet banking (Mohammed, 2009). This means that, electronic banking has influenced in effectiveness and efficiency of banking services provision to majority of customers all over the world as denoting greater improvement over traditional banking

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 due to the integration of information technology into banking operation.

Traditional banking operations with the banks in Tanzania like CRDB Bank, NMB such as withdrawing and depositing money, checking of balances and requesting for bank

statements were mainly through the manual system. However these operations are now modernized by means of electronic banking system as such as ATMs, Mobile banking, telephone, point of sale and telex, which were adopted by banks to smooth the process of servicing clients. The present study investigates the factors for adoption and benefits of E-banking to CRDB Bank customers.

1.2 Statement of the problem

Technology is transforming activities in all aspects in the banking industry, as for Tanzania the wind change has started blowing drastically, like CRDB Bank offering ATMs, internet banking and increasing use of mobile phone (SIM) Banking among its customers. Thus with all this, the customers are expected to enjoy better delivery of services at low transactional costs without even a need to visit the bank halls, however it's not the case as it is expected, the impact of e-banking on the banking services is yet to be fully established to attain the better targets, the big issue being the mass population of customers that daily visits to the bank hence resulting into long winding queues of customers in the bank branches ready to carry banking transactions.

Despite the appreciation of the E-banking among customers of CRDB Bank, still remaining a number of challenges causing inconveniences to the group of customers, such as frequent system failure on ATM machines and short of money to the ATMs, failures at point of sale terminals, fault with the computers in the bank, corrupt or unable to operate because of network leading to customer queue for long hours, leading to customers delays and complains of the bank's operations despite technological improvement through electronic banking, as they no longer perceive the transactional benefits from which they are expecting from the use of electronic banking.

Therefore the study on the basis of the above statement, it aims at investigating the factors for adoption and benefits of electronic banking to customers, following the introduction of ATM, Online (internet) banking and SIM Banking as electronic banking

channels over which customers conduct banking services including bank balance enquiry, viewing bank statements, fund transfers and bills payment.

1.3 RESEARCH QUESTIONS

1. What factors determine customer's adoption in electronic banking?
2. To what extent do customers use electronic banking?
3. What are the benefits of using electronic banking to conduct bank financial services to customers?

1.4 OBJECTIVES OF THE STUDY

1.4.1 The general Objective

To investigate the factors for adoption and benefits of Electronic banking to CRDB Bank customers.

1.4.2 Specific objectives

1. To assess the factors for customer's adoption in electronic banking

2. To analyze the extent to which customers use electronic banking

3. To assess the benefits of electronic banking to customers

1.5 SIGNIFICANCE OF THE STUDY

The conduct of this research expects to contribute differently to the expectations of different groups of people who will be interested in its findings, such as banks, the regulatory bodies, and the public and to the business world at large. The increasing pace of the adoption of the technological innovation in the banking industry in the country will smoothly lead to convenience and improvement of the banking services as the result massive transactional benefits to the majority of the customers.

Strongly believing the research findings will help the Banks in Tanzania specially the CRDB Bank with the adoption of more effectively, efficiently and convenient ways of electronic banking specifically to satisfy the customers at large and continuing staying competitive in the banking industry in the country.

Foremost, the study will help the public increasing understanding of the electronic banking services the Bank provides and the maximum satisfaction they would gain out from the Electronic banking usage; hence the study will evidence the need for improvement of the banking services through electronic banking. The CRDB Bank at large will benefit from this study as it will raise the need for the bank to improve the service delivery to a more efficient way to make sure that customers get what they need at a right time and place

The study will as well enhance the required evidence to the CRDB Bank, the regulatory authorities to further strengthen their concern in ensuring that customers enjoys the best services and increasing the need to enhance ongoing financial innovation and financial inclusion in the Tanzania through the use of the electronic banking most especially with the Mobile banking which is revolution to the banking industry worldwide and as Tanzania in general.

Further the study will add to the literature as the secondary data, to encourage other researchers and students to undertake the same kind of study in the future.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents the history and the concepts relating to the electronic banking in banking industry. Further the chapter constitutes the critical review of the studies related to the launching of the electronic banking and their impact on the banking services to customers.

2.1 Theoretical review

2.1.1 Traditional banking system

According to Cater, (2000) traditional banking included none using of mechanized, computerized or any electronic device, thus involved the acts of receiving, recording processing, posting and delivery of accounting details on customers of banks. In manual banking, only labor manpower was initiated and was not connected through the use of computers. However, according to Adam (1999), the manual banking was changed following its associated problems which were limiting efficient delivery. The system was characterized with persistence of human errors in the act of delivering services to customers, leading to loss of interest among many customers when transacting business with the bank, furthermore the manual system put excessive pressure on the employees of the banks, as one had to provides services manually from one customer to another as the result errors and long queues in the bank branches.

2.1.2 The concept of Electronic banking

According to Basel Committee on banking supervision, (1998 and 2003) E-banking is defined as the provision of retail and small value banking products and services through electronic channels. Such products and services can include deposit taking, lending,

account management, the provision of financial advice, electronic bill payment, and the provision of other electronic payment products and services such as electronic money.

The term "electronic banking" or "e-banking" covers both computer and telephone banking. It refers to the use of information and communication technology by banks to provide services and manage customer relationship more quickly and most satisfactorily (Charity-Commission, 2003). Burr (1996) describes it as an electronic connection between the bank and the customer in order to prepare, manage and control financial transactions.

2.1.3 The evolution of electronic banking in Tanzania

Since the attainment of the independence in 1961, Tanzania financial landscape has gone through a number of changes, such that there have been major economic and political transformation as the results of the influence of the new market economy and liberalization of the financial sector at large. Further the continuing advancement of the technology has continued to facilitate the creation of new electronic financial products. Tremendous banking development started in the early of the 1990s following the gradual deregulation of the financial sector and computerization of the financial institutions, as there started the privatization and liberalization of the banking industry as the remarkable liberalization which took place under the banking and financial institutions act 1991, in turn to it laid the foundation for the need of efficiency in the banking sector and marking the new era for competitive banking industry in the country. Early with the onset of the computerization, there has been the explosion of alternative delivery channels to subside the traditional ways in a more efficient manner to facilitate the delivery of the services to customers. According to Bank of Tanzania (BOT) report 2011, Liberalization of the financial sector and increased competition has led to better use of Information and Communication Technology (ICT) among banks and hence better service to customers. The use of ICT has helped banks to offer better services and new products to its customers like the introduction of Automated Teller Machine (ATMs).

In the early of the 1997, the first automated teller machines (ATM) was introduced to the banking industry to carry out simple banking transactions, but later other banks started adopting the delivery system which to a large extent resulted to the improvement of the delivery of the services. The ATM's, to a large extent released banks from the constraint of time and geographical location and the changes through the technology was the banking hours that extended beyond office hours, hence force it providing banks with a more economical substitute for normal branches.

Later in the years of 2000's, there occurred tremendous adoption of the ICT technologies in the banking sector by many banks, including the massive adoption of the electronic products in the banking industry. The networking of the ATMs in the country by many banks like the CRDB bank and others, as well the introduction of the phone banking, PC banking and the internet banking just to keep the pace with the worldwide banking innovation and competition in the banking industry however the low level of the financial inclusion in the country posing the major hindrances to the majority of Tanzania.

Recently the banking industry characterized by the massive usage of the electronic banking in the provision of the banking services, and largely acknowledging the advantages of it over the traditional system as it has led to the improvement of the banking services to the customers hence to an extent enhancing the customer satisfaction to many of the customers who uses the electronic banking products through staying enhanced with effectively, efficiently and economical services. Currently the mobile banking is gaining greater rise in the concern of the electronic banking as Tanzania recognizes the rapid increasing of the mobile phone subscribers among Tanzanians as according to the TCRA report 2013, thus stimulating the banks to increase the technological improvement with linking of the provision of the banking services through the mobile phone to enhance the customer self service operation without visiting the bank branches as for CRDB Bank with its SIM Banking. As well the case of internet banking gaining advantage to a small group of customers who find friendly to it

compared to the majority who are unaware of the service usage. With the help of the regulatory authority Bank of Tanzania, continues to initiate the financial innovation through the mobile banking as to increase the financial inclusion among the majority of Tanzanians.

2.1.4 Overview of Electronic banking services

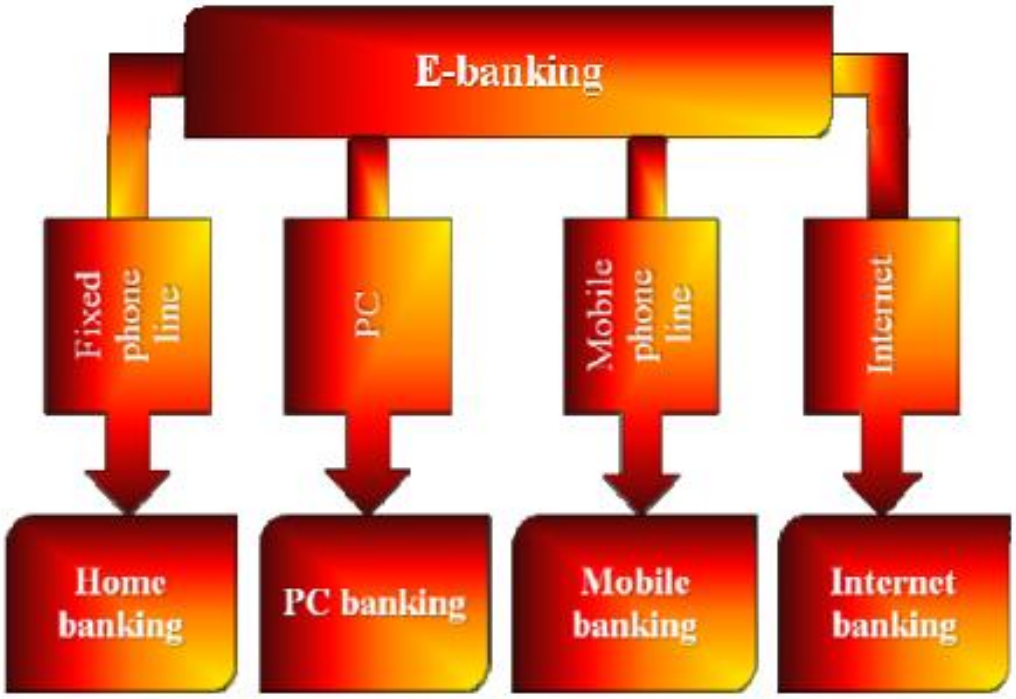
Electronic banking services

Electronic banking usage, through the use of different channels including mobile phone, internet and ATM, with such enables the provision of different services including fund transfers, balance enquiry/bank statement, bills payment, international remittance, savings, cash withdrawal, purchasing, commodity dealing/investment, loans and any other periodical payment such as daily, weekly, monthly, quarterly, yearly.

Types of electronic banking services

According to the EY Global Consumer Survey (2014) Electronic banking started over some decades especially in many African countries, starting with ATMs which are being popular in many countries as the main channel through many banks used as a differentiation from other banks in winning out the competitive advantage by gaining more customers in their locality. Thus many customers are used to the channel and frequently use it to conduct their banking transactions although still banks have to cling on the evolution of global banking industry as the revolution of other channels including the mobile banking and internet banking. This is the way also for the banks to differentiate in the banking competitive industry by engaging with the new channels which offer more convince and transactional benefits to customers. Including Mobile banking, internet banking, and PC banking and fixed phone line. Driga I, (2010) came out with the following types of electronic banking through the figure below

Figure 2.1 Types of electronic banking



Source; Driga I (2010)

Mobile banking (SIM banking)

Is a system that allows bank customers to conduct different transactions through a mobile device, being the newest service in electronic banking; mobile banking relies on WAP (Wireless Application Protocol) technologies since a mobile device requires a WAP browser installed in order to allow access to information.

Previously in Europe mobile banking services were offered via SMS as it was recognized as the primitive way which was enabled by the use of the mobile web, however in the country mobile banking until 2010 have been performed via SMS or the mobile web, Driga (2010). The system operated in such a way that a specific sequence of SMS messages will enable the system to verify if the client has sufficient funds in his or her wallet and authorize a deposit or withdrawal transaction at the agent. Also, when depositing money, the merchant receives cash and the system credits the client's bank

account or mobile wallet. In the same way the client can also withdraw money at the merchant: through exchanging SMS to provide authorization, the merchant hands the client cash and debits the merchant's account.

This is one of the innovative technological advancement which dominates most of the electronic banking services as gradually customers are getting into frequent using of their mobile to access banking transaction. Basically the services provide customers with services as mini statement, Balance enquiries, intra bank funds to any bank account within CRDB Bank network, funds transfer to mobile money, bills payment (Brela, TPA, TRA, Luku,), ability to send money to people with no bank accounts or ATM Cards (Cardless) and transaction alert (TemboCards/Visa/MasterCard usage)

The CRDB Bank offers SIM Banking as part of the form of mobile phone banking which is secured, the bank has ensured maximum security through the initiation of personal identification number (PIN), in which the customer is flexible to changes it anytime, and the customer is advised not to share it with a third party.

Internet Banking

Referred as online banking, web banking or virtual banking, an outgrowth of PC banking, is a more developed service, a system that enables bank customers to access accounts and general information on bank products and services or perform account transactions directly with the bank through a personal computer using the internet as the delivery channel; customers are able to access all of their accounts through the website of the bank and are allowed to conduct banking activities such as transferring funds, paying bills, viewing account balances, paying mortgages or purchasing financial instruments and certificates of deposits

Home banking; generally refers to the practice of conducting banking transactions from home rather than at branch locations that allows customers to obtain information about personal accounts via a phone call; it is based on the existence of a telephone line, a

customer passwords and personal code that provide access to data; clients are able to consult account balances, transfer money within their accounts and conduct routine transactions.

PC banking; a form of banking that enables customers to perform bank transactions from a PC by providing a proprietary financial software program that allows the customer to perform financial transactions from his/her home computer via a modem or wireless network.

Electronic fund transfer (EFT)

Electronic funds transfer (EFT), refers to the computer-based systems used to perform financial transaction electronically. The term is used for a number of different concepts including electronic payments and cardholder-initiated transactions, where a cardholder makes use of a payment card such as a credit card or debit card.

EFT transactions require authorization and a method to authenticate the card and the card holder. Whereas a merchant may manually verify the card holder's signature, EFT transactions require the card holder's PIN to be sent online in an encrypted form for validation by the card issuer. Other information may be included in the transaction, some of which is not visible to the card holder (for instance magnetic stripe data), and some of which may be requested from the card holder (for instance the card holder's address or security value printed on the card). EFT transactions are activated during e-banking procedures. Various methods of e-banking include:

• Telephone banking

• Online banking

• Short Message Service (SMS) banking

• Mobile banking

• Interactive-TV banking.

Automated Teller Machines (ATMs)

An automated teller machine (ATM) is as well known as automated banking machine or cash machine. ATM supports for financial transactions of users from financial institutions in a public space without the need for a bank cashier, clerk or any bank employee.

ATM consists of plastic ATM card having magnetic strip which contains detail users information, card number, and some security information. Authentication is provided by the entering of customer's personal identification number (PIN).

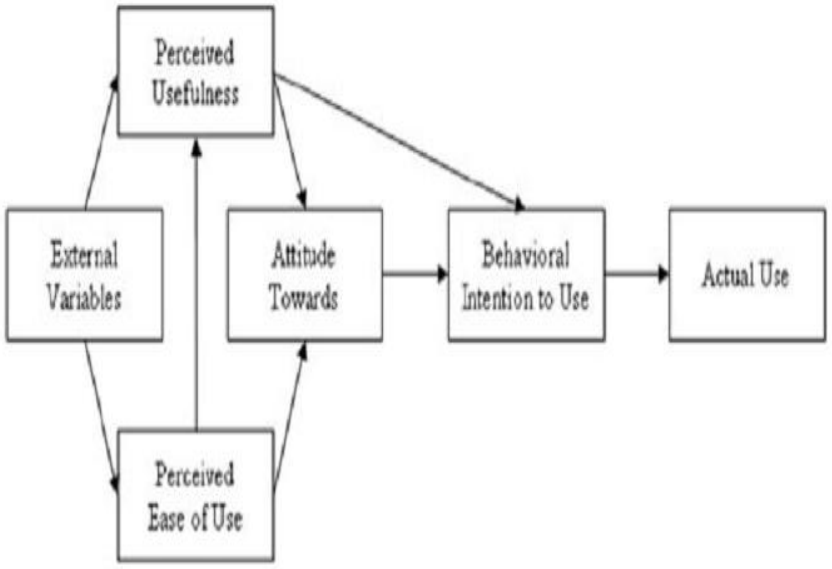
Customers can access, their bank accounts by using an ATM, in order to make cash withdrawals, credit card cash advances, to check their account balances as well as purchase prepaid cell phone credit, if the currency being withdrawal from the ATM is different from that, which the bank account is denominated in the in the money will be converted at a wholesale exchange rate. Thus, ATMs often provide the best possible exchange rate for foreign travelers and are heavily used for this purpose as well.

2.1.5 Technology acceptance model (TAM)

The technology acceptance model (TAM) that was introduced by Davis, Bagozzi, and Warshaw (1989) is one of the most cited models that researchers used to study underlying factors that motivate users to accept and adopt a new information system (Al Shibly, 2011). The primary goal of TAM is to give an explanation of factors influencing information technology system acceptance in general. Davis (1989) suggested that using an information system is directly determined by behavioral intention to use it, which is in turn influenced by the user's altitude toward using the system and perceived usefulness of the system. Altitude and perceived usefulness are also affected by the perceived ease of use. According to TAM, greater perceived usefulness and the perceived ease of use of an information system will positively influence the altitude toward this system. The altitude, in turn leads to a greater intention to use the system, which positively affects one's actual use of the system. TAM supposes that, other thing

being equal, perceived usefulness is influenced by the perceived ease of use because the easier a technology to use, the more useful it can be. Thus the theoretical model is presented in the figure below

Figure 2.2; technology acceptance model (TAM



Source; technology acceptance model (Davis, 1989).

According to Davis (1989) defined, Perceived usefulness (PU) is defined as the degree to which a person believes that using a particular system would enhance his or her job performance. Perceive ease of use (PEU) refers to the degree to which a person believes that using a system will be free of effort. Attitude (ATT) explains a person's favorable or unfavorable assessment regarding the behavior in question. Intention (INT) is a measure of the strength of person's willingness to use effort while performing a certain behavior. The external variables in the model refer to a set of variables that can influence information system adoption indirectly through perceived ease of use and perceived usefulness (Davis et al., 1989).

Hence, as the electronic banking is concerned the historical model (TAM), is of great influence to the adoption of the e banking technologies, as for adoption to the use of

ATM, Mobile and internet banking by customers. As the electronic banking continues to grow, banks need to meet the consumer demands in order to create a product that better serves the customer.

2.2 Empirical review

Literature from different sources have come with different views pertaining the electronic banking and their benefits to cutomers, the channel like ATM started as the main one denoting the adoption of the electronic banking by many banks, thus it has gained high popularity and most customers uses it and many researchers are of concern to the new revolution of the electronic banking thus stressing on the influence of the internet banking and mobile phone banking, Daniel (1999) referred electronic banking being the provision of banking services to customers through internet networking, however, Singh and Malhotra, (2004) defines electronic banking in a more comprehensive way as the deployment of banking services and products over electronic and communication network directly to customers. Burr (1996) describes electronic banking as an electronic connection between the bank and the customer in order to prepare, manage and control financial transactions. Lustsik (2004) describes electronic banking as a variety of the following platforms: Internet banking, telephone banking, TV-based banking, mobile phone banking, and PC banking Among these technologies, the increasing penetration of personal computers, relatively easier access to the internet and a wider diffusion of mobile phones has drawn the attention of most banks to e-banking (Boateng & Molla, 2006).

Karjaluoto, Heikki, Mattila, Minna, Pento, Tapio (2002) argued that banks have the prerogative to determine among numerous electronic banking services, the most suitable for their operations. Inclusively, they stressed that internet technology is the main electronic distribution channel in the banking industry. However it’s seen that with the developed countries the internet technology is predominantly used by the customers in the conduction of the banking transactions but to the developing countries most

especially to the sub Saharan Africans countries its yet enough to consider the internet as the main electronic banking delivery channel. Wang (2003) documented that in years of 1990s electronic banking was underutilized and thus companies used it only for advertisement and marketing of their services. The contention that the electronic banking has been underutilized may be due to poor knowledge and illiteracy rate of high level among the population. What appears to be the most commonly used electronic banking channel in Africa is the use of the ATMs as according to 2014 EY Global Consumer Survey, thus it's likely that developing countries experience a slow evolution of the electronic banking as most due to lack of knowledge among the population.

Transactional benefits to customers can be enhanced through better banking services, instead of increasing bank branches the banks need to ensure effective electronic banking like mobile and internet banking to ensure an increase in the market share as the results of related transaction benefits to customers. However On the other hand, internet, as the electronic banking channel is often not feasible to the large part of the population; this is due to a lack of reliable distributed computer networks, as the populations in Tanzania are considered "under banked", meaning that they do not have access to formal banking services BOT Report (2012). Despite various initiatives, still the level of financial inclusion in Tanzania is relatively low. as according to the Bank of Tanzania (BOT) report in 2012 on FinScope survey, conducted in 2009 revealed that only 12 percent of adult population in Tanzania had access to formal financial institutions, while about 27 percent depend on non formal institutions (SACCOS, MFIs, NGOs) and 56 percent of adult population had no access to any kind of financial services.

Mobile phone banking is gaining a greater rise in the banking industry in the world and in Tanzania as well to facilitate the delivery of the electronic banking services over the branches in Tanzania, as According to the statistics from TCRA report 2012, the number of mobile phone subscribers has increased up to 58% with over 27 million subscribers. In this case mobile banking is the only available feasible means to provide mass market alternative to branch banking in Tanzania. With the current four

deployments (Tigo Pesa, M-Pesa, Ezy-Pesa and AirtelMoney , mobile banking presents the potential to extend beyond traditional bank coverage to include rural area, which are characterized with low population density and poor infrastructure. Statistics from BOT shows that there are over 30million mobile banking subscribers. And over 700million transactions worth of US$12.3billion has been conducted since mobile money was launched.

Empirical assessment of the customer acceptance of the electronic banking carried out in Germany, Buseand 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 favored 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. Hence he implied 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.

Further, Thornton and White (2001) in a study of customer orientations and usage of financial distribution channels in the Australian financial industry, showed that mostly of financial institutions adopted banking technology because of increasing competition and the deregulation of 1980s. As well, Rafiu, (2007) postulated that the need to maintain the banking market share in the banking industry, has influenced many banks to invest in the information technology and make more and efficient use of the internet. The adoption of e-banking has influenced many banks reforming information technology strategies in order to persist well in the competitive markets. This denotes that electronic banking services have critical impact on banking activities and enough impacts to the customers who perceive the transactional related benefits like

convenience, ease of use, speedy, less cost transaction and time saving out from the usage of the electronic banking much higher compared to the traditional banking system. Thus the adoption of e-banking services will lead to significant reduction in long queues in many banks.

2.2. 1 Service delivery (E banking channels)

The promotion of electronic banking is contingent with widespread availability of internet access as well as advanced telecommunications infrastructure. And with the high mobile penetration and growth rates, mobile telecommunications networks are being considered as alternatives to the more traditional banking channels as it's indicated by 2014 EY Global Consumer Survey.

ATMs help customers to conduct banking transaction 24 hours a day, with internet and mobile banking, customers can transact different services like making bill payments, viewing their balances and bank statements without visiting nearby branches. This is slowly transforming the society in cashless one as transaction are getting enhanced without walking with lots of cash to the banks. Such that bank customers through transfer of fund electronically can book and pay for their airlines tickets or subscribing to the initial public offer in the capital markets, sometimes purchasing of different goods and services is being initiated through transfer of fund to the sellers account in an electronic way. May people are now subscribing to the mobile banking simply because its being accessed by many thus fostering the increasing adoption of mobile banking, through it customers can check their account balances, make fund transfers and make some other simple banking transactions (Amedu, 2005).

Jayawardhena and Foley (2000) posits that electronic banking being the best service delivery of banking services, as it outweighs and posits as a solution to the transactional problems caused by the traditional banking. Such that efficient and effective of mass of banking transactions are being carried via electronic banking in different times much more compared to the traditional banking.

As well for the online (internet) channel, as according to the study by Yang and Fang (2004) postulated that internet based customers prefer pure internet suppliers with necessary customer service but yet they demanded many services through other channels electronically, While also Oghenerukevbe, (2008) commented that fast provision and delivery of banking services to majority of customers has been influenced by the internet banking. According to 2014 EY Global Consumer Survey, indicated that the revolution over the electronic banking is largely on the mobile phone banking and is found enough in the developed countries compared to developing countries especially in Africa, however there is little evidence to date of an increase in the number of users registering for more formal banking services via mobile phone, such as savings and credit services (Ivatury, 2006; Morawczynski, 2008). Initial analysis seems to indicate that while today's mobile banking systems are providing good money transfer and payment services to early users, there will need to be better marketing and training involved to help consumers understand what the systems are capable of, as well as improved policy measures to ensure that the benefits of mobile banking are evenly distributed across all banking and consumer sectors (Ivatury, 2006)

Despite experiencing a number of the positive effects of electronic banking on the service delivery and on banking service, there are some major setbacks found out by some of the researchers, as for Chiemeke, Evwiekpaefe and Chete (2006) conducted an empirical investigation on adoption of e-banking in Nigeria, but the results were negative as majority did not adopt because of insecurity, inadequate operational facilities including telecommunications facilities and electricity supply, and made recommendations on how Nigeria banks can narrow the digital divide. As for Tanzania according to the Bank of Tanzania, (2012) majority of low income Tanzanians and small businesses in the informal or subsistence economy still have little awareness and access to savings accounts, insurance products and other formal financial services, in other words majority still are unbanked, which results to the inability to explore the maximum using of the e banking delivery channels like ATMs, mobile and internet banking.

2.2.2 Factors for adoption in electronic banking

Many researchers' came with findings on different factors pertaining to the adoption of customers in electronic banking, including social demographic attributes, technological attributes, institutional factors, social influences and many others. The technology acceptance model (TAM) has been frequently documented by researchers in explaining the influence to participate in electronic banking (Al Shibly, 2011). Davis et al (1989) documented the perceived usefulness, perceived ease of use, attitude, and intention to use as the influencing factors to adopt new technologies. Wu (2005) on his study on the factors influencing the participation in internet banking, found some demographic attributes like age, income, occupation and deduction level as significant influencing factors to adopt electronic banking. Others came with other factors influencing adoption in electronic banking. According to Poon (2008) age, education level, computer skills and internet access at home/office were significantly related to usage of electronic banking services, while Sohain and Shanmugham (2003) did not find significant impact of age and deduction in use of electronic banking services, where as significant impact was found with monthly income only. Mohamed and Mohemmed (2012) found that the usage of e-banking services was related to the client' income, the type of bank account, and computer skills level and internet usage, however, their results not indicate enough to show significant impact of age, marital status, education level and profession. Elisha A (2007), in his study on electronic banking in developing economy in Nigeria aimed at giving out the factors for the perception of the customers to the electronic banking in Nigeria, and demonstrated some factors including convenience, flexible virtual banking system, reliability, time factor, real time access to information, saving transaction cost, on line bill payments, digital signature for security, faster transfer, ease of use, user friendly, low transaction fees, anytime and anywhere banking facility, access to current and historical transaction data, facility of fund transfer to third party, speed and operational efficiency. Later concluded that many factors are lying on the transactional related benefits like convenience and flexibility and 84% of customers indicated the

need and influence of the electronic banking to efficient banking services which in turn produce such transactional benefits to customers as output, thus the electronic banking is of necessity to increase producing better banking services to customers through enhancement of the related transactional benefits to customers. Thus there are many factors which influence customers in adoption of electronic banking, as many researchers came out with, but many of them stressed on the social demographic influences on the participation in electronic banking and technological attributes as demonstrated by the TAM model and there is no way one can rely on particular factors to be the most influencing factors compared to other category of factors.

2.2.3 Influence of demographic attributes to participate in electronic banking

The inception of the electronic banking has as well impacted the customers' behavior towards the participation to the electronic banking. As the results leading to the customers who participate in electronic banking and other customers who do not participate to the electronic banking with the bank, different factors both sociological and institutional factors have influenced the customers to the participation to then electronic banking in their banks, Including the age, education, gender occupation, income, security and privacy, web design, trust.

Many researchers have conducted their study on the factors enhancing the customers' adoption and participation to the electronic banking as Madden and Savage (2000) found that the individuals who tended to use the internet banking in Australia were young males, with high level of income and education, while also Choudrie and Dwivedi (2005) confirmed that the economic status for individuals influences their ability to own and then use a technology. Moreover, Rogers (2003) showed that the demographic attributes play an important role in predicting adoption and that economic status (income) is highly connected to the initial adoption to the internet banking. As many have been postulating on the factors that influence the customers participation to the internet banking, the study was undertaken in India to find out the factors that influence

the customers participation to the electronic banking, and came out with the factors like education, income, cultural resistance, security, poor operational infrastructure.

Victoria Melbourne (2004), conducted a research in Australia on the characteristics of the customers to the adoption and participation to the internet banking in which she tested the following factors as the determinants like age, income, education, experience, disability and emotion, and lastly came with the conclusion that younger, high income earners and better educated are likely mostly users to the internet banking and concluded also that there is no significant relationship between electronic banking and gender or occupation. However Zhang and Li (2004) suggested that health condition (disability, emotion such as stress) also impact customer perceived usage of technologies. Thus based on the above it's likely that age, education, income, experience, disability and emotion are included as customer characteristics to participate with the electronic banking

Asli M (2011), in his research on the customers perspective and risk issues on the electronic banking in Turkey, postulated some demographic factors that influence customers to participate in the electronic banking including gender, education, income, age and came with the findings that only education level and income level have significant influence on the usage of the internet banking among customers while there is no significant relationship between the usage of the internet banking and demographic factors like age and gender, hence educated people are more likely to the use of internet banking and electronic banking in general compared to less educated and low income group of the population. While also Bartel and Sicherman (1998) indicated that more educated individuals may require less training in response to technological change if their general skills enable them to learn the new technology, thus he indicated that well educated individuals have better home productivity than less educated individuals because they can produce household goods with relatively smaller inputs and time, and also the educated one being relatively subjected to getting higher income.

Although, income level. Age, education, and geographical location have a significant effect on people's access to and use of the electronic banking, adoption patterns across gender were as well notable in many countries. Chen and Wellman (2004) in a study which focused on Internet banking usage in China, Germany, Korea, Italy, Japan, Mexico, UK, and USA found that men were more likely than women to use the Internet banking and the rate of adoption was high for young people who understand English and live in urbanized environments. Thus it is expected to find that consumers in the young age group to be more likely to invest time to learn to use internet banking and to participate in the electronic banking at large as it will enable them to gain transactional benefits like time saving.

Thus, many have come with the conclusion pertaining to factors directed to the participation to the internet banking however with respect to other electronic banking products like ATMs and the mobile phone banking the sociological factors like income, education, age, occupation and cultural and geographical factors plays greater role in determining the customers influence to participate in the electronic banking while gender on the current situation may not play a large part to the participation of customers with the electronic banking.

2.2.4 Extent of usage of electronic banking (ATM, online and mobile) by customers

The usage of the electronic banking by customers and the extent to which they use electronic banking has been varying among the banks and in different countries as according to the 2014 EY Global Consumer Survey, for the developed countries, there is a high and increase usage of the internet and the mobile phone banking through the massive innovation of the use of the banking application in the mobile phones in order to access the banking services, compared to the developing countries where ATM is the only that has gained popularity thus creating a room for massive inclusion of the customers to the internet banking as well as mobile phone banking, which are reducing transactional costs at large.

Researchers have came with their findings pertaining the usage of the electronic banking among customers and posing out some factors stimulating the increase and need of use of the electronic banking to the customers. Muhammad S A, Muhammad T M, Ehtesham U M (2009) on their research on electronic banking in Pakistan, posed out some factors from the customers perspective like service awareness, perceived benefits, privacy of data, technology awareness, trust and support enhancing the usage of e banking and came up with the conclusion that most of the customers are not aware of the technology and use of IT facilities like internet banking facilities thus mostly customers keep on paying their bills in near to the bank branches as the result the customers have to wait in hours in line outside the bank to pay their bills, as well indicated that customers prefer to call a bank to check their balance as according to them, internet is not secure to check balance online. The findings also showed that almost 60 percent of the customers are using their ATM card to pay utility bills and other transactions while 80% of the customers are not willing for online banking because of lack of trust on technology as well as lack of computer knowledge. However the increasing usage of the mobile phone among customers would foster the use of it to conduct banking transactions among customers if the knowledge on the use would be instilled to the customers as a way to reduce the congestion to the ATM machines which is found to be familiar with among the majority of customers and the mostly frequent used electronic banking channel.

Nafis Alam (2010) in his research findings on the challenges faced by Sudanese banks in implementing online banking concluded that 80% of the customers doubted the safety of the customers accounts with the online banking and as well the 80 % of the customers are not familiar with what online banking is and would therefore be reluctant to it. Thus despite the patronization of the customers to the use of the online banking still they are found of use to the ATM machines where they can conduct banking transactions easily. Hence it’s likely that many customers especially in many developing countries in Africa use ATM frequently compared to other channels like internet and mobile phone banking, as because of large number of less educated customers and poor infrastructure which

cannot easily render the efficiency and effectiveness of the electronic banking services to them.

According to 2014 EY Global Consumer Survey, came out with findings on the extent of usage of electronic banking including internet banking, mobile banking, ATM and branch, in terms of preferred banking method, which use the channel at a special frequency, channel used weekly or more often and mobile banking usage worldwide. The EY 2014 Global Consumer Survey presented that internet is the preferred banking method globally for paying bills or making transfer while branch banking is favored for deposits, advice and sale. On the percentage of channel preference by task indicated that customers prefer the internet, mobile and ATMs, on daily basis, for weekly basis customers pick ATM and online channels but for monthly usage they prefer branch banking. On the channel used more frequently among the continents Africa led on the extent of usage of ATMs with 70% compared to other channels like online, Mobile and Branch banking. Hence concluded that the mobile technology is revolutionizing the global banking and payment industry by offering new opportunities for banks to provide added facilities to their customers, Although mobile banking penetration is high in certain countries (such as U.S, France, UK, Germany), mobile banking is relatively new in many markets and its usage is still low in most countries over the world (Gupta, 2013).

Thus, it's clear that developed countries have gone few steps ahead of developing countries as African countries are concerned in terms of the electronic banking where by the extent of usage by many customers is with the internet banking and mobile banking which is getting new phase and seen to be the most convenient way to customers, compared to many African countries where the usage of electronic banking is at large limited to the ATMs where many customers find it more friendly than other channels. Although the mobile banking is as well getting pace in many countries like Tanzania as for CRDB Bank currently conducting massive advertisement to influence the increase usage of SIM Banking as its more convenient and easy to use and enables transactional

benefits to customers out from the electronic banking services. Such as launching of *"Shinda Paso campaign"* for SIM Banking, However even globally despite the increase use of the electronic banking to enhance the customer satisfaction through a number of transactional benefits still there is a need for branch banking for advices, sales and other banking services.

2.2.5 Extent of usage of electronic banking services by customers

There are many electronic banking services which are provided through electronic banking and which at last render to perform transactions on their own without enquiry to visit their nearby branches. There are common and simple transactions which are provided electronically and as well being patronized by majority of customers such services include viewing balances, viewing bank statements, transfer of funds, bills payments, Lipowski (2013) in his study found that most of electronic banking costumer used to view their balance, view bank statements and paying bills electronically and frequent use of ATMs was paramount, he added on the advantage to the users especially with mobile subscribers who received banking information though their mobile rather than accessing the banking halls. Driga (2014) found that many customers who adopted electronic banking used frequently to view their bank's accounts balances compared to other service and documented many customers in African continent over the preference of branch banking and ATMs in conduction of their banking services. Akuffo (2013) found many users of electronic banking in Ghana used frequently electronic banking to view their account balance and view their bank's accounts mini statements compared to other services while the EY Global Consumer Survey 2014 reviled that most of the users of electronic banking in Africa conduct simple banking services like view balances, viewing bank statements and intra bank fund transfers, while it reviled still many patronize branch banking compared with electronic banking. Thus many customers are transforming to electronic banking while maintaining the conduction of simple and common banking services like viewing balance, viewing bank statements and fund transfers and with few who conduct bills payment.

2.2.6 Benefits of electronic banking

Benefits to banks and customers

The banking industry has enjoyed several gains from the massive technological innovation in the world, such gains include enhanced customer access and awareness, speedy or faster process and transmission of information, convenience to banking and reduction of fraud levels and improved risk management, global compliance as well as banks are able to adopt trends to provide smooth and standardized services worldwide and easier marketing of banking services among others.

Internet banking itself as seen to gain a greater pace in the developed countries ensures a number of benefits to both the customers and the banks themselves, as according to Victoria Melbourne (2004) indicated the benefits to the bank as low cost of transaction, compared to human teller banking it reduces expenses such that banks can reduce customer service staff as the customers use more self-service functions, there is less cheque processing costs due to an increase in electronic payments, costs of paper and mail distribution are reduced as banks statements and disclosures are presented online, there is less data entry as applications are completed and processed online by customers. And for customer he indicated the following benefits convenience, lower service charges, more accessible information about bank accounts and attractive option for busy people since it saves time to go to the bank branches and gives 24 hours access. Obviously the customers through the use of electronic banking will be able to access the services at low cost, speedy, anytime, anywhere, efficiently, ease of use, short time of period compared to traditional where they all cling to the bank's branches but the expectation might not be reached due to some challenges from the banking industry as such as poor infrastructure to enhance the effective operation and provision of the electronic banking services to customers.

According to Nathan (1999), electronic banking services have provided numerous benefits for both banks and customers. The first benefit for the banks offering

electronic banking service is better branding and better response to the market and thus gaining the competitive advantage over other banks, those banks that would offer such service would be perceived as leaders in technology implementation. As a result, they would enjoy a better brand image. The other benefits are possible to measure in monetary terms. The main goal of every company is to maximize profits for its owner and other stakeholders. According to Allen and Hamilton (2002), an estimated cost of providing the routine business of a full service branch in USA is $1.07 per transaction, as compared to 54 cents for telephone banking, 27 cents for ATM banking and 1.5 cent for internet banking. On the other hand, the advantages for the customers are significant time saving and reduced costs in accessing and using the various banking products and service, increased comfort and convenience (Pyun, Scruggs and Nam, 2002).

Convenience of conducting banking transactions out of bank branches has been found significant in the cases of adoption of the electronic banking, customers are able to do their banking 24 hours a day, 7 days a week. E-banking customers are able to check their account balances, pay bills, apply for a loan, trade securities, and conduct other financial transactions, Moutinho, L. and Smith, A (2000) postulated that every ATM could carry the same functions as human teller, efficient and routine transactions with a less cost and enhance full advantage in productivity. However the technological innovation in the banking industry cannot be completely regarded as a substitute for tellers for example because there are a number of times where the ATMs fail to function thus making the customer unable to access the banking services.

On the other hand, according to KPMG (1998), bank's revenue increases from Internet Banking due to: Increased account sales; Wider market reach; New fee-based income; New market opportunities; Improved customer satisfaction. For consumers, Internet banking provides convenience, lower service Charges, more accessible information about bank accounts, and an attractive option for busy people since it saves time to go to the bank branches and gives 24 hours access (Lee and Lee, 2000), All the

benefits of B2C e-commerce such as 24/7 bank service, convenience, access from anywhere, one stop shop and easy access to information also apply to internet banking Singh (2004).

The increase of electronic banking as alternative will reduce a large number of customers visiting banks, which in turn will minimize queues in the branches (Thornton and White, 2001). Available electronic banking channels like mobile phone and internet banking ensures self service to customers thus the banks reduces administration costs, expenses in branch networking and staffs costs, as well as providing customers with more services at a very low cost compared to traditional banking. Employees of the bank and office premises that are left in this situation may be profitable as well as they can be used for other activities (Birch and Young, 1997). This will definitely result in the improvement of customer satisfaction ultimately leads towards improved customer satisfaction and the institution's bottom line (Thornton & White, 2001).

The benefits of E-banking are manifold and are to be seen from the point of view of the banks themselves, customers and even the regulators Sergeant (2000). Sergeant is of the view that for banks, E-banking brings different and arguably lower barriers to entry; opportunities for significant cost reduction; the capacity to rapidly reengineer business processes; and greater opportunities to sell cross border. For customers, the potential benefits are: more choice; greater competition and better value for money; more information; better tools to manage and compare information; and faster service.

Nancy. (2001) in her finding viewed the situation differently as customers liked to interact with human being rather than machines, the customers found easly contacting with human beings as they would ask questions and believed bank employees being less and prone to errors. Thus documented that any face to face transactions were carried in efficient manner and with courtesy further she commented that altitude being an important variable which influenced customers to adopt electronic banking services like internet and mobile banking without forgetting ATMs. Hence the customers with less

altitude or negative ones towards e banking especially those who can't read or write are less likely to use such electronic banking services than with positive altitude.

Thus, customers who use electronic banking are gaining transactional benefits at high level as the smooth and efficient services are provided in a more convenient way compared to the previous time they have been used to, transactional cost reduction have been the motive factor for e banking user such as through mobile banking and internet banking which are getting the new phase of efficiency provision of better banking services to customers. However many researchers posing out the advantages associated with the adoption of the electronic banking in the banking industry, there are as well some of the challenges from the use of the electronic banking as according to the study undertaken in India Nigudge (2014), the challenges include infrastructural barriers, knowledge barriers, legal and security issues, economic factors, social and cultural barriers and management and banking issues. Thus the need for the covering up of the challenges would harness the advantages of the electronic banking to large extent.

2.2.7 Customer satisfaction

Customer satisfaction is referred to as an evaluative judgment a customer makes before making a choice on purchase decision (Oliver, 1980; Churchill and 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).

According to Robinson (2000), internet banking enhances customer satisfaction because financial services are extended beyond banking halls. Further, e-banking has increased a large number of customers thus promoted customer loyalty and satisfaction with bank customers (Oumlil and Williams, 2000).

Mahdi and Mehrdad (2010) used chi-square to determine the impact of e-banking in Iran and their findings from the view points of customers is that, e-banking cause higher

advantages to Iranians. In other words, Iran banks provide services that the customers are deriving satisfaction with particular reference to the use of e-banking. In a similar study, Jayawardhena and Foley (2000) explore e-banking as a new delivery channel arguing that e-banking may help to overcome the inherent disadvantages of traditional banks; it is very clear that if e-banking conducted successfully it leads to big volume of transactions, hence resulting to the mass of customers enjoying maximum satisfaction out of the electronic banking usage.

It is obvious that the success of electronic banking as argued by many researchers depends largely on the customer preferences and satisfaction, bank service quality in which all this would result to the competitive advantage to the bank, as each bank is striving for in the banking industry right now. Recent studies found that consumer behavior is changing partly because of more spare time. The way of use of financial services is characterized by individuality, mobility, independence of place and time, and flexibility (Seitz and Stickel, 2004). However other researchers did the study on the customers perception of and reaction to the electronic banking products and services, and others on the customer satisfaction and concluded that few E banks that face liquidity problem in the advanced countries is a result of the negative perception their customer have on their services. In fact in some countries, E banking products and services are not very popular because customer do not consider them as better alternative to traditional banking services (Balachandher, 2001),

Bello and Dogarawa (2005) also examined and assessed the impact of e-banking services on customer satisfaction in the Nigerian banking industry. Their study found out that many banks' customers in Nigeria are fully aware of the positive developments in information technology and telecommunications which led to the introduction of new delivery channels for Nigerian commercial banks' products and services. The aim was to satisfy and get customer delighted. Most customers however, still patronize the bank branches and find interaction with human tellers as very important. Secondly the study found that customers enjoying electronic banking services are still not satisfied with the

quality and efficiency of the services. This is expressed in the number of times customers physically visit banks and length of time spent before such services are received. Customers' perception of and reaction to these developments are issues of concern to both Government and banking industry.

The success of electronic banking depends largely on the customers' satisfaction of the products and electronic banking services, the banks need to make enough efforts in creating awareness among existing and prospective customers about the benefits of the electronic banking products and services. In Tanzania electronic banking products are gaining ground as many customers receiving them as a solution to the problems of poor traditional service delivery especially with the increase use of the mobile banking. However experts posit that the rate at which many customers accept the product is still very low beyond expectation, some research finding posits due to lack of awareness about the product, illiteracy of the majority who creates the unbanked society, inadequate legal framework and low technology. Hence it's for the regulatory authority like (BOT) and banks to foster the financial inclusion innovation especially with the mobile banking in which many customers may find friendly to use and enhance efficiency in the banking industry later customer satisfaction on hand.

2.2.8 Risks and problems associated with electronic banking

According to the financial services regulatory commission (2014), electronic banking creates risk management challenges for institutions, as because of the rapid changes in information technology, the commission has identified a number of risks associated with e banking for supervision purposes including

Strategic risk in which is the current and prospective impact on earnings or capital arising from adverse business decisions, thus an e-banking service should be consistent with the Institution's overall financial strategy. The planning and decision making process should focus on how specific business needs are met or

enhanced by e-banking, rather than focusing on the product as an independent business objective

Operational/Transaction Risk arises from fraud, processing errors, system disruptions, negligence, and the inability to deliver products or services, maintain a competitive position, and manage information. In the provision of e-banking services, Institutions may rely on outsourced software companies. They require the proper management of information systems and the right capacity to service their customers. Contingency and business resumption planning is necessary for Institutions to ensure that they can deliver products and services in the event of adverse circumstances.

Technology Risks are risks related to any adverse outcome, damage, loss, disruption, violation, irregularity or failure arising from the use of or reliance on computer hardware, software, electronic devices, online networks, and telecommunications systems. These risks can also be associated with systems failures, processing errors, software defects, operating mistakes, hardware breakdowns, capacity inadequacies, network vulnerabilities, control weaknesses, security shortcomings, malicious attacks, hacking incidents, fraudulent actions and inadequate recovery capabilities.

Reputation Risk arises from negative public opinion. An Institution's reputation can be damaged by e-banking services that are poorly executed or otherwise alienate customers. It is important that customers understand what they can reasonably expect from a product or service and what special risks and benefits they incur when using them. Customer education along with formal incident response and management procedures can help lessen an Institution's reputational risk.

However some researchers stressed the issue of the risks associated with the E banking, raising the issue of security being the major risks to the customers out from the usage E banking in conducting banking activities, despite, electronic banking being providing opportunities to the banks, still there is big case as the banking services through internet

banking are limited because of security concerns, complexities and technological difficulties (Sathye and Mols, 1999). While also Suganthi, Balachandher and Balachandran (2001) took the concern of risk in terms of security problems and risk in terms of trust in one's banks.

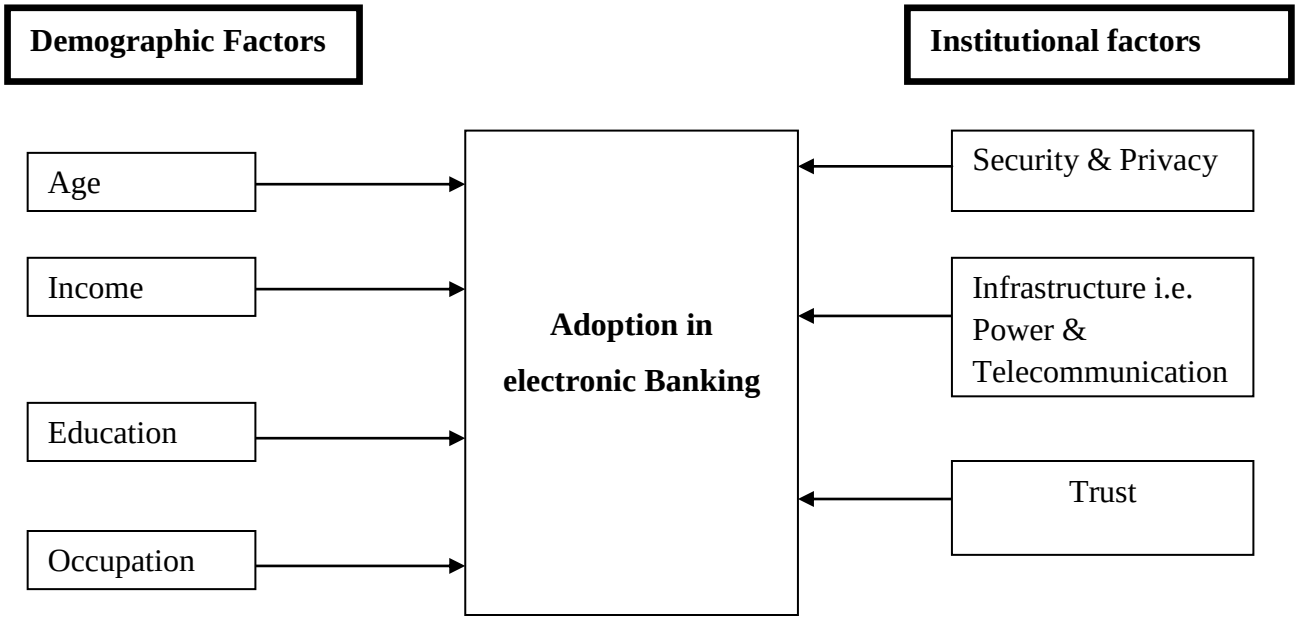
Electronic banking involves the provision of services to majority of customers and employees with accessibility to information smoothly, in a way that is ensured with full security (Soludo, 2004). Thus the technology advancement must provide security to meet the challenges encountered by the E banking. But partially the software and hardware vendors assuring the building of the secure products, but to what extent does the E banking assure the product's security? E banking want to be satisfied with the claims of the security issues specifically from the technological vendors as through the comparison between the independent security evaluations and internationally established security criteria will at least provide the assurance with the security claims. 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.

Conceptual framework

The literature undertaken above from the studies of researchers who undertook studies on the electronic banking, through them have enabled to come with model framework as firstly showing the factors to the participation of customers in electronic banking and the Model of the study aims to show the relationship between the electronic banking and benefits of electronic banking to customers

The conceptual framework under this study starts with model one (figure 2.3) which shows the factors for adoption of customers in electronic banking, specifically indicating some social demographic attributes and institutional factors influencing customers to adopt in electronic banking. Factors including Age, education, income, occupation and gender as social demographic and security and privacy, Trust, infrastructure such as power and telecommunication as the institutional factors,

Figure 2.3 Factors for adoption in electronic banking

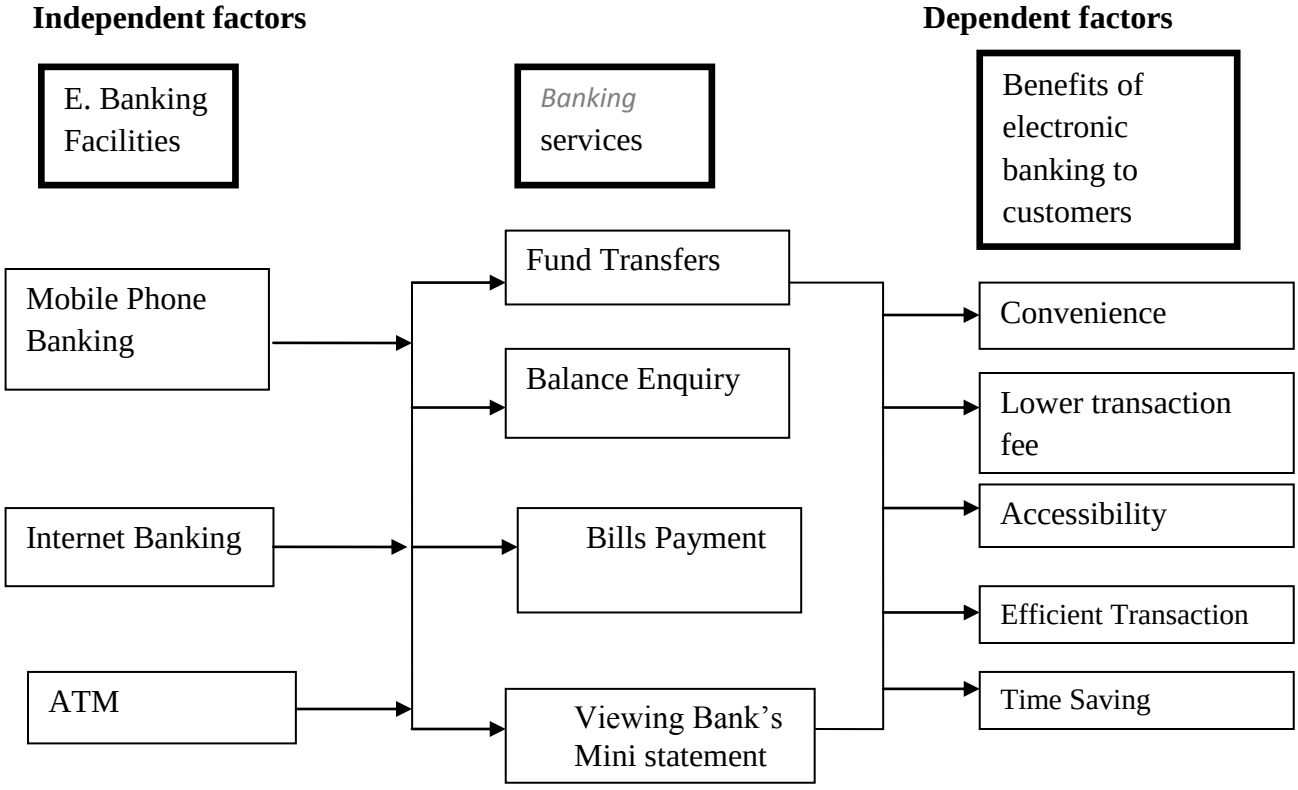


Source; researcher (2016)

The conceptual model

Figure 2.4 below shows the proposed model for the study. Demonstrating the impact of electronic banking on banking services, variables used in this model are explored from the literature review from previous studies. The model shows relationship between the independent variables including the electronic banking facilities in terms of Internet banking, mobile phone (SIM) banking and ATM and dependent variable being related benefits including convenience, lower transaction costs, time saving, efficient transactions, anywhere and anytime banking facility and a 24 hours service, where the relationship is being moderated by the common banking services provided through electronic banking including balance enquiry, payments transactions like bills payment, fund transfers and viewing bank's account mini statement.

Figure 2.4; The conceptual model



Source; researcher's conceptual model (2016)

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter outlines the method that will be used for the study and adopts the following structure: research design, population and sample, data collection methods, research procedures and data analysis.

3.1 Research design

A research design is the arrangement of conditions for collection and analysis of data in manner that aims to combine relevance to research purpose with economy in procedure (Kothari, 2004). It details also a blueprint to guide the implementation of research study towards the realization of research objectives. The quantitative study was aimed at investigating the factors for adoption and benefits of electronic banking to customers, as primary data collected were quantitative in nature. A questionnaire was introduced and pre-tested in order to obtain the required information. The study was descriptive in nature, because it aimed at describing the benefits and factors for adoption of electronic banking to customers. Malhotra (1999) defines descriptive research as "a type of conclusive research which has its major objective the description of something".

Cross sectional study design was also adopted, as the respondents were considered at fixed point in time. The design is mostly used descriptive design in marketing research, the cross sectional design take short period of time and involves the collection of information from any given sample of population elements only once, perhaps over period of days, weeks or months.

3.2 Study area

The study was carried out in Morogoro Municipal located in the eastern part of Tanzania at Morogoro CRDB Bank branch. CRDB Bank is one of the leading commercial banks in Tanzania, and initiates massive of banking technological improvement through electronic banking such as SIM banking, internet banking and improved ATMs. Thus the reason behind selecting Morogoro is that, many customers have been using retail banking and following with massive banking adoption of electronic banking, customers are transforming from retail to electronic banking, thus examining the factors for adoption and benefits of electronic banking to customers of Morogoro. The branch is automated and operates E banking services targeting a number of customers who are increasing and who were highly initiated by the E banking campaigns like SIM Banking.

3.3 Population

A population consists of all cases of individuals or things or elements that fit a certain specification. Thus the target population for this study consisted of CRDB Bank customers in Morogoro Branch. The Morogoro Branch was chosen because of nearness and convenience of the researcher to information accessibility from customers, as it is the largest branch and operates with many customers in electronic banking as well as traditional accounts such as Current account, savings account, corporate accounts and other accounts.

3.4 Sample size and sampling technique

Sample size

The sample of the study included 100 CRDB Bank customers, who were selected from among the population of customers from Morogoro branch. The sample was large enough in conduction of the study. The selected sample is consistent with study view by

Struwig and Stead (2001) who stated that if sampling has been correctly followed then sample sizes of 100 to 200 can provide an acceptable reflection of the population.

Sampling technique

The convenience sampling technique, a non probability sampling method was used to select customers from the CRDB Bank Morogoro branch; The method was chosen because it was not possible to identify the customers before hand, as there were no list available which corresponded with the required elements that is there were no list of customers (users and non users of electronic banking) provided by the bank branch and so probability sampling was not possible. The convenience or accidental sampling technique used is a type of non-probability sampling which involves the sample being selected from that part of the population which is close to hand, Such that, 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 branch for business transactions and were asked and agreed to participate in answering the questions on the questionnaire.

3.5 Data collection

Primary data

Primary data refers to data collected direct from the field; it involves observation, questionnaires and interviews. The primary data enable to get the first handed data (Kothari, 2000).

Thus, relying on primary data as to collect many views directly from the customers who are concerned with the problem of the study, the data collection methods for the study was Questionnaire.

Research questionnaire

A research questionnaire was used to collect data. A closed ended questionnaire was addressed to customers of Morogoro branch who responded to the questions as firstly demographically while other parts were required to be responded by customers who said "yes" in using electronic banking.

The questionnaire included three parts, where Part one comprised of demographic factors including age, occupation, education, income and gender, the part was filled by both users' and non users of electronic banking and later the demographic information was tested whether they influenced participation in electronic banking. Part two focused on the related benefits of electronic banking, the part was filled with users of electronic banking as the users were required to indicate their level of agreement or disagreement with the statements provided. Part three focused on the extent and frequency of usage of electronic banking services, the part was filled by users of electronic bank, and participants were requested to respond to the frequency they used electronic banking.

Secondary data

Secondary data involves information gathered from sources already existing; such information will be collected from the books, articles, journal publications and the internet sources of related study.

3.6 Validity and reliability

Face validity refers to whether the items of the test paper to measure what the test proposes to measure. The face validity of the study was enhanced by the researcher, through the pilot study with few customers of CRDB bank Morogoro, and further face validity was enhanced by asking professional bank staffs dealing with e banking and other staffs to evaluate the questionnaires. The comments and recommendations given were positive and indicted the questionnaire was clear and easy to understand.

Reliability

Reliability refers to the extent to which a scale produces consistent results if measurements are made repeatedly (Malhotra, 1999). Internal consistency reliability is the common used measure for assessing survey instruments and scales, and it's measured statistically. Cronbach's Alpha test was used to test for reliability of the study. According to Litwin (1995) a minimum Cronbac's Alpha value of 0.7 is generally accepted because it represents good reliability. The cronbach Alfa of 0.914 was obtained, thus reflecting the measure was correct and represent good reliability and consistency in the study. (See appendix two)

3.7 Data Analysis

A computerized statistical analysis of data was necessary to describe and interpret the data that was obtained from the primary sources (questionnaire), thus a computer package SPSS version 16 was adopted to analyze the information. The stages in statistical analysis included the data preparation, tabulation of data and lastly descriptive analysis and chi sure test was conducted to test the relationship between variables.

Data were prepared including data editing and data coding, where data editing involved the ascertaining of the questionnaires as to whether they were filled properly and completely and checking out for mistakes. While with data coding involved the grouping and assigning of numeric codes identifying various responses with certain questions.

The collected data were analyzed through SPSS program, through which descriptive statistics was run, and included showing frequency as it reported the number of responses that question received and percentages which showed proportion of respondents who answered question in certain way. The results were displayed in tabulation form to make the frequencies readable and understood well. The data was then entered into statistical tool (chi-square) to show how demographic attributes had

influence on customers' adoption in electronic banking. Thus the analysis was carried out in accordance with each of the study's objective

3.7.1 Objective one

To assess the factors for customers adoption of electronic banking

Customers were asked to respond to the questionnaires as whether one used any of electronic banking services, the users regarded as adopters while non users who responded no regarded as non adopters, later chi square was used to explore relationship between demographic factors and adoption in electronic banking.

Table 3.1Summary of analysis for objective one

N	Variables	description	Measurement	Scale of measurement	Analysis technique	Decision
1	Age	Age of the respondent till meeting with researcher	Number of years	1. 18 – 25 years old 2. 26 - 35 years old 3. 36 - 45 years old 4. 46 - 55 years old 5. Above 56	Percentages Frequency Chi square	Young Middle aged Old people
2	Income	Income of the respondent	Monthly wage/income	1. 10,000-300,000 2. 300,000-1,000,000 3. 1,000,000-5,000,000 4. Above 5,000,000	Percentages Frequency Chi-square	High earners Moderate earners High earners
3	education	The education level reached by respondent	Education Level attained	1. Low than High school 2. High school/equivalent 3. Diploma 4. Degree 5. Masters/PhD	Percentages Frequency Chi-square	Less educated High educated
4	Occupation	Nature of the work/ employment level	Employment status	1. Student/unemployed /retired 2. Public sector 3. Private sector 4. Self employed	Percentages Frequency Chi-square	Employed unemployed

The literature suggest many variables which influence the customer to use electronic banking many being the social, economic, institutional and technological factors associated with the adoption to use electronic banking, thus for the purpose of the study, the researcher analyzed the social demographic attributes as whether they influence customers to adopt E banking.

Age

Age of the respondent is believed to the factor influencing the customers usage to electronic banking and for the sake of the study, it entailed at looking on the age of the respondent till the day met by the researcher.

The variable age was measured in terms of number of years of the respondent till the date met by the researcher, where by the respondent responded to its age category as shown from 18- 25, 26- 35, 35 – 45, 46- 55, 56 and above years old.

The data was analyzed by examining the frequency with which certain responses occurred, and the results were displayed by means of tables to make the frequencies easier to read. The program used to analyze the results will be SPSS program. Descriptive statistics was used to analyze the variable reflecting the users and non users of electronic banking through frequency and percentages and lastly CHI-SQUARE test was used to explore the relationship between age of the respondents and participation in electronic banking, and reflected the results of users and non users in a cross tabulation and chi-square test tables.

Along with the Literature, the researcher aimed to show how age influenced participation and what age group participated more than the other including young, middle age group and old people. The results aimed to indicate what group would be mostly users and which non users were.

Income

The variable describes the income level of the respondent as which influenced adoption in using electronic banking, thus the researcher aimed at looking at the monthly income levels of the respondents as if they influenced to participate in electronic banking. Income was measured in terms of the monthly income level of the respondents which could be in terms of one's wage or salary or income per month.

Respondents both users' and non users of electronic banking responded to their income level, and data collected was analyzed using simple descriptive techniques. Firstly the frequency of all responses was determined and secondly the frequency reflecting users and non users was given to show the income level distribution among respondents. CHI-SQUARE test was used to explore the relationship between the income levels of the respondents and participation in electronic banking. The results were displayed in cross tabulation which reflected the income distribution between the users and non users with respect to their income levels and chi sure test table. The researcher aimed at establishing whether income would influence the adoption and through determining the income level group participation, as one being users like high income earners and non users were being the low income earners. The literature suggests that people with certain income especially with high income are able to participate to the electronic banking compared to those with low income, thus for the sake of this study, the researcher used reasonable earning of 300,000 Tanzanian shillings, to make decision whether people with moderate to high income that's above 300,000 participate more compared to others.

Education

The literature suggests that education level is one of the influencing factors of participation in the electronic banking, thus the researcher entailed at looking on the education level of the respondents to know if their education real influences them to participate in the electronic banking. The respondents responded to different education level including, less than high school, high school, diploma, bachelor degree, masters

and PhD. The variable was measured in terms of the education level attained by the respondents, thus as the respondents will responds to the level of education they have attained such as its indicated in the table above.

Data collected was analyzed through simple descriptive technique including percentages and frequency on the first place, and later frequency of both non users and users of e banking was displayed. Chi square test was run to show significant relationship between education of the respondent and participation in electronic banking. The results were displayed in cross tabulation and chi sure test tables. The results were aimed to display the significant relationship and assessing between the groups of educated and less educated in relation to participation in electronic banking. The researcher based on the benchmark set of diploma education level where below that would be recognized as less educated and with diploma and high as high educated.

Occupation

Occupation as the variable describes the nature of the work or employment of the respondent, thus the researcher assessed whether the nature of the work influence one to participate in the electronic banking. The variable was measured in terms of employment status of the respondents such that the respondent responded to the following scale as 1- public sector employed, 2- private sector, 3- self employed, 4- student/unemployed/retired. The obtained information was coded, tabulated as per the scale and analyzed through descriptive technique including the use of percentages and frequency whereby it showed the frequency of all responses and secondly it showed frequency reflecting users and non users of electronic banking. The chi square test was used to depict the significance relationship between occupation of the respondent and participation in electronic banking, where the results were displayed with the cross tabulation as it showed results reflecting participation of both users and non users of electronic banking in relation to their occupation level. Lastly along with literature suggesting employed participated more than employed; the analysis presented the extent

to which group participated more than the other such that employed and unemployed differences in participation.

3.7.2 Objective two

To analyze the extent to which customer use electronic banking

The summary of the analysis of the objective is detailed with the aid of the table given below, in which the objective entailed at analyzing the extent or the frequency of usage of electronic banking services among customers/users.

Table 3.2 Summary of analysis for objective two

N	variables	description	measurement	Scale Of measurement	Analysis technique	Decision
1	ATM	Frequency of use	Number of times per month	1. Never 2. 1 – 4 times 3. 5 – 8 times Over 8times	Percentages Mean/averages frequency	Frequent users Less frequent (low) users
2	Mobile (SIM) Banking	Frequency of use	Number of times per month	1. Never 2. 1 – 4 times 3. 5 – 8 times Over 8times	Percentages Mean/averages frequency	Frequent users Less frequent (low) users
3	Internet banking	Frequency of use	Frequency of use	4. Never 5. 1 – 4 times 6. 5 – 8 times Over 8times	Percentages Mean/averages frequency	Frequent users Less frequent (low) users
4	Balance enquiry	Frequency of checking balance through e banking	Number of times per month	4. Never 5. 1 – 4 times 6. 5 – 8 times 7. Over 8times	Percentages Mean/averages frequency	Frequent users Less frequent (low) users
5	Bills payment	Frequency of paying bills electronically	Number of time per month	1. Never 2. 1 time 3. Over 1time	Percentages Mean/averages frequency	Frequent users Less frequent (low) users
6	Fund transfer	Frequency of transferring fund via E banking	Number of times per month	1. Never 2. 1 – 4 times 3. 5 – 8 times 4. Over 8times	Percentages Mean/averages Frequency	Frequent users Less frequent (low) users
7	Viewing Account mini statement	Frequency of requesting mini statement electronically	Number of times per month	0. Never 1. 1 – 3 times 2. Over 3times	Percentages Mean/averages frequency	Frequent users Less frequent (low) users

Analysis of variables

E banking channels (ATM, SIM and Internet Banking)

The study analyzed in the first place, the extent and frequency to which users of electronic banking used electronic banking channels monthly, the frequency was measured in terms of number of time as to which one used electronic banking channel per month. Later descriptive analysis in form of percentages and frequencies were used to analyze the responses. The decision based on the results indicted and separated users of electronic banking into two mainly groups of either frequent users or less frequent users per month s one uses at least more than one time was recognized as the frequent user.

Balance enquiry

The researcher entailed at looking at the frequency to which customers/users use electronic banking to check their bank's account balances in a certain period of time especially on a monthly basis.

The variable was measured in terms of number of times customer uses electronic banking channels to check bank account balances per month, thus the respondent responded to different number of times to which one requested through the electronic banking such as never, 1-4 time, 5-8time, over 8 times per month.

The data obtained was analyzed by simple descriptive statistics including frequency showed the number of responses that will occur to a question and percentages showed proportion of respondents to their level of frequency and showed the extent of usage. The results was shown through tables, which made easier to understand the frequency and proportion of respondents with frequency of usage to e banking for balance enquiry, along with the literature the researcher sated a more than once use of e banking to view balances as being frequent users and less than that being less frequent user.

Bills payment

The researcher entailed to look the extent/frequency to which customers/users use electronic banking channels like SIM and Internet banking to pay their outstanding bills like electricity and water charges. The variable was measured in terms of number of times per month the user uses electronic banking channel to pay outstanding bills, thus the respondent was required to respond to level of number of time as such as never, 1 time, more than 1 time.

The data obtained was coded and analyzed using descriptive analysis technique including percentages and frequency, whereby the researcher showed the frequency of the responses in each level of usage per month. Through the tabulation the results were shown to show the frequency of usage among respondents in each level.

The literature suggests that many online and mobile banking users use electronic banking frequently to pay their bills, thus for the purpose of this study the researcher sets 1 time per month as the benchmark to denote the extent of frequency of usage of electronic banking to pay one's bills, such that it showed the high users who used one time to pay bills electronically and non users who did not pay bills electronically.

Fund transfers

The researcher in this variable aimed at showing the extent and frequency to which customers use electronic banking to make fund transfer either from one account within the same bank or with another bank, the extent to which customer uses SIM and online banking to transfer fund. The variable was measured in terms of number of times per month, to which the customer/user used electronic banking channels like SIM and Internet banking to conduct fund transfer transaction. Thus the respondent responded to the following never, 1- 4time, 5-8times, above 8times.

The obtained data was analyzed using descriptive analysis technique including frequency that showed the occurrence of responses to the question and percentages of each level was calculated to show the proportion of extent of frequency of usage depending on each response from the respondent, the results were displayed through tables to depict the frequency and proportion of the response. Decision based on Previous researchers on similar study documented that many customers used electronic banking to transfer fund frequently per month as its convenient, thus for the purpose of the study the researcher sets more than one time per month as the criteria to know the extent of usage among customers where those who use more than one time per month will be regarded as high users and below one time low users.

Viewing account mini statement

The variable describes the frequency to which customers use e banking to view their bank's account mini statement, thus the researcher entailed to show the extent to which customers use electronic banking like ATM, Mobile and Internet banking to view bank's account mini statement.

The variable was measured in terms of number of times per month one uses electronic banking channels to view bank's account mini statement. Thus the respondents was required to respond to the following levels as never, 1 – 4 times, 5 – 8 times, over 8 times per month.

The obtained was analyzed using descriptive analysis technique including frequency that showed the number of occurrence to the question and percentages of each levels of number of time as according to the responses was calculated to show the proportion of the respondents who answered the question on the extent of usage, later the results were displayed through tables make easy of interpretation.

The literature suggests that customers use electronic banking to request mini statement of their banks accounts either on weekly basis or monthly. Thus for the sake of this study the researcher set 1 time per month to be the benchmark to show the frequency of using e banking for requesting mini statement, thus showed high users as who use more than 1 time and below that as low users.

3.7.3 Objective three

To assess the benefits of using electronic banking to conduct banking financial services to customers

The objective entailed at assessing the benefits customers enjoyed through the use of electronic banking in conducting banking financial services. The summary of analysis of the objective is given below with the aid of the table

Table 3.3 Summary of analysis for objective three

N	variable	description	measurement	Scale of measurement	Analysis technique
1	Transaction fee/cost	Low cost charged per transaction	Level of acceptance	1.Strongly disagree 2.Disagree 3.Neutral 4.Agree 5.Strongly agree	Percentages Mean/averages frequency
2	convenience	Anytime and anywhere banking facility (24/7)	Level of acceptance	1.Strongly disagree 2.Disagree 3.Neutral 4.Agree 5.Strongly agree	Percentages Mean/averages frequency
3	Time saving	no need to visit bank branch	Level of acceptance	1.Strongly disagree 2.Disagree 3.Neutral 4.Agree 5.Strongly agree	Percentages Mean/averages frequency

Analysis of variables

Transaction fee/cost

The variable described the fee charged through electronic banking to complete a single banking transaction, as literature suggest the low cost charged compared to branch banking thus the researcher aimed to show if customers perceive the low cost of transaction.

The variable in terms of the level of acceptance to whether the transactional cost per transaction is reduced with electronic banking was measured through the 5 point likert scale respondents will be required to respond to one of the options, as 1-strongly disagree, 2- disagree, 3- neutral, 4- agree, 5- strongly agree.

The obtained data was analyzed through descriptive technique like percentages and frequency whereby frequency of the responses to the questions were depicted and the percentage of each response according to 5 point likert scale was calculated to show the proportion of the how respondents agree to the reduction of transaction cost through using e banking, the results was shown through the pie tables which showed the frequency and proportion of responses to the extent of usage. The results along with literature the study analysis showed whether users real perceive the low cost associated with transacting through electronic banking.

Convenience

The variable describes the provision of electronic banking services 24 hours a day (24/7) with efficiency and effectiveness of services, the electronic banking enhances anytime and anywhere banking facility. Thus impacting the low transaction costs of electronic banking services.

The variables in terms of the level of acceptance to convenience of electronic banking services was measured through the 5point likert scale 1-strongly disagree, 2- disagree, 3- neutral, 4- agree, 5- strongly agree. Respondents responded to one of the option as per the scale.

The data obtained was analyzed through descriptive analysis, whereby frequency of the responses was showed among respondents and the percentages of each option according to the 5 point likert scale was determined to see the proportion of the respondents on the extent to perceive the convenience of the electronic banking services. Tables were used to show the results for descriptive analysis as it easily showed the frequency and proportion of responses.

The literature suggests that electronic banking is convenient as you transact anytime and anywhere, thus the study showed how customers perceived whether the electronic banking is convenient and provided services efficiently according to the results.

Time saving

The variable described the extent to which the electronic banking impact the transactional costs of electronic banking services to customers in form of time saving as through electronic banking the customers have no need to visit the bank branches to transact rather they transact electronically.

The variable in terms of the level of acceptance of respondents was measured through a 5 point likert scale as 1-strongly disagree, 2- disagree, 3- neutral, 4- agree, 5- strongly agree, whereby the respondents were required to choose one of the option depending on one's perception.

The data obtained was analyzed using descriptive technique including frequency that showed the occurrence of responses to questions and percentages of each response in each option of the 5 point likert scale was calculated, later through tables the results of frequencies and percentages were easily shown.

The literature suggests that electronic banking results to transactional costs benefit through time saving, Thus for the sake of this study the researcher analysis showed whether the electronic banking impact transactional costs of banking services through time saving as there is no need to visit the branch.

CHAPTER FOUR

PRESENTATION OF FINDINGS

4.0 Introduction

This chapter details the analysis of the responses from 100 respondents. All the respondents were customers from CRDB Bank in Morogoro where 70 respondents were users (adopters) of electronic banking and 30 respondents were non users (non adopters) of electronic banking, the results of the statistical analysis presented here were obtained using SPSS version 16 computer program, with the aid of appropriate frequency tables for clear illustration.

The researcher considered that any customer using any of the electronic banking channels such as ATM, SIM Banking and internet banking, would be recognized as the user of electronic banking and non users included those who did not participate in any of the electronic banking channel. The analysis has been carried out in accordance with the three research objectives; the analysis begins with the demographic profile of the respondents' later chi-square technique was used to test the relationship between respondent's demographic characteristics and adoption in electronic banking, descriptive analysis of the extent of usage of electronic banking and lastly the descriptive analysis of the benefits of electronic banking in conducting banking financial services to customers.

4.1 Demographic profile

This section describes the demographic profile of the participants who in total included 100 respondents where 70 used electronic banking and 30 did not use electronic banking. Firstly, the participants were introduced in terms of their demographic information and secondly the section presents some important demographic findings, which examines if demographic variables influence the usage of electronic banking, in different group separately (users and non users of electronic banking)

4.1.1 Gender

As reflected in table 4.1 below, the analysis showed that 66 respondents equivalent to 66% of the respondents who responded were male and 34 respondents equivalent to 34% of the respondents who responded were female, this indicates that there was dominance of males over females who responded in the sample size of the research.

Table 4.1 Gender

		Frequency	Percent
Valid	male	66	66.0
	female	34	34.0
	Total	100	100.0

Source; researcher's survey, 2016

Table 4.2 below reflect the user and non user gender distribution, where by the analysis showed that 49 respondents who use electronic banking were male, representing 70% of the users and 2 respondents who use electronic banking were female representing 30% of the users while 7 respondents who were not using electronic banking were males equivalent to 56.7% and 3 respondents who were not using electronic banking were females representing 43.3% of the non users.

Table 4.2 Gender distribution for user and non user

	USER		NON USER	
	Frequency	Percent	Frequency	Percent
Male	49	70%	17	56.7%
Female	21	30%	13	43.3%
Total	70	100%	30	100%

Source; researcher's survey, 2016

4.1.2 Age

Table 4.3 shows that 26 respondents fell on the age category of 8 – 25 age group equivalent to 26%, 31 respondents equivalent to 31% fell to 26 to 35 age group, 24

respondents equivalent to 24% fell in 36 to 45 age group, 13 respondents equivalent to 13% fell in 46 to 55 age group and 6 respondents equivalent to 6% fell to 56 and above age group

Table 4.3 Age of the respondent

		Frequency	Percent
Valid	18-25	26	26.0
	26-35	31	31.0
	36-45	24	24.0
	46-55	13	13.0
	56 and above	6	6.0
	Total	100	100.0

Source; researcher's survey, 2016

Table 4.4 below shows age reflecting the users and non users of the electronic banking, the analysis showed that 15.7% of the users fell in the 18 to 25 age group while non users represented 50% in the same age group, 40% of the users fell in the age group of 26 to 35 and only 10% accounted for non users, 28.6% represented users of electronic banking and 13.3% accounted for non users in the 36 to 45 age group, 12.9% represented users and 13.3% represented non users in the age category of 46 to 55 years and 2.9% represented users and 13.3% represented non users of electronic banking in the age category of 56 and above

Table 4.4 Age of the respondent (user and non user of electronic banking)

	USER		NON USER	
	frequency	percent	frequency	percent
18 - 25	11	15.7%	15	50%
26 – 35	28	40%	3	10%
36 – 45	20	28.6%	4	13.3%
46 – 55	9	12.9%	4	13.3%
56 and above	2	2.8%	4	13.3%
Total	70	100%	30	100%

Source; researcher's survey, 2016

4.1.3 Occupation

Table 4.5 of analysis showed that 24% of the respondents were public sector employees, 20% of the respondents were private sector employees, 28% of the respondents were self employees and 28% of the respondents represented the category of respondents who were either students or retired or unemployed.

Table 4.5 Occupation of the respondent

		Frequency	Percent
Valid	public sector employed	24	24.0
	private sector employed	20	20.0
	self employed	28	28.0
	student/unemployed/retired	28	28.0
	Total	100	100.0

Source; researcher's survey, 2016

Table 4.6 below shows that, 31.4% of respondents who were public employed were using electronic banking and only 6.7% of public employed respondents were not using electronic banking, 27.1% of the respondents who are private sector employed used electronic banking while 3.3% of the private sector employed respondents did not use electronic banking, 27.1% of the respondents who are self employed used electronic banking and 30% of the respondents who are self employed did not use electronic banking and 14.3% of respondents who are either student or retired or unemployed used electronic banking while 60% of them did not use electronic banking

Table 4.6 occupation of the respondent

Occupation	USER		NON USER	
	frequency	percent	frequency	percent
Public sector employed	22	31.4%	2	6.7%
Private sector employed	19	27.1%	1	3.3%
Self employed	19	27.1%	9	30%
Student/retired/unemployed	10	14.3%	18	60%
Total	70	100%	30	100%

Source; researcher's survey, 2016

4.1.4 Income level per month

Table 4.7 of analysis shows that, 26 respondents equivalent to 26% earned income per month of 10,000 to 300,000, 33 respondents representing 33% earned income of 300,000 to 1,000,000 per month, 33 respondents representing 33% earned income of 1,000,000 to 5,000,000 per month and 10 respondents representing 10% earned income of more than 5,000,000 per month

Table 4.7 Income per month of the respondent

		Frequency	Per cent
Valid	10,000 - 300,000	26	26.0
	300,000 - 1,000,000	31	31.0
	1,000,000 - 5,000,000	33	33.0
	More than 5,000,000	10	10.0
	Total	100	100.0

Source; researcher's survey, 2016

Table 4.8 below shows that income level per month reflecting the users and non users of the electronic banking, 12.9% represented users of electronic banking with income level per month from 10,000 to 300,000 and 56.7% represented non users of electronic banking with income from 10,000 to 300,000, 30% of the respondents represented users of electronic banking and 33.3% represent non users of electronic banking with income level per month from 300,000 to 1,000,000, 45.7% of the respondents represented users

of electronic banking and 3.3% represented non users of electronic banking with income from 1,000,000 to 5,000,000 per month and 11.4% of respondents represented users of electronic banking while 6.7% represented non users of electronic banking with income level per month of above 5,000,000

Table 4.8 Income level per month of the respondent (user and non user of e banking)

Income level	USER		NON USER	
	frequency	percent	frequency	percent
10,000 – 300,0000	9	12.9%	17	56.7%
300,000 – 1,000,000	21	30%	10	33.3%
1,000,000 – 5,000,000	32	45.7%	1	3.3%
Above 5,000,000	8	11.4%	2	6.7%
Total	70	100%	30	100%

Source; researcher's survey, 2016

4.1.5 Education level

Table 4.9 of analysis shows that 2 respondents had less than high school education, 14 respondents equivalent to 14% had high school education, 19 respondents representing 19% had diploma/high diploma education level, 49 respondents equivalent to 49% had bachelor degree education, and 16 respondents representing 16% had masters degree or PhD.

Table 4.9 Education level of the respondent

		Frequency	Percent
Valid	less than high school	2	2.0
	high school	14	14.0
	Diploma/high diploma	19	19.0
	bachelor degree	49	49.0
	graduate (Master's or PhD)	16	16.0
	Total	100	100.0

Source; researcher's survey, 2016

The analysis presents the education level of the respondents reflecting the user and non user of electronic banking, such that 2 respondents equivalent to 6.7% who had less than high school did not use electronic banking, 2 respondents representing 2.9% were users of electronic banking and 12 respondents representing 40% were non users with high school education level, 10 respondents representing 14.3% used electronic banking and 9 respondents representing 30% did not use electronic banking with diploma education level, 42 respondents with bachelor degree representing 60% used electronic banking and 7 respondent representing 23.3% with bachelor degree did not use electronic banking, 16 respondents representing 22.9% with either masters or PhD used electronic banking, as shown in table 4.10 below

Table 4.10 education level of the respondent

Education level	USER		NON USER	
	frequency	percent	frequency	percent
Less than high school	0	0%	2	6.7%
High school	2	2.9%	12	40%
Diploma/high diploma	10	14.3%	9	30%
Bachelor degree	42	60%	7	23.3%
Masters/PhD	16	22.9%	0	0%
Total	70	70%	30	30%

Source; researcher's field survey, 2016

4.1.6 The relationship between demographic factors and participation (adoption) in electronic banking

The analysis was further undertaken using technique of analysis (CHI-SQUARE TEST) to depict the relationship which exist between social demographic characteristics of respondents and participation (adoption) in electronic banking like Internet banking, mobile (SIM) Banking and ATM. Thus the analysis was undertaken to see whether demographic factors including age, income level, education level and occupation influence one to adopt electronic banking.

The relationship between the consumers' demographic characteristics and participation in electronic banking was tested using chi – square test. The researcher used chi-square because it helps to determine significant relationship among the variables, the analysis presented the following

4.1.6.1 Age

The chi-square was used to test whether there is significant relationship between the age of the respondents and participation in electronic banking, whether age influence the participation in electronic banking. The p value of 0.000 (table 4.12) which is less than 0.05 implies that the chi square is significant and indicates there is significant relationship between age and participation in electronic banking. The cross tabulation (table 4.11) below shows the age distribution between the two different groups, as users were 15.7% and non users 50% in the age group of 8 – 25, users accounted for 40% and non users 10% in the age category of 26 – 35, users were 28.6% and non users were 20% in the age category 36 – 45, users were 12.9% and non users 13.3% in the age category of 46 – 55, and users were 2.9% and non users were 13.3% in the age category of 56 and above.

Table 4.11 Age and participation in electronic banking, cross tabulation

	Participation in electronic banking				
Age	YES (USERS)		NO (NON USERS)		Total
	frequency	percent	frequency	percent	
18 – 25	11	15.7%	15	50%	26%
26 – 35	28	40%	3	10%	31%
36 – 45	20	28.6%	4	13.3%	24%
46 – 55	9	12.9%	4	13.3%	13%
56 and above	2	2.9%	4	13.3%	6%
	70	100%	30	100%	100%

Source; researcher's field survey, 2016

Table 4.12 Chi-Square Tests, age and participation in electronic banking

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	21.468[a]	4	.000
Likelihood Ratio	21.722	4	.000
Linear-by-Linear Association	.442	1	.506
N of Valid Cases	100		

a. 3 cells (30.0%) have expected count less than 5. The minimum expected count is 1.80.

4.1.6.2 Income

The chi-square is significant (p= 0.000) table 4.14, indicating that there is significant relationship between income and participation in electronic banking. The cross tabulation (table 4.13) depicted that the distribution of monthly income levels between the users and non users of electronic banking. a Total of 87.1% of users of electronic banking have income of over 300,000 per month, total of 56.7% of non users have income of below 300,000 per month, 33.3% of non users have income of 300,000 to 1,000,000, 3.3% of non users have income of 1,000,000 to 5,000,000 and only 6.7% of non users have income of 5,000,000 and above.

Table 4.13 Income and participation in electronic banking cross tabulation

	Participation in electronic banking				
Income level	YES (USERS)		NO (NON USERS)		Total
	frequency	percent	frequency	percent	
10,000 – 300,0000	9	12.9%	17	56.7%	26%
300,000 – 1,000,000	21	30%	10	33.3%	31%
1,000,000 – 5,000,000	32	45.7%	1	3.3%	33%
Above 5,000,000	8	11.4%	2	6.7%	10%
total	70	100%	30	100%	100%

Source; researcher's field survey, 2016

Table 4.14 Chi-Square Tests, age and participation in electronic banking

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	27.483[a]	3	.000
Likelihood Ratio	30.675	3	.000
Linear-by-Linear Association	20.768	1	.000
N of Valid Cases	100		

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 3.00.

4.1.6.3 Occupation

The chi-square value is significant (p= 0.000) table 4.16, indicating that there is significant relationship between occupation of the respondent and participation in electronic banking, the cross tabulation (table 4.15) describes the occupation distribution between the two groups of users and non users of electronic banking, showing that 31.4% of the users were public employed, 27.1% of the users were private sector employed, 27.1% of the users were self employed and 14.3% of the users were unemployed but 60% of the non users were unemployed, 30% of the non users were self employed and sum of 10% of the non users were employed either public or in private sector.

Table 4.15 Occupation and participation in electronic banking cross tabulation

	Participation in electronic banking				
Occupation	YES (USER)		NO (NON USER)		Total
	frequency	percent	frequency	percent	
Public sector employed	22	31.4%	2	6.7%	24%
Private sector employed	19	27.1%	1	3.3%	20%
Self employed	19	27.1%	9	30%	28%
Student/retired/unemployed	10	14.3%	18	60%	28%
Total	70	100%	30	100%	100%

Source; researcher's field survey, 2016

Table 4.16 Chi-Square Tests, occupation and participation in electronic banking

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	27.052[a]	3	.000
Likelihood Ratio	28.801	3	.000
Linear-by-Linear Association	23.019	1	.000
N of Valid Cases	100		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.00.

4.1.6.4 Education level

The chi square is significant (p= 0.000) table 4.18, showing that there is significant relationship between education level and participation in electronic banking. The cross tabulation (table 4.17) depicts the education level between the users and non users of electronic banking, a total of 82.9% users of electronic banking have education level of diploma/high diploma to masters and PhD but 46.7% of the non users of electronic banking have education level of lower than diploma/high diploma, including high school and less than high school

Table 4.17 Education level and participation in electronic banking cross tabulation

	Participation in electronic banking				
Education level	YES (USER)		NO (NON USER)		Total
	frequency	percent	frequency	percent	
Less than high school	0	0%	2	6.7%	2%
High school	2	2.9%	12	40%	24%
Diploma/high diploma	10	14.3%	9	30%	19%
Bachelor degree	42	60%	7	23.3%	49%
Masters/PhD	16	22.9%	0	0%	16%
Total	70	100%	30	30%	100%

Source; researcher's survey, 2016

Table 4.18 Chi-Square Tests, education level and participation in electronic banking

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	40.709[a]	4	.000
Likelihood Ratio	44.211	4	.000
Linear-by-Linear Association	38.502	1	.000
N of Valid Cases	100		

a. 4 cells (40.0%) have expected count less than 5. The minimum expected count is .60.

4.2 Extent of usage of electronic banking (frequency of usage of electronic banking)

The researcher assumed that anyone using any of the E banking facilities such as Mobile banking, internet banking and ATM were recognized as user of electronic banking. Thus the analysis presents the finding regarding the frequency to which the respondents (users) of which were 70 users use electronic banking to carry out different banking transactions.

4.2.1 Frequency of use of Automated Teller Machine (ATM)

The analysis of the data collected from the respondents on the frequency of use of the automated teller machine (ATM) as one of the channel for electronic banking per month, indicated that out of all 70 respondents used ATM, where 56 respondents used ATM one to four times a month (1 – 4 times), equivalent to 80% of all respondents, 10 respondents used ATM five to eight time a month (5 – 8 times), equivalent to 14.3% of all respondents and only 4 respondents used ATM more than eight times in a month (over 8 times), equivalent to 5.7% of all respondents, as shown in table 4.19 below

Table 4.19 Frequency of use of ATM per month

Category	Frequency	Percent
Never	0	0%
1 – 4 times	56	80%
5 – 8 times	10	14.3%
Over 8 times	4	5.7%
Total	70	100%

Source; researcher's survey, 2016

4.2.2 Frequency of use of SIM banking per month

The analysis on the frequency of use of SIM Banking per month by the respondents indicated that 6 respondents, equivalent to 8.6% never used SIM Banking per month, 51 respondents equivalent to 72.9% used SIM Banking one to four times in a month (1 – 4 times), 8 respondents equivalent to 11.4% used SIM Banking five to eight times a month and 5 respondents representing 7.1% used SIM Banking over 8 times a month, as shown in table 4.20 below

Table 4.20 Frequency of use of SIM banking per month

Category	Frequency	Percent
Never	6	8.6%
1 – 4 times	51	72.9%
5 – 8 times	8	11.4%
Over 8 times	5	7.1%
Total	70	100%

Source; researcher's survey, 2016

4.2.3 Frequency of using internet (online) banking per month

The analysis presents the extent to which respondents used internet banking per month, and it indicated that 38 respondents representing 54.2% did not use internet banking, 28 respondents equivalent to 40% of the users used internet banking one to four times a month, 2 respondents equivalent to 2.9% used internet banking five to eight times a month and 2 respondents equivalent to 2.9% used internet banking over eight times a month, as shown in table 4.21 below

Table 4.21 Frequency of using internet (online) banking per month

Category	Frequency	Percent
Never	38	54.2%
1 – 4 times	28	40%
5 – 8 times	2	2.9%
Over 8 times	2	2.9%
Total	70	100%

Source; researcher's survey, 2016

4.2.4 Frequency of viewing bank's account balances per month through electronic banking

The analysis presents the frequency to which respondents view their account's balance through the use of electronic banking channels like ATM, Mobile phone and over the internet. The analysis presents that 8 respondents equivalent to 11.4% never viewed their balances through e banking, 52 respondents, equivalent to 74.3% viewed their account balances one to four times (1 – 4 times) a month, 8 respondents, equivalent to 11.4% viewed their account's balance five to eight times a month (5 – 8 times) and 4 respondents, equivalent to 2.9% viewed their account's balances over eight times a month, as shown in table 4.22 below

Table 4.22 Frequency of viewing bank's account balances per month through e banking

Category	Frequency	Percent
Never	8	11.4%
1 – 4 times	52	74.3%
5 – 8 times	8	11.4%
Over 8 times	2	2.9%
Total	70	100%

Source; researcher's survey, 2016

4.2.5 Frequency of paying bills through electronic banking per month

The analysis presents the frequency in terms of number of times the respondent used electronic banking per month to pay bills outstanding like electricity and water bills. The analysis presents that 42 respondents (users), equivalent to 60% never paid bills through

electronic bank per month, 22 respondents, equivalent to 31.4% paid bills just one time through electronic banking in a month and 6 respondents representing 8.6% paid bills over one time per month through electronic banking, as shown in table 4.23 below

Table 4.23 frequency of paying bills

Category	Frequency	Percent
Never	42	60%
1 time	22	31.4%
Over 1 time	6	8.6%
Total	70	100%

Source; researcher's survey, 2016

4.2.6 Frequency of transferring fund through electronic banking per month

The analysis showed that 13 respondents, equivalent to 18.6% never used electronic banking to transfer fund such as one person to the other, 50 respondents, equivalent to 71.4% used electronic banking to transfer fund 1 – 4 times a month, 4 respondents equivalent to 5.7% used electronic banking 5 – 8 times in a month to transfer fund and only 3 respondents equivalent to 4.3% used electronic banking over 8 times to transfer fund in a month as shown in table 4.24 below

Table 4.24 Frequency of transferring fund through electronic banking per month

Category	Frequency	Percent
Never	13	18.6%
1 – 4 times	50	71.4%
5 – 8 times	4	5.7%
Over 8 times	3	4.3%
Total	70	100%

Source; researcher's survey, 2016

4.2.7 Frequency of viewing banks account's mini statement per month

Table 4.25 of the analysis presented the extent and number of times to which respondents used electronic banking to view their bank's account mini statement per month and it showed that 13 respondents equivalent to 18.6% never used electronic banking to view bank's account statement, 50 respondents equivalent to 71.4% viewed Bank's statement 1 – 4 times a month 4 respondents equivalent to 5.7% viewed bank

mini statement 5 – 8 times a month and 3 respondents equivalent to 4.3% viewed bank's statement over 8 times a month

Table 4.25 Frequency of viewing banks account's mini statement per month

Category	Frequency	Percent
Never	13	18.6%
1 – 4 times	50	71.4%
5 – 8 times	4	5.7%
Over 8 times	3	4.3%
Total	70	100%

Source; researcher's field survey, 2016

4.3 Benefits of using electronic banking to customers

The analysis presents the impacts and extent to which the respondents perceive the related benefits out from using the electronic banking like ATM, SIM Banking and internet banking to conduct banking financial services.

4.3.1 Electronic banking provides convenient way to conduct banking transactions (convenience)

The electronic banking enables the customers to conduct better services, thus the analysis showed that 2 respondents which is 2.8% strongly disagreed that E banking is convenient, 45 respondents representing 64.3% agreed that E banking is convenient and 23 respondents which is 32.9% strongly agreed that E banking is convenient, as shown in the table 4.26 below

Table 4.26 Electronic banking is convenient

Category	Frequency	Percent
Strongly disagree	2	2.8%
Disagree	0	0%
Neutral	0	0%
Agree	45	64.3%
Strongly agree	23	32.9%
Total	70	100%

Source; researcher's survey, 2016

4.3.2 Electronic banking is anytime and anywhere banking facility (Accessibility)

E banking is accessible anytime and anywhere thus, the analysis showed that 1 respondent, equivalent to 1.4% strongly disagreed that E banking is anywhere and anytime banking facility, 2 respondents equivalent to 2.9% disagreed that E banking is anywhere and anytime banking facility, 15 respondents equivalent to 21.4% could not tell whether E banking is anytime and anywhere banking facility, 46 respondents representing 65.7% agreed that E banking is anytime and anywhere banking facility and 6 respondents representing 8.6% strongly agreed that E banking is anytime and anywhere banking facility, as shown in the table 4.27 below

Table 4.27 Accessibility

Category	Frequency	Percent
Strongly disagree	1	1.4%
Disagree	2	2.9%
Neutral	15	21.4%
Agree	46	65.7%
Strongly agree	6	8.6%
Total	70	100%

Source; researcher's survey, 2016

4.3.3 Electronic banking provides 24 hours service (24/7)

Electronic banking ensures services are provided anytime in a day. The analysis showed that 1 respondent representing 1.4% strongly disagreed that E banking provides services 24 hours a day, 3 respondents representing 4.3% disagreed that E banking provides services 24 hours a day, 30 respondents representing 42.9% could not tell whether E banking provides services 24 hours a day, 33 respondents representing 47.1% agreed that E banking provides services 24 hours a day and 3 respondents representing 4.3% strongly agreed that E banking provides services 24 hours a day, as shown in the table 4.28 below

Table 4.28 Electronic banking provides services 24 hours a day

Category	Frequency	Percent
Strongly disagree	1	1.4%
Disagree	3	4.3%
Neutral	30	42.9%
Agree	33	47.1%
Strongly agree	3	4.3%
Total	70	100%

Source; researcher's survey, 2016

4.3.4 Electronic banking saves time

Electronic banking provides services without the need to visit bank branches, thus the analysis showed that 1 respondent representing 1.4% strongly disagreed, 2 respondents representing 2.9% disagreed that electronic banking saves time, 12 respondents representing 17.1% could not tell whether E banking saves time, 46 respondents representing 65.7% agreed that E banking saves time, 9 respondents representing 12.9% strongly agreed that E banking saves time, as shown in table 4.29 below

Table 4.29 Time saving

Category	Frequency	Percent
Strongly disagree	1	1.4%
Disagree	2	2.9%
Neutral	12	17.1%
Agree	46	65.7%
Strongly agree	9	12.9%
Total	70	100%

Source; researcher's survey, 2016

4.3.5 Electronic Banking has lower transaction fees/charges

The transaction fee charged for electronic banking services is perceived to be lower compared to traditional banking, thus the analysis indicated that 1 respondent, representing 1.4% strongly disagreed that E banking has lower transaction fee, 1 respondent representing 1.4% disagreed that E banking has lower transaction fee, 12 respondent, representing 17.2% could not tell if E banking has lower transaction fees, 53

respondent, representing 75.7% agreed that E banking has lower transaction fees and 3 respondent representing 4.3% strongly agreed that E banking has lower transaction fees, as shown in table 4.30 below

Table 4.30 Lower transactions fee (cost)

Category	Frequency	Percent
Strongly disagree	1	1.4%
Disagree	1	1.4%
Neutral	12	17.2%
Agree	53	75.7%
Strongly agree	3	4.3%
Total	70	100%

Source; researcher's survey, 2016

4.3.6 Electronic banking transactions are efficient

Electronic banking offers banking transactions which are efficient in terms of speed and accuracy, thus the analysis showed that 2 respondents, representing 2.9% strongly disagreed that E banking transactions were efficient, 2 respondents representing 2.9% disagreed that E banking transactions were efficient, 1 respondent representing 1.4% could not tell if E banking transactions were efficient, 35 respondents representing 50% agreed the E banking transactions were efficient and 30 respondents representing 42.8% strongly agreed that E banking transactions were efficient, as shown in the table 4.31 below

Table 4.31 Electronic banking transactions are efficient

Category	Frequency	Percent
Strongly disagree	2	2.9%
Disagree	2	2.9%
Neutral	1	1.4%
Agree	35	50%
Strongly agree	30	42.8%
Total	70	100%

Source; researcher's survey, 2016

CHAPTER FIVE

DISCUSSION OF THE FINDINGS

5.0 Introduction

This chapter presents the discussion of the findings presented in the earlier chapter; for the purpose of satisfying the objectives of the study, which include assessing the factors determining customer's adoption in electronic banking, analyzing the extent to which customers use electronic banking services and lastly assessing the benefits of electronic banking to customers.

5.1 Factors influencing adoption in electronic banking

The literature, suggest that social demographic attributes have been found to be associated with the adoption of different electronic banking channels, especially internet banking, mobile banking and ATM (Al-Ashban and Burney, 2001; Karjaluoto et al, 2002; Sathye, 1999). For instance people with high education attainment possess good information processing skills, which are good attributes to adopt new technology, thus the study has analyzed the demographic factors including age, income level, education level and occupation and were tested through chi square technique of analysis to show the relationship with adoption in electronic banking. The findings are discussed below to satisfy the study's objective

5.1.1 Age

The chi-square test, with p value of 0.000 which is less than 0.05 denotes that there is significant relationship between age of the respondent and participation in electronic banking, the cross tabulation table 4.11 in the analysis, presented the age distribution among the participants and non participants in electronic banking, it indicated that 50% of the non users of electronic banking were younger age from 18 to 25 while mostly participants were middle aged group including age group from 26 to 45 comprising total of 68.6% of all users of electronic banking. This goes in consistent with Akinci et al.'s

(2004) findings in Turkey show that mid – aged consumers are more likely than younger or older consumers to adopt electronic banking either internet banking, mobile banking, and tele banking, while also Mattila (2001) findings, concluded that mostly internet banking users are middle aged, relative wealthy and highly educated.

Thus, the study's findings suggested that age has significant influence in adoption in electronic banking, as the age increases the participation in electronic banking increases, further the results imply that typical users of electronic banking are middle aged group ranging from 26 to 45 years.

5.1.2 Income level per month

The findings as indicted in table 4.8, showed that a total of 87.1% of the users of electronic banking have income of higher than 300,000 including income from 300,000 to 5,000,000 and above, while 56.7% of the non users of electronic banking have income of less than 300,000 per month, this indicates that income influence the participation in electronic banking, and high income earners participate more than low income earners in electronic banking

The chi-square test also showed p value of 0.000 which is below 0.05, denoting that there was significant relationship between income and participation in electronic banking and the results showed 87.1% of users of electronic banking having income above 300,000 while 56.7% of the non users have income of less than 300,000. This indicates that income has impact in participation in electronic banking and as income increases there is influence of increase in usage of electronic banking. The finding goes in consistent with Mohamed and Mohemed (2012) and sohain and shanmugham (2003) which indicted that income has influence in usage of electronic banking, thus concluding that high income earners are typical users of electronic banking than non users who earn low income.

5.1.3 Occupation

The findings as indicated in table 4.6, between the users and non users of electronic banking showed that a sum of 85.6% of the users of electronic banking are employed whether public sector employed, private sector employed or self employed while 60% of the non users of electronic banking are unemployed and include students, retired and unemployed.

Chi-square test was run to test the relationship between occupation of the respondents and adoption in electronic banking, the results showed p value of 0.000 which is below 0.05 and denotes that there is significant relationship between occupation and participation in electronic banking and with cross tabulation table 4.15, sum of 85.6% of users being the employed ones and 60% of the non users being unemployed group. The results concurs with the findings done by Karjaluoto et al, 2002; Mattila et al, 2003; Sathye, 1999, which showed that with high level occupations are more likely to use electronic banking especially internet and mobile banking, thus for the purpose of the study, the findings indicate that occupation has influence in participation in electronic banking and mostly users of electronic banking are employed and mostly non users of electronic banking are unemployed.

5.1.4 Education level

The findings of the study as shown in table 4.10, which showed the education level of the respondents reflecting the users and non users of electronic banking, it showed that a total of 97.2% of the users of electronic banking have education level higher than diploma, including bachelor degree, masters and PhD, while a sum of 46.7% of the non users of electronic banking have education level below diploma including high school and less than high school, thus showing that higher educated people participate more in electronic banking.

The chi square test was run to show the relationship between education level and participation in electronic banking, and it showed a p value of 0.000 denoting a

significant relationship between education level and participation in electronic banking, table 4.17 showed about 97.2% of the respondents who use electronic banking have education level of diploma and high while mostly of the users accounting to 46.7% of the non users of electronic banking have education level of less than diploma. Thus the study denotes that mostly users of electronic banking have high education and mostly non users have less education, the study goes in consistent with the findings of izogo et al, Nasri (2011), Mohamed and mohemed (2012), who concluded education level to have influence in participation in electronic banking, such that high educated participate more in electronic banking than less educated people.

The findings detailed that, the four demographic factors age, income, occupation and education have impact in participation in electronic banking, the chi-square test which was undertaken showed significant relationship between the four factors and participation in electronic banking. Thus the study suggest that middle aged group ranging from 26 to 45, educated, employed and high income earners participate and are likely to participate more in electronic banking than the younger group, less educated, unemployed and low income earners who mostly do not participate in electronic banking. The findings concurs with the findings by Al – Ashban and burney, 2001; Karjaluoto et al, 2002; Mattila et al, 2003; Sathye, 1999, which showed that social demographic attributes contribute in adoption in electronic banking, such that high education group (having higher knowledge of new technology information and skills compared to the low education group) consumers, belonging to upper middle class and in middle age group are likely to adopt electronic banking.

5.2 Extent to which customers use electronic banking services

This section discuss the findings pertaining to the frequency of usage of electronic banking services by customers, the discussion starts with the frequency of usage of electronic banking channels including ATM, SIM banking and Internet banking on a measure of number of times per month and finishes with the extent to which customers

use electronic banking channels to conduct banking services which are commonly performed by most of the users.

5.2.1 Frequency of use of Automated Teller Machines (ATM)

The findings with reference in table 4.19 showed that all the users (70 respondents) use ATM per month and indicated that 80% of the respondents use ATM one to four times a month (1 – 5 times), while remaining 20% of the users of electronic banking use ATM 5 to 8 times and over 8 times. The study indicates that all the users of electronic banking patronize ATM than any other electronic banking channel and mostly of the customers (users of electronic banking) use it one to four times a month, or weekly. The findings goes in consistent with the study done by Kwashie (2012) on the impact of electronic bank on service delivery in Ghana and found that most of the users of electronic banking patronize and use frequently ATM on weekly basis than other electronic banking channel such as mobile and internet banking. Akuffo (2011) in his study on the impact of electronic banking in Ghana industry, on the mostly used electronic banking channel and found that 75% of the customers use ATM, 20% use mobile banking and 5% use internet banking mostly. Thus the study indicates that mostly users of electronic banking use mostly ATM at least 1 to 4 times a month (weekly).

5.2.2 Frequency of using Mobile Banking (SIM Banking)

The study's findings as given from table 4.20, showed that most of the users of electronic banking (72.9%) use SIM Banking in a range of one to four times a month and a total of 18.5% use SIM Banking in 5 to 8 and over 8 times a month. This indicates that most of the users of electronic banking use SIM Banking weekly or in a frequency of one to four times a month. Driga (2014) concluded that mobile bank is currently used by most of customers as it cement the modernization of e banking, and most customers use it mostly to conduct banking transactions compared to ATMs and online banking.

5.3.4 Frequency of using internet banking per month

The study's findings on the frequency of use of internet banking by the users who participate in electronic banking as per table 4.21 and showed that 54.2% of the customers do not use internet banking, while a sum of 45.8% use internet banking in a frequency of 1 to four time, 5 to 8 times and over 8 times per month. Thus the results indicates that mostly of the users of electronic banking did not use internet banking and only few users of internet banking use in frequency of one to four times a month, rather they use other channels like ATM and Mobile banking, to access electronic banking services. The findings are consistent with the study of Akuffo (2012) which showed only 5% of the users of electronic banking use internet banking frequently in Ghana, while the EY (2014) Global Consumer Banking Survey showed only 40% of the customers from Africa use internet banking at special frequency compared to other continents and concluded that 70% of the users frequently use ATM compared to other continents. Thus the study details the low frequency use of internet banking among users and low patronization by the users as only 45.8% of the users use internet banking frequently.

5.2.4 Frequency of viewing bank's account balances per month

The findings as shown in table 4.22, showed that most of the users of electronic banking equivalent to 74.3% use electronic banking to view their account balance in a frequency of one to four times a month or weekly basis and sum of 14.3% of the users of electronic banking use electronic banking to view their account's balances in a frequency of over 5 times a month. This indicates that mostly of the users of electronic banking including ATM, SIM and internet banking use frequently (weekly) to view their bank's account balances without visiting in their branches to view their balances however still few visit their branches for balance enquiry request. the findings goes in consistent with the study of Driga (2014) showed that 86% of the users use electronic banking especially (internet banking, ATMs, Mobile banking and call centre) to view their accounts balances, where 50% use internet, 10% use mobile, 21% use ATMs and 6% use call centers, however the study presented that most of African electronic banking, users uses branch and ATMs in

electronic banking transactions. Lipowski (2013) showed that over 90% of the users use mobile banking in checking their accounts more than four times a month. Thus the study shows that mostly users use electronic banking in viewing bank's account balances more frequently than any other electronic banking service.

5.2.5 Frequency of paying bills through electronic banking per month

The findings as per table 4.23, presented that 60% of the users of electronic banking do not use electronic banking (any of either SIM or internet banking), to pay out their bills like electricity, telephone and insurance premium bills, while 40% of the users use electronic banking to pay their bills one or more than one time per month. The findings indicate that most of the users still do not use electronic banking to make bills payment per month and they prefer branch banking to make their bills payment and mostly of the users uses electronic banking just once per month to pay their bills in a month. The study is consistent with the study of Kwashie, W (2012) who concluded that most of ghanain customers do not use electronic banking to make bills payment.

5.2.6 Frequency of transferring funds through electronic banking per month

The findings as indicated in table 4.24, showed that 18.6% of the users did not use any of electronic banking like internet and SIM Banking in transferring funds, while most of the users of electronic banking 71.4% use electronic banking especially internet and SIM Banking in transferring funds such as from one account to the other person's account in a frequency of one to four times a month while only 5.7% of the users use electronic banking to transfer funds in 5 to 8 times a month. This indicate that most of the users use electronic banking especially SIM Banking and internet banking in transferring money in a frequency of one to four times in a month or once per week. The finding is consistent with the study done by Lipowski (2013), on the usability of mobile distribution, found that 62.5% of the users use mobile banking to transfer money from accounts for bills payment at least one time per week, and 35% of the users use mobile banking in the case of money transferring to another phone once a month.

5.2.7 Frequency of viewing Mini bank statement

The findings as per table 4.25 showed that 71.4% of the users use electronic banking including ATM, SIM Banking and internet banking to view their bank's mini statement in a frequency of one to four times a month while 18.6% of the users did not use electronic banking in viewing their bank statement. The study's findings indicate that most of the users of electronic banking use electronic banking frequently in one to four times a month to view and download their mini statement like monthly bank statement rather than visiting branch banking. The study done by Yasir and Asif (2010) showed that most of the electronic banking users use internet banking frequently to perform two main services including balance enquiry and viewing information on transaction history of an account, and concluded the two services to be the most popular services among banks, thus this finding conforms with this study and indicate the viewing of bank statement by most of the users of electronic banking at least one to four times a month.

The findings indicate that most of the users uses ATM mostly, SIM Banking and less with Internet Banking to perform different services and mostly of the services performed include balance enquiry, transfer of fund (money) and view bank's statement while bills payment is not frequent used by the users through electronic banking as most seems to use branch banking in conducting such transaction, Ngandu (2012), on the most popular services conducted by electronic banking users in Durban south Africa, found that firstly many users use electronic banking more frequently and found that over 40% use electronic banking monthly, and secondly most users 78% of the respondents indicated that electronic banking was used for transferring funds, 37.7% was used to make payments, 12.8% was used for bank statement and balance enquiry however Yasir and Asif (2010) indicated that frequently used services include balance enquiry, fund transfer and view bank account history, and this conforms with our study which indicate high frequency in a one to four times a month with the use of such electronic banking services.

5.3 Benefits of electronic banking in conducting banking financial services to customers

This objective is concerned with the related benefits customers perceive through the use of electronic banking in accessing financial services. The transactional benefits as for the purpose of the study include efficient transactions, lower transaction fees, convenience, accessibility, time saving and provision of 24 hours service a day.

5.3.1 Convenience of electronic banking transactions

Previous analysis showed that most of the users of electronic banking agreed that electronic banking transactions were convenient, such that electronic banking enabled the conduction of better services to customers in a more convenient way than traditional banking. Kwashie (2012) found that 76% of the customers who uses electronic banking agreed that electronic banking was convenient, useful and fast. The finding indicate that most of the users of electronic banking find convenient to conduct banking financial services through electronic banking rather than through branch banking which is characterized with problems of queues and many other. Sumani (2011), in his study in Ghana, came with the findings that most of the users of electronic banking perceived and agreed to it to be convenient and fast and customers carry their transaction smoothly compared to branch banking where its less convenient, however Wu (2005), documented convenience of electronic banking services to be one of the influencing factor to adopt internet banking in south Africa and most of the users agreed to the convenience of electronic banking services when carrying financial services. The research in this study indicate that most of the users of electronic banking agreed to the convenience of electronic banking in carrying financial services as compared to branch banking which is less convenient.

5.3.2 Anywhere and anytime banking facility (accessibility)

The findings of the study showed that a sum of 74.3% of the users of electronic banking agreed that electronic banking is anytime and anywhere banking facility, meaning that customers can access electronic banking services at any location and at any time, with the use of well located ATMs, with the use of internet and SIM Banking anywhere and anytime enables customers to conduct banking services more convenient without visiting bank branches. This indicate that adoption to electronic banking by customers enhance the transactional costs benefits as one can conduct banking transactions at anytime and at any location, and the study reviled the highest perception of the users on accessibility of the electronic banking. Sumani (2011) found that many customers perceive the advantage of electronic banking as anytime and anywhere banking facility, as most of the users agreed that they frequent access electronic banking services without visiting bank branches. This finding is consistent with the study's finding as customers agreed to anywhere and anytime banking facility of the electronic banking.

5.3.3 Time saving

Previous analysis as shown in table 4.29 showed that a sum of 78.6% of the users of electronic banking agreed that electronic banking save times when conducting banking transactions such that it requires one to undertake banking services without visiting in bank branches and transactions being undertaken in a very short time. This indicate that most of the customers perceive that usefulness of electronic banking as it consumes less time to accomplish a transaction compared to attending in branches. A customer can freely use internet or Mobile banking or ATM to carry out banking transaction. The finding is consistent with the study done by Kwashie (2012), which showed that 47.6% strongly agreed and 34.3% agreed that electronic banking saves time much more than manual banking. Wu (2005) in his findings showed that 60% of the respondents agreed that internet banking is much better than traditional banking because of time saving and being a motivating factor as requires one not to visit a bank branch. The researcher

indicated time saving to be perceived benefit in transaction costs to customers as the cost and time to visit branch is minimized to a large extent by the customers.

5.3.4 Lower transactions fees

The previous analysis as shown in table 4.30 showed that 80% of the users of electronic banking agreed that electronic banking is the cheapest form to conduct banking transactions compared to traditional banking where charges per transactions are higher. Cost savings has helped electronic based banks to offer lower or no service fees and offer higher interest rates on interest-bearing accounts than traditional banks (Gerlach, 2000; Jun and Cai, 2001). This finding is consistent with the study done by Akuffo, (2012), which found that 87% of the customers said "Yes" that electronic banking transactions are cheap or have lower transactional charges compared to manual banking. This indicate that the electronic banking is cost effective to customers as they transact at a low cost including lower of charge (transaction charges, clearing charges, bill collection and payments, ATM charges and processing charges).

5.3.5 Efficient transactions

The finding as shown in table 4.31 in the previous analysis showed that about 92.8% of the users of electronic banking agreed that electronic banking offers conduction of efficient banking transactions and this include the speed of financial services, immediate and quick transaction and check out with minimal time compared to the manual banking. The findings conforms with the findings of Sumani (2011) which showed that most of customers who participate in electronic banking agreed that electronic banking makes transaction very fast and accurate compared to manual banking where human errors are often and reduces the accuracy of banking transactions to customers. Thus the researcher posits that with electronic banking transactions are efficient as in terms of speed, accuracy and minimal time example lower fees charged with the use of ATM, Mobile and Internet banking.

5.3.6 Provision of 24 hours service (24/7)

Electronic banking provides services 24 hours a day, thus the findings as indicated in table 4.28, which showed that 51.4% of the customers agreed that electronic banking provides services 24 hours in a day, while almost half of the respondents including 42.9% could not tell. This shows that only few customers perceive that electronic banking provides services full time in a day, some literature poses the frequent failures of the system and blockage of network hinders the full provision of the banking services via electronic banking channels like Internet, SIM (mobile) and ATM. However study done by Sumani (2011) showed that most of the customers who use electronic banking perceived and agreed that electronic banking services are provided 24 hours in day, which is not so consistent with the finding of this study as only half of the users of electronic banking agreed that electronic banking services were provided 24 hours.

CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATION

6.0 Introduction

This chapter outlines the findings of the study, as the study investigated the factors for adoption and benefits of electronic banking to customers in CRDB Bank Morogoro. In accordance with the general objective, the study sought to find out factors determine the adoption of electronic banking, analyze the extent to which customers' use electronic banking and assess the benefits of electronic banking to customers. This chapter comprises of the summary of the findings, conclusion, recommendations and contributions this study can make to determine future research directions are highlighted.

6.1 Summary of the findings

Mainly the study entailed to investigate the factors for adoption and benefits of electronic banking to CRDB Bank customers, in line with this main objective the researcher proposed the specific research objectives, as in the first place the researcher wanted to identify the factors that influence customers to adopt electronic banking (ATM, SIM and Internet banking). The study analyzed the social demographic attributes including Age; Income, Occupation and Education to be the influencing factors, to the adoption of electronic banking by customers in CRDB Bank. Further a measure of relationship (chi-square) technique was adopted to show a relationship between the factors and participation in electronic banking, it reviled a p value of 0.000 which denoted a significant relationship between the factors and adoption in electronic banking, thus age, income, occupation and education level, all had positive influence in participation in electronic banking. The research found that people of middle age ranging from 26 – 45, moderate and high income earners at least above 300,000, employed and educated with at least diploma level of education were typical users of electronic banking while young aged below 25 and older above 55, uneducated,

unemployed and low income earners were non adopters and non users of electronic banking.

Further with respect to specific objective 2, the researcher entailed at analyzing the extent to which customers used electronic banking. The frequency of use of electronic banking was analyzed among the users of electronic banking and it was found that most of the users of electronic banking use automated teller machine (ATM) and Mobile (SIM) Banking frequently in a range of one to four times while only half of the users of electronic banking used internet banking and half of them never used internet banking per month, thus ATM was mostly used electronic banking channel while Internet banking was the least used electronic banking channel among the users. Further the frequency of use of electronic banking services was analyzed and reviled the popular services conducted in electronic banking by customers included the balance enquiry, viewing bank statements, transfer of fund (money) while bills payment over electronic banking was not frequently used by most of the users of electronic banking and mostly users used the services through electronic banking in a frequency of one to four times a month.

Lastly, with sub objective three, the researcher aimed at assessing the benefits of using electronic banking in conducting banking financial services to customers, the study found that most of the customers (users) of electronic banking agreed on the benefits of using electronic banking to conduct banking financial services. Most of the customers agreed that electronic banking was convenient, time saving as requires no need to visit bank branches, anywhere and anytime banking facility, lower transactional charges (fees), efficient transactions (immediate transaction and accuracy)and 24 hours services, thus denoting the overall related benefits of using electronic banking compared to manual banking.

6.2 Conclusion

Electronic banking is continuing transforming the banking industry in the country, as it tries to change the traditional banking into modernized banking, with great technological sophistication, which entails at rendering self service banking operations to customers. However the study showed the factors for adoption and benefits of electronic banking to customers, as through posing firstly some demographic attributes like income, age, education and occupation which have influence on adoption of e banking by customers, these are not the only factors as there are many factors like technological attributes which as well influence adoption by customers. Further it has been indicted that most of the users of electronic banking frequently patronize ATM following with mobile (SIM) banking and less of internet banking which has not gained much popularity and most of customers do not use it at all. The available electronic banking perform few and simple banking transactions which customers uses frequently like balance enquiry, fund transfers, viewing bank statements and few use for paying bills, however it's not enough for customers not to visit branches as still e banking provides few services thus continuing popularity of branch banking among many customers. Customers perceive the transactional related benefits with the use of electronic banking like convenience, time saving, lower costs, efficient transaction and 24 hours service, however still there are many non adopters of electronic banking and still most of the customers patronize branch banking to electronic banking hence continuing posing congestion in bank branches despite the e banking continuity like SIM, internet banking and ATM, thus calling for banking increasing sophistication and improvement of electronic banking services to enable efficiency of the e banking services to customers.

6.3 Recommendations

Recommendations were made, basing on research findings in the previous sections and on literature read. The researcher recommends the following

- CRDB Bank should make electronic banking more useful and usable, this can be enhanced through the following

- Increasing customers awareness of the usefulness of using electronic banking services, with the need to educate customers extensively on the use of electronic banking services especially internet and SIM banking which are not so well patronized by customers
- Build customers recognition of electronic banking; through emphasizing the advantages of electronic banking services, such as time saving, low cost services, convenience and efficient transactions and provide various types of information both financial and non financial
- Emphasize the full functionality of their systems to respond efficiently to different banking needs of the users
- Customers feedback on electronic banking services should be elicited and analyzed
- Bank's should improve help and facilities in their electronic banking services and carrying out frequent customer surveys so s to understand what their need and developing electronic banking strategy to enhance sustainable banking efficiency.
- Sophistication and improvement of mobile and internet banking, through incorporating more banking services to be conducted via e banking which will largely reduce bank branches congestion.

➢ More ATM facilities should be placed at potential locations in the town centre to reduce distance and time use in accessing the facility

6.4 Areas for future research

This research provide a room and aid for further research to be done in relation to electronic banking not only in Morogoro but covering many parts in the country as electronic banking is tremendously transforming the banking industry including

➢ Research considering the perspective on non adopters of electronic banking especially with Mobile and internet banking which are still not so familiar with

many of the customers, with intention of investigating to why many customers still do not adopt electronic banking services

REFERENCES

Adams, N (1999). Electronic Commerce, Technical. Business and Legal Issue, New Jersey, Prentice-Hall

Allen and Hamilton (2002). Internet Banking. A survey of current and future development

Akuffo, T. E. (2011). The effect of interenet banking on the Ghanaian banking industry, a case of cal bank, unibank and prudential bank, Kwame Nkrumah university of science and technology.

Amedu, U. M. (2005). Domestic electronic payment in Nigeria. The challenges central bank of Nigeria bullion, 29 (1)

Balachandher, K.G (2001): Electronic Banking in Malaysia: A Note on Evolution of Services and Consumer Reactions, Multimedia University, Malaysia, at http/www.mmu.edu.my

Basel Committee on Banking Supervision, (1998). Risk Management for Electronic Banking and Electronic Money Activities.

Basel Committee on Banking Supervision, (2003). Risk Management Principles for Electronic Banking. Bank for International Settlement.

Bello A. & Dogarawa K. (2005). The impact of e-banking on customer satisfaction in Nigeria. Ahmed Bell University, Zaria-Nigeria.

Boateng, R. & Molla, A. (2006) Developing E-banking Capabilities: Preliminary Lessons. Journal Banking and Commerce, Vol. 11, No. 2 pp. 1-10

BOT (2011), Report on a review of the role and functions of the Bank of Tanzania (1961-2011).

BOT (2012), Financial innovations and financial inclusion in Tanzania, 26th – 27th November 2012

Burr, W. (1996): Can E – Banking services be profitable? , Tartu University Press, Estonia

Chang, Y. (2003). Dynamics of banking technology adoption: an application to internet banking, Department of Economics, workshop presentation, university of Warwick, Coventry, UK, 2003.

Charity-Commission (2003), Guidelines on Electronic Banking, available at http/www.charity-commission.gov.uk

Chiemeke, S. C., Evwiekpaefe, A. and Chete, F. The Adoption of Internet Banking in Nigeria: An Empirical Investigation, Journal of Internet Banking and Commerce, vol. 11, No.3, December 2006.

Daniel, E. (1999). Provision of electronic banking in the UK and Ireland, International Journal of Bank Marketing, Vol. 17, No. 2 pp. 72 -82.

Driga, I and Isac, C. (2014). E banking services – features, challenges and benefits, Annal of the university of petrosani, economics, 14(1), 2014, pp, 49-58

EY (2014) Winning through customer experience, Global Consumer Banking Survey

Fagbuyi, T (2003). New Security Requirements For E-Banking System, In Business Times, August 25-31, p.36

Gupta, P. K. (2008) Internet Banking in India: Consumer concern and Bank Strategies, global journal of business research, vol. 2, No. 1, 2008, pp 43 – 51

Izogo, E.E., Nnaemeka, O.C., Ezema, K.S., & Onuoha (2012). "Impact of Demographic Variables on Consumers' Adoption of E-banking in Nigeria: An Empirical Investigation". European Journal of Business and Management

Jayewardene, C and Foley, P (2000). Change in the Banking Sector: The case of Internet Banking in the UK. Internet Research: Electronic Networking Applications and Policy, Vol. 10, No. 1 pp. 19-30.

Kamel, S. (2005). The use of information technology to transform the banking sector in developing nations, information technology for development, vol.11, No. 4, 2005, pp. 305 - 312

Kannabira G. and Narayan, H. (2005). Deploying internet banking and e – commerce: case study of a private sector bank in India. information technology for development, vol. 11, No. 4, 2005, pp. 363 – 379.

Karjaluoto, Heikki, Mattila, Minna, Pento, Tapio (2002). Electronic banking in Finland: consumer beliefs and reactions to a new delivery channel, journal of financial services marketing, vol. 6, No. 4, 2002, pp. 346 – 361

KPMG (1998). Internet banking development, operations and maintenance. KPMG Consulting Group, an industry white page.

Kwashie, W. (2012). The impact of electronic banking on service delivery to customers of Ghana commercial bank limited, Kwame Nkrumah University of science and technology.

Lee, E. & Lee, J. (2000). Haven't adopted electronic financial services yet? The acceptance and diffusion of electronic banking technology. Financial counseling and planning, Vol. 2 (1), pp 49-60.

Lipowski, M. (2013). Usability of mobile distribution channel for financial services. Maria Curie-Skłodowska University in Lublin, Poland.

Litwin, M. S. 1995. How to measure survey reliability and validity. London: SAGE Publications

Lustik, O. (2004). Can e-banking services be profitable? Faculty of Business Administration, University of Tartu, Estonia. (Working Paper No. 30).

Mahdi, S. and Mehrdad, A. (2010). E – Banking in emerging economy. Empirical evidence of Iran, international journal of Economics and Finance, Vol. 2, No. 1, pp 201 – 209

Malhotra, N. 1999. Marketing Research: An Applied Orientation. Upper Saddle River: Prentice Hall.

Malhotra, P. and Singh, B (2007). Determinants of Internet Banking Adoption by Banks in India, Emerald Internet Research Vol. 17, No. 3, pp. 323-339.

Mohamed A.I. & Mohammed A.Y.O., (2012): Factors influencing the Adoption of e-banking in Sudan: Perceptions of Retail Banking Clients. Journal of Internet Banking and Commerce. Vol. 17, N0.3, 2012.

Moutinho, L. and Smith, A (2000) Modeling bank customer satisfaction through mediation of attitudes towards human and automated banking. International Journal of Marketing, Vol. 16, No. 3

Nathan, L. (1999). Community banks are going online, Community and Banking, Federal Reserve Bank of Boston.

Ngandu, T. B. (2012). Perceptions of electronic banking among Congolese clients of south African bamks in the greater Durban area. master of technology, marketing in the department of marketing, Durban Institute of Technology.

Rafiu, O. (2007). The emergence of internet banking in Nigeria. An appraisal, information technology journal, Vol. 6, No. 4, pp. 490 – 496

Robson, C. (1993). Real-world research: A resource for social scientists and practitioner researchers. Malden: Blackwell Publishing.

Sathye, M. (1999). Adoption of internet banking by Australian consumers. An empirical investigation, international journal of bank marketing, Vol. 17, No. 7, pp. 324 – 334.

Seitz, J and Stickel, E (2002): Internet Banking - An Overview, available at www.euv-frankfurt-0.de

Sergeant, C (2000). E Banking: Risks and Responses, B & B Societies Financial Services, USA, at http://www.fsa.gov.uk/pubs/speeches/sp46.html

Singh, A. M., and Malhotra (2004). Trends in South African. Internet banking. Aslib Proceedings, 56(3), pp. 187-196.

Struwig, F. and Stead, G. 2001. Planning, designing and reporting research. Cape Town: Pearson Education.

Suganthi, Balachandher and Balachandran (2001). Internet banking patronage. An empirical investigation of Malaysia, journal of internet banking and commerce. Vol. 6, No 1

Sumani, Y. (2011). Prospects and challenges of electronic banking in ghana-a case of sg-ssb bank limited. Accra, Kwame Nkrumah University of science and technology.

Sohail M., & Shanmugham B., (2003): E-banking and Customers' preferences in Malaysia: An empirical investigation. Information Sciences: An International Journal, Volume 150, Number 3-4, pp. 207-217.

Soludo, C. (2004). Consolidating the Nigerian Banking Industry to Meet the Development Challenges of the 21stCentury, Being an address delivered to the Special Meeting of the Bankers' Committee, held on July 6, at the CBN Headquarter, Abuja.

TCRA (2013).Tanzania Communications Regulatory Authority: QUARTERLYTELECOMSTATISTICS,http://www.tcra.go.tz/images/documents/telecomStatsJune13.pdf.

Thornton, J. and White, L. (2001); Customer orientation and usage of financial distribution channels, journal of services marketing, vol.15, No. 3, pp 168 – 185

Wu J (2005). Factor that influence the adoption of internet banking by South Africans in the Ethekweni metropiltan region, master of technology, marketing in the department of marketing, Durban Institute of Technology.

APPENDIX I

Dear Customer,

Electronic banking is a system where banking services are provided electronically to bank customers, through the use of electronic channels like ATM, Mobile (SIM) Banking and online/internet banking and other electronic channels.

In this context, I am conducting research on **"Factors for adoption and benefits of electronic banking to customers, Case of CRDB Bank Plc, Morogoro"** for the Masters Degree of Science in Accounting and Finance, Mzumbe University. Kindly spare some of your valuable time to fill up the questionnaire. The information collected shall be used for academic purposes only.

Part I: Demographic factors **Please tick the option that best describes your answer.**		
1. Age:	☐ 18-25 ☐ 36-45 ☐ 56 and above	☐ 26- 35 ☐ 46-55
2. Gender:	☐ Male	☐ Female
3. Occupation	☐ Public sector employed ☐ Self employed (work on my own business)	☐ Private sector employed ☐ Student/ Unemployed/ Retired
4. Income per month (Ths):	☐ 10,000 to 300,000 ☐ 1,000,000 to 5,000,000	☐ 300,000 to 1,000,000 ☐ More than 5,000,000

5. Education Level:	☐ Less than high school ☐ Diploma/High Diploma ☐ Graduate degree (Master's or Ph.D)	☐ High school or equivalent ☐ Bachelor degree

Part II: Transactional related benefits

Do you use E banking, any of the following (ATM, SIM and Internet banking) yes [ ] No [ ]

If the answer is "Yes"

Please indicate the level to which you agree the following statements based on transactional costs benefits of using electronic banking to customers based on the following scale:

Strongly disagree Disagree Neutral Agree Strongly agree

1 2 3 4 5

No.	Statement	Disagree	Disagree	Neutral	Agree	Agree
1.	E banking provides convenient way of conducting banking transactions	1	2	3	4	5
2.	Electronic banking is anytime and anywhere banking facility	1	2	3	4	5
3.	Electronic banking provides services 24 hours a day (24/7)	1	2	3	4	5
4.	Using Electronic banking saves time (no need to go to bank branch)	1	2	3	4	5
5.	Using Electronic banking saves a lot of transaction cost	1	2	3	4	5
6.	Electronic banking has lower transaction fees/charges	1	2	3	4	5
7.	Electronic banking transactions are efficient	1	2	3	4	5

PART 3; **Electronic banking Usage**

Do you use electronic banking such as ATM, SIM and Internet Banking YES [ ] NO [ ]

If the answer is "YES"

Please show the extent to which you use electronic banking channels including ATM, SIM and Internet (online) banking to conduct banking transactions (Services)

a) How long have you been using ATM, internet and mobile banking

   [ ] less than 1 month [ ] 1 to 6 months [ ] 7 to 12 months [ ] more than a year

b) How frequently do you use an Automated Teller Machine per month

   [ ] never [ ] 1 to 4 times [ ] 5 to 8 times [ ] over 8 times

c) How frequently do you use SIM Banking per month (for example balance inquiry, fund transfer between accounts)?

   [ ] never [ ] 1 to 4 times [ ] 5 to 8 times [ ] over 8 times

d) How frequently do you use internet (online) banking per month

   [ ] never [ ] 1 to 4 times [ ] 5 to 8 times [ ] over 8 times

e) How frequently do you check bank's account balance through electronic banking per month

   [ ] never [ ] 1 to 4 times [ ] 5 to 8 times [ ] over 8 times

f) How frequently do you pay bills outstanding per month through E banking

   [ ] never [ ] 1 time [ ] over 1time

g) How frequently do you transfer fund through E banking per month

[ ] never [ ] 1 to 4 times [ ] 5 to 8 times [ ] over 8 times

h) How frequently do you view Bank's account mini statement per month through E banking

[ ] never [ ] 1 to 4 times [ ] 5 to 8 times [ ] over 8 times

Thank you very much for your precious time and Responses!

APPENDIX II

Reliability Statistics

Cronbach's Alpha	N of Items
.941	16

Item Statistics

	Mean	Std. Deviation	N
gender of the respondent	1.34	.476	100
e banking is convenient way for banking transaction	3.27	1.613	100
e banking as anytime and anywhere banking facility	2.94	1.406	100
e banking provides services 24 hours a day	2.74	1.292	100
no need to visit a bank branch	3.00	1.449	100
e banking save transaction costs	2.99	1.425	100
lower transaction fees	2.96	1.385	100
e banking transactions are efficient	3.29	1.671	100
frequency of using ATM per month	1.88	.742	100
frequency of using SIM banking per month	1.82	.783	100
frequency of using Internet banking per month	1.38	.632	100
frequency of viewing bank's balances per month	1.74	.691	100
frequency of paying bills per month	1.34	.590	100
frequency of trasfering funds per month	1.67	.697	100
frequency of viewing bank's mini statement per month	1.65	.730	100
participation in electronic banking	1.30	.461	100

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
gender of the respondent	33.97	162.191	-.178	.948
e banking is convenient way for banking transaction	32.04	124.120	.933	.930
e banking as anytime and anywhere banking facility	32.37	128.458	.936	.930
e banking provides services 24 hours a day	32.57	132.147	.890	.931
no need to visit a bank branch	32.31	128.176	.913	.931
e banking save transaction costs	32.32	128.462	.922	.930
lower transaction fees	32.35	129.765	.906	.931
e banking transactions are efficient	32.02	123.353	.919	.931
frequency of using ATM per month	33.43	144.571	.848	.935
frequency of using SIM banking per month	33.49	144.535	.802	.936
frequency of using Internet banking per month	33.93	151.965	.506	.941
frequency of viewing bank's balances per month	33.57	146.692	.782	.937
frequency of paying bills per month	33.97	151.989	.545	.940
frequency of transferring funds per month	33.64	147.566	.721	.937
frequency of viewing bank's mini statement per month	33.66	147.237	.705	.937
participation in electronic banking	34.01	171.303	-.934	.954