

ST JOHN'S UNIVERSITY OF TANZANIA



MASTER OF BUSINESS ADMINISTRATION IN CORPORATE MANAGEMENT

**ASSESSMENT OF FACTORS HINDERING THE ADOPTION OF ELECTRONIC
BANKING SYSTEM IN TANZANIA:
A CASE OF NMB AND CRDB BANKS IN DODOMA MUNICIPALITY**

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**A DISSERTATION SUBMITTED IN PARTIAL FULFILMENTS OF THE
REQUIREMENTS FOR THE MASTER OF BUSINESS ADMINISTRATION IN
CORPORATE MANAGEMENT OF THE ST. JOHN'S UNIVERSITY OF TANZANIA**

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CERTIFICATION

I, the undersigned, certify that I have read and hereby recommend for acceptance by St. John's University of Tanzania a dissertation entitled: Assessment of factors hindering adoption of electronic banking system in Tanzania: a case of NMB and CRDB banks in Dodoma Municipality in the fulfilment of the requirements for a degree of Master's of Business Administration in Corporate Management of the St John's University of Tanzania.

.....

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Date:.....

DECLARATION

I, Nyanjiga H. Mujuberi declare that this dissertation entitled: Assessment of factors hindering adoption of electronic banking system in Tanzania, is my own hand work and that, it has never been presented and will not be presented to any higher learning institution or University, for any other degree or similar awards.

Signature

Date.....

DEDICATION

This research report is dedicated to my father Mr. Hezekia Mujuberi and my mother Nyafungo Mujuberi, my three daughters namely Grace, Judith and Beatrice Kolongo.

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LIST OF ABBREVIATIONS

ATM	Automated Teller Machine
BI	Behavioural Intention
CRDB	Cooperative Rural Development Bank
DTPB	Decomposed Theory of Planned Action
FI	Financial Institution
ICT	Information and Communication Technology
NMB	National Microfinance Bank
SJUT	St John's university of Tanzania
SN	Subjective Norms
SPSS	Statistical Package for Social Science
TCRA	Tanzania Communication Regulatory Authority
TRA	Theory of Reasoned action
URT	United Republic of Tanzania
URT	United Republic of Tanzania
WWW	World Wide Web

ABSTRACT

In recent years of banking industry, the adoption of Electronic banking started to occur broadly, as one of the ways to offer different financial products, due to that reason, there was an advancement in information technology (IT) and stiff competition in banking sector. Electronic banking offers useful products to both commercial banks and bank Customers. Despite these advantages of electronic banking services, there are limiting factors for the adoption process which caused customers to remain in the usage of traditional banking methods to perform most of their transactions. This study has aimed at accessing factors affecting the adoption of electronic banking in Tanzania, a case of CRDB and NMB of Dodoma Municipality. In so doing, three specific objectives and variables of the study were taken into account; the study, has utilized both primary data (through interviews and questioners) and secondary data through documentary review (through documents obtained from both CRDB and NMB). Analysis was done by the use of SPSS and the results were presented in tables. Study findings have revealed that there were hindering factors in the adoption of electronic banking services, these include the perceptions of risks, perception in transaction costs, privacy and security issues, laxity of financial institutions in promoting electronic banking and network access. The study finally recommends to the regulators or law makers for advancement of electronic banking services, education to customers about electronic banking should be provided regularly, the government also through TANESCO or any other bodies of electricity supply, should put an emphasis on supplying electricity in rural areas and the lastly the concerned bank (CRDB and NMB) should increase the number of electronic devices, especially automated teller machines.

CHAPTER ONE

INTRODUCTION

1.1 Chapter overview

In this first chapter, the focus is on what the study was all about and the rationale for undertaking it. It begins with the background information on electronic banking in Tanzania, followed by the statement of the problem to justify the need for the study. The chapter also, presents the objectives of the study and research questions. Lastly, the chapter winds up with the significance of the study and a summary of the chapter.

1.2 Background of the Study

Contemporary business in our times is characterized by competition, technological development and unprecedented customer dynamism, all engineered by globalization. Customers are increasingly demanding more value, with goods customised to their exact needs, at a less cost, and as quickly as possible (Clarke and Shah, 2009). Mrak (2000) contends that globalization has exposed economies to much more intense competition than ever before. This has required businesses to develop innovative ways of creating value which often require different enterprise architectures, different IT infrastructures and different ways of thinking about doing business (Clarke and Shah, 2009). In brevity, to survive in modern business times, innovative technological change has become constant.

The banking industry, like many other industries, has significantly been influenced by this evolution of technology, surfacing as a main strategy to contain competition challenges and customer dynamism. The evolution of banking technology has been mainly driven by changes in the distribution channels as evidence can be drawn from the services of automated teller machines (ATMs), phone-banking, tele-banking, pc-banking and most recently, internet banking (IB) (Chang, 2003). With these global trends, banks in Tanzania had limited options, but to follow suit and serve customers electronically.

Electronic banking provides an opportunity to operate virtual bank accounts with greater convenience. Mobile banking, for instance, provides convenient financial services such as savings, money transfers, bill payments and airtime top ups without relying exclusively on cash (Masamila, 2014). According to Sunday (2014), electronic banking technology is meant to provide adequate services at low cost and high efficiency level. The technology is designed to reduced cost, promote the

growth of the economy and to bring about increased financial activities that ultimately increased the gross domestic product of a nation (Sunday, 2014). Chang (2003) adds that computerised networks to banking reduced the cost of transaction and increased the speed of service delivery substantially.

As Tanzania's economy continues to grow, it has created unprecedented opportunity for the growth of the adoption of electronic banking services (Masamila, 2014). More so has this been possible in the country's current mobile status of connectivity, with two third of the population owning mobile phones, not to mention other electronic devices with the capacity to conduct electronic banking like computers and tablets. This has offered the increased growth opportunity for the banking industry in Tanzania (Masamila, 2014). Unfortunately, however, the opportunity has so far been missed due to some problems connected to electronic banking in Tanzania.

Nowadays, the electronic technology is playing the major role for the world of business especially in banking activities. Electronic banking (e-banking) is the newest delivery channel for banking services. The definition of e-banking varies amongst researches, partially because electronic banking refers to several types of services, through which bank customers, can request information and carry out most retail banking services via computer, television or mobile phone (Daniel, 1999; Mols, 1998; Sathye, 1999). In fact, it has effectively "opened" twenty-four hours a day, seven days a week. Customers can do their daily banking activities without having to wait in line or wait on hold for telephone banking services. E-banking, offers electronic services that allow consumers to check the balances in their accounts, transfer funds among accounts, pay bills electronically as well as apply for loans, download information about accounts into their own computers, trade stocks or mutual funds, look at images of their cheques and deposit slips (Turban et al., 2004). E-banking, has become increasingly prevalent, employed by many financial institutions to reduce costs associated with having personnel serve customers physically, shorten processing periods, increase speed, improve the flexibility of business transactions and provide better service overall (Shih and Fang, 2004). With the rapid progress of other types of electronic, largely Internet based services also there has been increased interest in e- banking services. With the rapid growth of Internet technology, online banking has played an important role in the e-payment area which provides an online transaction platform to support many e-commerce applications such as online shopping, online auction and Internet stock. Banks have

been using the Internet as one of their distribution channels because Internet Banking services benefit both the banks and their customers (Karjaluoto, 2002). It has become the most profitable distribution channel of the banks because it can help banks to save costs. It is convenient for the customers to execute their bank transactions or contact their banks faster, anytime and anywhere. Many companies in the financial services sector, have been quick to implement Internet capabilities, and electronic service is becoming the viable option for interaction between financial service providers and their customers (Rotchanakitumnuai, S and Speece, M 2004).

This study, aims at determining factors influencing the adoption of internet banking by the Tanzanian consumer. More accurately, internet banking acceptance will be studied by using factors, that are important from the success point of view, referring to the idea that consumers were using internet banking directly. Hence, more knowledge on the factors that affected internet banking adoption is needed in order to better understand and facilitate the adoption.

The modern world, is faced by a rapid development in technology; such advancement of Information Communication Technology (ICT), that has introduced a number of new systems in all the aspect of life and the economy in general (Mollel, 2008). Science has recently joined the world through the usage of internet systems, which were in the early 20th century used for mail communication and advertisement plans by several companies in the world. The Internet massively impacts all aspects of business. In the 21st century, electronic business is no longer an option for businesses; it is a necessity (George, 2011).

Electronic banking recently has been adopted in various commercial activities ,(Mambi, 2010), Despite the risks associated with this technology, market economy and the need to make the world one village, has necessitated commercial and financial institutions adopting electronic banking to link banking activities or affairs, more easily than it was in the past(Daudi, 2008).

With the rapid diffusion of the internet, Banking in cyberspace is fast becoming an alternative channel to provide banking service and product. The internet is now, considered as the strategic weapon and will revolutionize the way banks operate, deliver, and compete against one another. Especially when competitive advantage of traditional branch network is eroding rapidly (Nehmzow, 1997; Seitz, 1998) as the business weak noted, "Banking is essential to modern economy," (quoted in

financial times 1996). The internet poses a very serious threat both to the customer base of the traditional banking oligopoly and to its profits. Their beliefs is that, the internet poses the revelation of the retail banking in monumental proportional, high street, or brick and mortar banks as we know them may largely disappear.

1.3 Statement of the Problem

While mobile phones offer a convenient avenue for the growth of banking, many Tanzanians own no bank accounts. In essence, many Tanzanians use no banking services. According to Masamila (2014), the level of financial inclusion in Tanzania, is still low despite various initiatives. While in instance, only 17% (i.e, 3,700,000) of the adult population by 2013 had bank accounts, mobile phone subscribers had exceeded 58% (or 27,000,000) of the country's population (Masamila, 2014 and Rumanyika, 2015).

This number of people unfortunately with mobile phones but without a bank account is set to grow (Ishengoma, 2011). Rumanyika (2015) adds that, it is astonishing to note that, there is a low rate of mobile banking adoption despite having more than half of the country's population, possessing mobile phones and other electronic banking supporting devices like computers, i-pads and tabulets.

Thus, based on Masamila (2014) and Rumanyika (2015) findings that show, over 58% of Tanzania's population are mobile phone subscribers, while only 17% of the same own bank accounts. This study, wants to assess factors constraining the adoption of electronic banking by customers in Tanzania despite the available avenue.

1.4 Objectives of the Study

1.4.1 Main Objective

The main objective of this study, is to assess factors that constrain the adoption of electronic banking system in Tanzania, despite the available opportunity. NMB and CRDB banks in Dodoma Municipality are taken to serve as cases of this study.

1.4.2 Specific Objectives

Specifically, the study intends to:

1. To analyze customers' awareness of electronic banking services in Tanzania
2. To investigate factors, constraining the adoption of electronic banking services in Tanzania
3. To examine challenges for electronic banking services in Tanzania

1.5 Research Questions

1. Are there any customers using electronic banking services in Tanzania?
2. What are factors hindering the adoption of electronic banking system in Tanzania?
3. What are the challenges, for electronic banking services in NMB and CRDB in Tanzania?

1.6 Significance of the Study

This study, will come up with documented assessment factors constraining the adoption of electronic banking system in Tanzania. Upon the successful accomplishment of this study, many benefits are expected to accrue. Notably, different stakeholders like bank managers and the banking industry in general, as well as the researcher in person, are expected to benefit from the findings of this study.

The study, is expected to enrich the existing body of knowledge, particularly on electronic banking system in Tanzania. It is expected that, theories will emerge out of this study that will fill in the current knowledge gaps on the adoption of electronic banking system in Tanzania.

On the other hand, banking executives are also expected to benefit from the study. Findings and recommendations of the study, will broaden their spectrum of strategies, the application of which will enhance the adoption of electronic banking system. In facts, this will increase the banks' customer base.

Lastly, being a bank employee, the candidate (researcher) is expected to enhance her abilities in the banking industry, that will enable her to do her job in a better way.

1.7 Chapter Summary

The concern of the foregoing chapter, was on introducing the topic of the study, its background information and the logical basis for undertaking it. The chapter also, explained the objectives the study which intended to achieve and the research questions the study seeks. In the last place, the chapter identified some benefits that, are expected to accrue from the study, notably managerial, personal and theoretical benefits; all of which, are expected to make better the performance of the banking industry.

CHAPTER TWO

LITERATURE REVIEW

2.1 Chapter Overview

The agenda of this chapter, is to present some previous research studies that have been done whose subject, objectives or findings correlate in one way or another to the current study. The chapter begins presenting the definitions of key terms and theories related to the adoption process. It proceeds, to show the background and current status of electronic banking systems in Tanzania. The chapter also, presents some previous studies related to the subject in question that is, the empirical evidence and winds up with the conceptual framework and the summary of the chapter.

2.2 Definition of Key Terms

This section, defines different terms that made up the study. The terms include bank, banking, banking services and electronic banking (E-banking).

2.2.1 *Bank*

A bank, is an organisation that accepts deposits that can be withdrawn on demand. It also lends money to individuals and businesses that need it. According to Fama (1980), a bank is a financial intermediary that issues deposits and uses the proceeds to purchase securities. The author adds that, the main business of banks in the transactions industry is to maintain the system of accounts in which transfers of wealth are carried out with bookkeeping entries (ibid). Banks are distinguished from other financial institutions by their provision of deposits and loan products (Heffernan, 2005). The Banking Companies Act of India, defines a bank as a financial institution which accepts money from the public, for the purpose of lending or investment repayable on demand or otherwise withdrawable by cheques, drafts or order or otherwise.

2.2.2 *Banking*

Banking, can generally be described as the business carried out on by an individual at the bank. This may include walk in banking, ATM banking and online banking. It is a business activity, of accepting and safeguarding money owned by other individuals and entities, and then, lending out this money in order to earn a profit (Goyal, 2015). In alternative terms, banking is the business engaged in by banks.

2.2.3 Banking Services

According to Goyal (2015), banking services these days, include issuance of debit and credit cards, providing safe custody of valuable items, lockers, ATM services and online transfer of funds across the world. The services are the various ways in which a bank serves the needs of the customer, such as operating accounts, making transfers, paying bills, paying standing orders and selling foreign currency.

2.2.4 Electronic Banking

Electronic banking, is the provision of customer access to accounts, the ability to move their money between different accounts, and making payments or applying for loans via e-Channels (Clarke and Shah, 2009). It is the adoption of Information and Communication Technology (ICT) in the banking sector (Sunday, 2014). According to Haigood (2010), electronic banking, also known as electronic funds transfer (EFT), is simply the usage of electronic means to transfer funds directly from one account to another, rather than by cheque or cash. The author adds that, one can use electronic funds transfer to:

- i. Have one's paycheck deposited directly, into your bank or credit union checking account.
- ii. Withdraw money from one's checking account, from an ATM machine with a personal identification number (PIN), at one's convenience, day or night.
- iii. Instruct one's bank or credit union, to automatically pay certain monthly bills from one's account, such as one's auto loan or one's mortgage payment.
- iv. Have the bank or credit union, transfer funds each month from your checking account to your mutual fund account.
- v. Have one's government social security benefits, check or one's tax refund deposited directly into one's checking account.
- vi. Buy groceries, gasoline and other purchases at the point-of-sale, by using a check card rather than cash, credit or a personal check.
- vii. Use a smart card, with a prepaid amount of money embedded in it for use instead of cash at a pay phone, expressway road toll, or on college campuses at the library's photocopy machine or bookstores.
- viii. Use your computer and personal finance software, to coordinate one's total personal financial management process, integrating data and activities related to one's income, spending, saving, investing, recordkeeping, bill-paying and taxes, along with basic financial analysis and decision making.

2.3 The Adoption Process

New concepts/products require an adoption process. When consumers face a really new concept, their previous experience may not be relevant to go through an ordinary consumer problem solving process. The adoption process includes steps individuals go through on the way to accepting or rejecting the new product or idea. According to Schiffman and Kanuk (2008), adoption is the micro process that focuses on the stages through which an individual consumer passes, when deciding to accept or reject the new product. Although the adoption process is similar to the problem solving process, learning plays a clearer role and promotion's contribution to the marketing mix is more visible. In the adoption process, an individual moves through some fairly definite steps (David and Wells, 1996).

2.3.1 Stages of the Adoption Process

According to Rogers (2003), there are stages in adoption process, these are;

Awareness: The potential customer, comes to know about the product but lacks details. The consumer may not even know how it works or what it will do or its benefits; eg, when electronic banking services were first introduced to the market.

Interest/Information: If the customer becomes interested, she/he will gather general information and facts about the product.

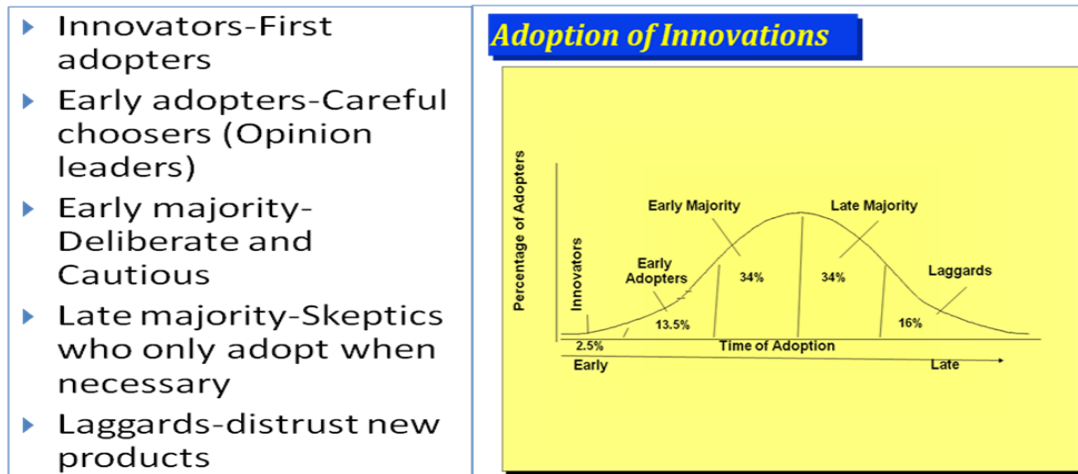
Evaluation: The consumer begins to give the product a mental trial applying it to his/her personal situation.

Trial: The consumer may buy the product to experiment it in use. The product that is either too expensive to try or is not available for trial, may take far longer to be adopted.

Adoption/Decision: The consumer decides on either to adopt or reject. The satisfactory evaluation and trial may lead to the adoption of the product for a regular usage.

Post-adoption Confirmation: The adopter, continues to rethink the decision and searches for support for the decision.

Figure 2.1: Adoption of Innovation



Source: Diffusion of innovations, Rogers (2003)

2.3.2 Factors Affecting the Rate of Adoption

David and Wells (1996) and Schffman and Kanuk (2008) have identified five factors, that affect the rate/speed with which an innovation (new product such as ellectronic banking) would be accepted by customers:

1. Complexity, that is, difficulty involved in understanding and using a new product. The more complex a product is, the longer it will take to adopt.
2. Compatibility; that is, how new product is consistent with existing values, knowledge, experience and needs. The more compatible the product is, the easier it will take to adopt.
3. Relative advantage, that is whether the product is perceived as superior/inferior to existing substitutes. If the product is perceived as infeerior before existing substitutes, the longer it will take to adopt.
4. Observability, that is, whether benefits of product usage can be observed and communicated to others. The more the product's benefits are observed, the lesser the time it will take for that product to be adopted.
5. Trialability; can the product be tried with limited resources? Or requires huge resources to try? If a product requires huge resources to try, it will take long to be adopted.

These factors also can be grouped as internal and external factors as follows;

2.3.2.1 Internal Factors

- *Perceived benefits of electronic banking (E- Banking)*

According to Cheng (2006), customers use electronic banking due to the reason that, it has a convenient speed and time, he keeps arguing that, there are advantages that a customer can get, these services in a wide range are, transfer of money, on line investments, withdraw from bank accounts, checking balances, and statements, payment of purchases and receipts of money, unlike normal traditional banking channels, electronic banking reduces the degree of customer and service provider contact. Smith & Kupp (2003) argues that, on line a customer can apply for a loan and the approval for the request takes little [processing time compared to traditional methods, in this context, the loan transaction period is reduced to minimum.

- *Perceived Credibility of the Service*

Perceived credibility, arises when all customers agree, that, the service they were offered was free from all risks, level of security was enough and terms of privacy were met.

- *Security to the customers*

This is about the user's authentication process, most banks use authentication means to eliminate intruders, this includes, the usage of the user identification and string of different characters, combined together (password) or the use of PINS. The reason behind for slow adoption of electronic banking, is security and threats, when it comes to integrity of information (O'Connel, 1996). Celick (2008) argues that, threats in security may include, exposing data to the unknown person, edition or modification of the existing data, complete loss of data and all of this, are eliminated by authentication process like biometric measures (like retina scanning) digital signature means, finger prints identification technologies and patterns.

- *The capability of the organization*

Electronic banking, is limited by organization capacity to make the technology adopted. Various banks worldwide like the man power to strengthen electronic banking services. in some cases, ability to market electronic banking services, becomes a barrier to deliver knowledge to customers. Skilled man powers are needed by these banks to educate the users (Cracknel, 2004).

2.3.2.2 External Factors

- *Regulatory support*

According to Kitummuai & Speece (2003), a legal support is needed and it is an important factor for development of the adoption process of electronic banking. Lack of laws and regulation in electronic banking, may make customers hesitant in using these services, Thomas et al (1998) argues about what party should bear the burden of a financial loss, an identification of the specific bearer will lead to risk transfer to the appropriate party. Attaran (2000) argues that, there is the tendency where the bank may shift the risk to the user, and hence, the adoption process fails.

- *Readiness of Financial institution*

According to Storey (1996), huge capital investment and a well organized infrastructure is needed in the adoption of electronic banking services, If the financial institution has a limited budget, there will be a greater chance of implementing the technology with insufficient capabilities.

24 The Background of Electronic Banking in Tanzania

Electronic banking globally, can be traced to have commenced in early 1980s when customers required a PC, modem and software provided by the financial service vendor (Clarke and Shah). These efforts, however, attracted a little acceptance until mid-1990s when other forms of electronic services emerged (ibid). Ishengoma (2011) shows that, electronic banking services were provided via SMSs after the introduction of primitive smart phones with wireless application protocol (WAP) support, enabling the use of mobile web.

In URT, Masamila (2014) shows that, electronic banking is relatively new and was first introduced by E-Fulusi Africa Limited in collaboration with FMBE bank through Mobipower platform. The platform allowed subscribers to transfer, receive, save and withdraw money as well as purchase goods and services through the use of mobile phones. Later in April 2008, Vodacom Tanzania in collaboration with Vodafone launched Vodafone M-Pesa (a version of M-Pesa in Kenya). With M-Pesa, customers are able to send money to any other mobile customer, via a simple text-based transaction. Recipients of such transfers, are able to convert the e-money back into cash at any authorised M-Pesa agent across the country (Masamila, 2014).

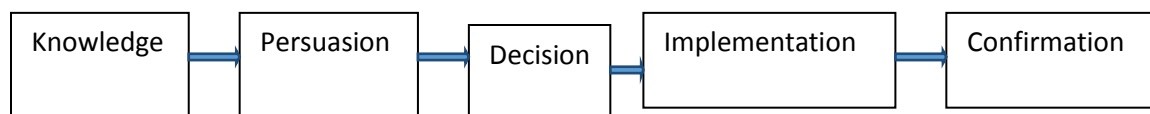
Thought to have set mobile banking into a vibrant business, Vodacom's initiatives were later adopted by other mobile network operators like TiGo, Airtel and Zantel. While later these mobile money transactions were enabled to be merged with ordinary electronic banking services, many customers stopped short of opening bank accounts so as to have a full version of electronic banking. According to Masamila (2014), for instance, currently Vodacom's M-Pesa is integrated with twenty one (21) commercial banks in Tanzania. This, however, has not made M-Pesa customers open accounts with those banks. Unfortunately, further, even many customers with bank accounts use no electronic banking services, other than withdrawing cash in ATMs.

2.5 Theoretical reviews of technology adoption

2.5.1 Diffusion of innovation theory

In this theory, there are four main elements in the adoption process, these include, innovation, communication channels, social system and time. According to Sharma& Mishra (2014), in the process of diffusion, there must be five important stages known as knowledge, persuasion, decision, implementation and confirmation. In confirmation there can be categories of users depending on time of adoption, these are, leap -floggers, laggards, late majority, early majority, early adopters and innovators.

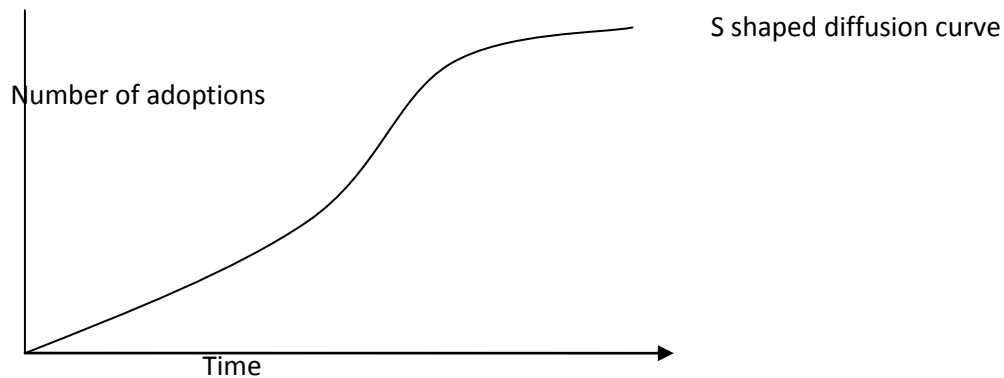
Figure 2.2: Diffusion of Innovation Theory



Source: Rogers (2003)

In this theory, there is a provision of s- shaped curve in the adoption process, of which, at the first time (initially), the rate of spread is slow and in the middle of the graph it accelerates to the maximum and finally, the rate of spread is reduced to create the s-shape. In adoption process by the use of s-shaped curve, early adopters, start to use a certain technology they make it known to the majority and the spread of the particular technology accelerates to the maximum, the time a few members withdraw from the use, and no new members accept the technology, spread stops completely.

Figure 2.3: S-Shaped curve of Diffusion of Innovation Theory

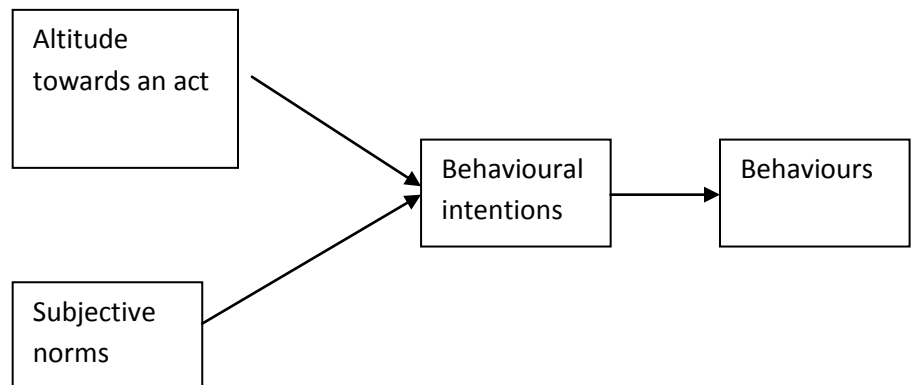


Source: Rogers (2003)

2.5.2 Theory of reasoned actions (TRA)

This theory was put forward by Ajzen & Fishbein IN 1967, it clarifies three general variables, which are, behavioural intention (BI), subjective norm (SN) and altitude, behavioural intention will be depending on the other two factors (altitude and subjective norms) of a particular person. The intention of a particular person can be converted into actions, if that person has an intention to behave in that particular way (Sharma& Mishra, 2014).

Figure 2.4: Theory of Reasoned Action



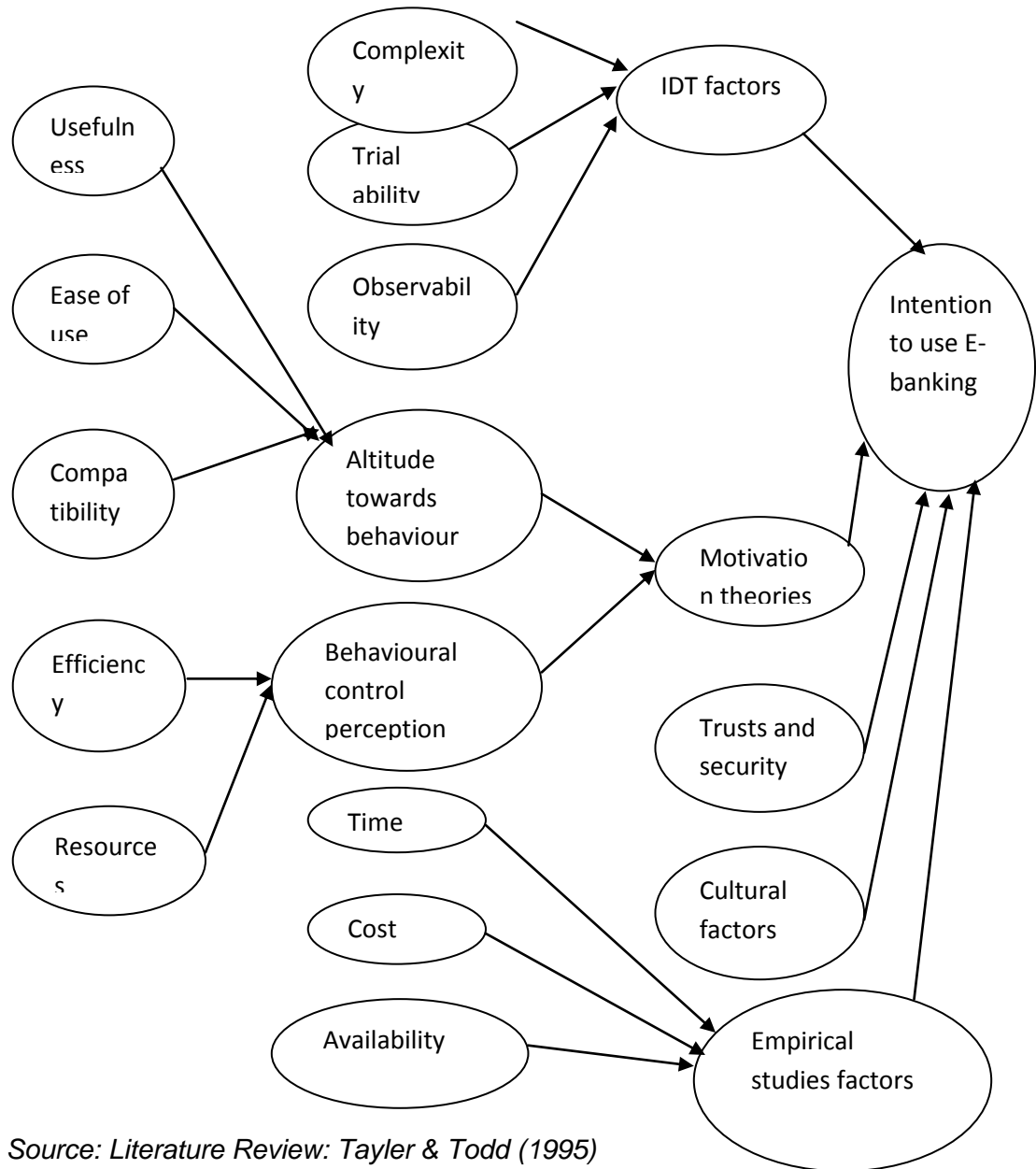
Source: Theory of Reasoned Actions, Ajzen & Fishbein (1967)

2.5.3 Decomposed theory of planned behaviours (DTPB)

According to Tayler & Todd (1995), technology adoption is influenced by three factors, which are, perceived behavioural controls of the person, the attitude of the person towards technology, and the intention of that person. In this theory, some factors affecting adoptability of technology were taken into account, these are,

security and trust towards the technology, cultural factors including spiritual values, time factors, cost factors and accessibility.

Figure 2.5: Decomposed Theory of Planned Behaviour



Source: Literature Review: Tayler & Todd (1995)

2.5.4 Social Cognitive Theory

According to Compeau & Higgins (1995), this theory considers the ability of customer to use a particular technology in accomplishing of the tasks. The behaviour of the customer or user, depends much on what s/he expects as an outcome which relates to personal gains and performance gains. Self-efficacy,, will also be much of the influence to the expectations on both personal and performance

gains. According to this theory, there are two main factors to consider which are opposing in nature. These factors, (positive contribution and negative contribution) influence the behaviour of the final user of electronic banking services.

2.6 Empirical Review

In their book, Clarke and Shah (2009) examined e-banking management issues, solutions, and strategies. The book explored issues critical for success in providing e-banking services. The purpose of the study that led to the publication of the book, was to assist organizations in utilising the opportunities offered by what the authors then termed as a relatively new set of technologies.

The authors pointed out the number of issues they purported were making e-banking difficult to implement, or why a bank would not realise the full benefits from it. First, they observed that although the growth of the internet had been very fast, there was a large population not connected to the internet, lacked computer literacy or could not afford charges especially in developing nations. Another issue was that, a large number of consumers of financial services were still reluctant to conduct their financial management online. A study of consumer habits in 10 countries found that, two-thirds of consumers did not consider online services important and that, almost 30 percent did not know whether their banks offered web-based services. Another issue was with internet security. It was noted that, internet security was still one of the major issues hindering the growth of internet related trade. Since the internet is an open network, high security risks are involved with financial transactions. Internet fraud is common, and related stories get immediate media attention, making people hesitant to bank online. Other challenges making customers hesitant to bank electronically were related to illiteracy of the language used by bank websites and the fear by banks of competition, thus making the promotion of internet banking low in their priority list (Clark & Shah, 2009).

The authors conclude their study hesitating to predict the future of electronic banking. However, they observe that, internet banking may become more viable as the functionality of e-banking grows, and customers adapt to the new ways of conducting their financial activities.

In another study, Chang (2003) used online survey data from Korea on internet banking, to analyse the adoption pattern of banking technology diffusion across customers. The researcher characterised the determinants for consumer adoption of

the new banking technology (*internet banking*). Internet banking adoption process was examined in both a static and a dynamic framework to explain why new banking technologies were not taken up by the mass-market. Findings of the paper showed that, internet banking adoption behaviour was affected by individual characteristics in both the static and dynamic frameworks. The individual characteristics include, demographics, exposure to the hazard, information seeking behaviour and general banking behaviour.

In Africa, in his study on “Factors that influence the adoption of internet banking by South Africans in the Ethekweni metropolitan region,” Wu (2005) presents both the results of the 400 interviews and the analysis of these results, with graphs and figures to determine the extent that the factors studied influenced customer adoption of internet banking. The study, which used scientific methods to test hypotheses tested with a chi-square test and independent sample t-test. In addition, a chi-square test was also used to test for relationship between consumers’ demographic characteristics and the adoption of internet banking. Moreover, an independent sample t-test was then used to test differences between users and non-users in terms of their perceptions of internet banking.

Findings revealed that had demographic factors including age, income; education level and occupation have a relationship with the adoption of internet banking. Psychological factors including perceived relative advantage, perceived compatibility, perceived complexity, perceived risk, and 15 perceived costs were found to influence the adoption of internet banking. The study findings also indicated that, social influences such as opinions of friends, parents, and other family members and colleagues, were not found to be important factors that can influence or hinder the adoption of internet banking in the South Africa context.

In another context than Africa, Salman Shamim and KashifSardar (2010) conducted a study on “Electronic banking and e-readiness adoption by Commercial Banks in Pakistan.” Their study, investigated the most current issues concerning the electronic banking problems during the implementation of electronic problems in Pakistan, a developing country, and causes that hinders this process. To investigate in the real-time scenario they used a case study of the Muslim Commercial Bank Limited in Pakistan in order to understand “why” and “how” the electronic banking could not be implemented successfully. Data were collected by use of interviews, surveys and bank website. Both qualitative and quantitative approaches were used

to investigate and gather proper understanding of the current e-banking issues. The response of interviews and surveys shows that, there were certain issues that hindered the use of e-banking in Pakistan. In spite of the fact that internet banking has been started in Pakistan in 2001, people were still using the old manual system to do the banking transactions, popularity of cash system waiting in long queues for hours and lacking of proper computer education and trust were documented as the major problems that were hurdles in electronic banking in that country.

On the other hand, there were a lot of reasons why the banks were not concentrating on internet banking, and cash flow was still popular in banks and internet banking was used by the banks for the limited and special services. Also it was found that, banks were facing the problem of customer awareness regarding security and privacy of using internet banking services, as still customers were reluctant to use the online banking services, so they preferred to go to banks and deposit their money by hand.

However, Internet banking has benefits such as cost savings and convenient access. Below, Ali Reza Montazemi & Hamed Qahri Saremi (2005), suggest that, banking institutions must identify and manage factors affecting the consumer's intention to adopt and continue usage, and argue that, dimensions of trust were the most important factors in enticing consumers towards adoption of Internet banking.

Internet banking, is expected to appeal to consumers with benefits such as cost savings, greater control over service delivery, reduced wait times, higher perceived levels of customisation, and convenient access to services without time or space constraints. This application of information technology also appeals to financial institutions because it can standardise service delivery, reduce labour and service costs, expand the options for delivery, and reach customers who were unreachable through other channels. Notwithstanding its appeal, Internet banking adoption by consumers is low. According to the research firm comScore, 423.5 million people accessed Internet banking sites globally during April 2012, reaching 28.75% of the Internet users. This consisted of 45% of the Internet users in North America, 37.8% in Europe, 25.1% in Latin America, 22% percent in Asia Pacific, and 8.8 percent in Africa.¹ Such a low adoption rate is troublesome to banking institutions.² To increase the adoption rate, banks need to better manage factors that affected consumers' adoption of the Internet banking. There are two ways of viewing the nature of Internet banking non-adopters. The dominant view, is based on the traditional value

chain system as a basis for value creation. In this view, the consumer represents demand for what the bank can offer, and value is transferred from the bank to consumer by satisfying that demand. In this view, those who had not adopted Internet banking simply represent the peripheral segment of consumers that is unable/ unwilling to use this technology. By focusing only on optimising the value chain and overlooking factors that effectuate adoption of the technology by consumers, the value chain focus hinders innovative means of serving consumers. To ameliorate this oversight, a new logic for value creation is emerging that, is based on *co-creation* of value where value is embedded in personalised experiences. The premise of the emerging logic of service offering is that, the end point is not a 'segment of one' but rather an experience of one. The implication of this view, is that by increasing the adoption of Internet banking requires banking institutions to identify and manage factors affecting the *consumer's* intention, to adopt and continue usage. Our focus in this article is on intention to adopt (i.e., pre-usage) of Internet banking.

The Internet has been given tremendous publicity in recent years. However, most research focuses on Europe or America rather than Asian countries. This study, hopes to contribute to a better understanding of the Internet phenomenon in Asia by examining the factors influencing the adoption and non adoption of the Internet among organizations in Singapore. A survey was carried out among business firms to examine the benefits of adopting the Internet, reasons for not adopting the Internet, and the criteria for selecting Internet access service providers. The Results showed that key benefits are derived from the global nature of the Internet, which enabled access to the worldwide information and the creation of a worldwide electronic presence. Non adopters of the Internet are concerned about whether staff will waste time surfing the Internet. Both access speed and technical support are viewed as important criteria in selecting an Internet access service provider (IASP). Implications of the results are discussed. Indeed, the emergence of Internet banking has prompted many banks to rethink their IT strategies in order to stay competitive. Customers today are demanding much more from banking services. They want new levels of convenience and flexibility (Birch and Young 1997; Lagoutte 1996) on top of powerful and easy to use financial management tools and products and services that traditional retail banking could not offer. Internet banking has allowed banks and financial institutions, to provide these services by exploiting an extensive public network infrastructure (Ternullo 1997).

Despite the many potential benefits, many teething problems will need to be addressed before Internet banking can become widely adopted. It is believed that, in the future, Internet banking will recede in importance as a strategic application to become a competitive necessity that must be adopted by most if not all banking and financial institutions.

Since the introduction of the Internet in 1969, it has evolved from the sole domain of the computer nerd and the academic to the mainstream channel of communication (Nehmzow, 1997). Recently, it has been rapidly gaining popularity as the potential medium for electronic commerce (Crede 1995; Ooi 1999; U.S. Department of Commerce 1999). The rapid growth of the Internet, has presented a new host of opportunities as well as threats to business. Today, the Internet is well on its way to become a full-fledged delivery and distribution channel and among the consumer-oriented applications, riding at the forefront of this evolution are the electronic financial products and services.

In Tunisia, the number of the users of Internet evolved to attain 2 million users in 68 miles at the end of June, 2008 against the million users in 618 miles for the same period of the last year, that is a 28 % evolution (the population total of Tunisia is approximately ten million inhabitants). A study accomplished by New Arab Advisors on the Tunisian Internet users and the evolution of the new technologies and the e-commerce in Tunisia between May and July, 2008. In effect, this study showed that about 36. 4 % of the users of Internet in Tunisia trade electronics, and even spent about 132. 7 million dollars during one year on purchases through Web. The number of the Internet users having already purchased via Internet in Tunisia, rises about 416 thousand persons according to the results (profits) of the aforementioned survey, which also deducted that the majority of the users of the e-commerce (64,8 %) make their electronic payments by bank cards, while 27,4 % of these users resort to the on-line payment prepaid through the "e-dinar".

Payments and account management products, over mobile GSM phones as SMS service have been available over one decade, exactly since 1992, television-based banking since 1998 and banking via mobile Internet WAP since 1999.

In 2004, the number of Tunisian banks that were offering Internet Banking was limited to four. Nowadays, this number has doubled so that 80% of the commercial banks in Tunisia, are offering now Internet Banking services. In fact, Amen Bank

was the pioneer in Tunisia to offer Internet Banking services since November 2000 following by STB (Société Tunisienne de Banque), BH (Banque de l'Habitat) and UBCI (Union Bancaire pour le Commerce et l'Industrie). In 2005, BIAT (Banque Internationale Arabe de Tunisie) was offered Internet Banking services and recently this supply is extended to Attijari bank, BT (Banque de Tunisie) and ATB (Arab Tunisian Bank). In addition to the extension of the number of Internet banks in Tunisia last years, also there is a development of Internet Banking services in quantity and quality. Actually, banking services offered via Internet are extended to other services more various and developed. So they are not limited to services of consultation but also other services more complicated like orders and payments of bills. Although, the development of the Internet Banking supply, the number of Internet Banking users is still very weak in comparison with the others e-banking services.

Generally, the slow Internet and e-commerce adoption in developing countries, can be associated with market and infrastructural factors affecting the availability of ICTs (Brown, Malecki and Spector 1976). For instance, in Tanzania, poor electrical supply, a low tele density and the lack of purchasing power resulted in a low rural Internet usage (Mercer, 2006). Moreover, the focus of ICT products manufacturers is usually on large distributions (Gatigson and Robertson, 1985) often located in developed countries for their selling initiates. Low usage of credit cards is also a major hurdle (Gatigson and Robertson, 1985; Kenny 2003; Biederman, 2000). Past research has found such problems for Business to Commerce e-commerce in India, Latin America and Russia (Hawk, 2004; Hilbert, 2001). 30-40% of transactions in Asia are cash based (Biederman 2000). Financial systems are also underdeveloped (Kenny, 2003). In the Caribbean, online transaction processing is not provided by the banks (Fraser and Wresch, 2005) or other forms of electronic payment systems (Wresch and Fraser, 2006). Consumers' level of awareness of internet banking influences the adoption of internet banking. The internet banking literature supports that individual factors like knowledge (Sathye, 1999; Polatoglu and Ekin, 2001) has an impact on consumer's adoption of internet banking. Sathye (1999) highlighted that, many consumers were simply unaware of internet banking and its unique benefits. Here knowledge, refers to the consumers' awareness of internet banking and the benefits associated with internet banking, and their knowledge of how to use basic technology. Colgate et al (2003) stated that, when consumers made decisions for different alternatives in the market place, the awareness of the existing

alternatives was the determinant for consumers to stay with their current banking provider. In this context, Sathye (1999) and Polatoglu and Ekin (2001) empirically supported the idea that consumer knowledge had an effect on electronic banking adoption. Sathye (1999) found that the lack of awareness about electronic banking and its benefits contribute to the non-adoption of electronic banking. Furthermore, Polatoglu and Ekin (2001) stated that the more knowledge and skills a consumer possessed about electronic banking, the easier it was for the consumer to utilize electronic banking. Therefore consumers who were more aware of internet banking were more likely to perceive internet banking as more useful, easy to use and more reliable, thereby, influencing the adoption of internet banking.

2.6.1 The Perceived Usefulness of Online Banking

There are two main types of the perceived usefulness and are categorized as intended and unintended rewards (Lee, 2008). Lee explained that, the intended rewards are the immediate and tangible rewards that consumers enjoy by using online banking services such as lower transaction fees and high deposit rate.

2.6.2 Online banking Trust and Security

Trust, is professed to be of paramount interest when it comes to its influence it has, on online banking acceptance according to Suping & Yizheng (2010). But online trust, can be overcome if proper understandings of the factors that can upsurge customers trust, for internet banking are well observed (Yap et al, 2009). They continued to advise that bank managers should take online trust seriously and suggested that, trust must be developed by combining conventional and online measures. In a survey conducted by Computer on Fraud and Security in 2007, 82% of customers were doubtful to reply to emails from their banks, 52% more said they will reject any sign-up for online banking, signifying that, more and more customers were now highly concerned about the security of online banking.

In April 2006 an RSA survey acknowledged that, there were 3,655 phishing occurrences aiming at banks of all sizes, and proceeded to suggest that, there was the probability that the phishing endemic will increase to a minimum of 4000 outbreaks a month in 2007 according to Moloney (2009). Moreover, phishing fraud has been the most disturbing problem for the banking sector because that is the weapon that the fraudsters used a lot to attack financial institutions (Reavley, 2005).

Furthermore, in recent developments it has been observed that, the two most pressing concerns that determine customers drive to adopt or decline online banking were trust and security issues according to Moga et al (2012). However, there is an inconsistency with this internet security claims in that according to Hole et al (2006), Customers are not perturbed by the dangers of identity theft, phishing email scams due to the conveniences that they enjoy by using online banking, and continue to acknowledge that, customers were likely to believe that internet banking is safe, when their banks tell them was safe which contradicts the truth about online security.

Several studies indicate that, online bankers are the most profitable and wealthiest segment to banks (Mols, 1998; Robinson, 2000; Sheshunoff, 2000). There could be two fundamental reasons underlying internet banking development and diffusion: cost savings for banks and reduction of branch networks, which has paved the way to self-service channels as quite many customers felt that, branch banking took too much time and effort (Karjaluo et al., 2003). Therefore, time and cost savings and freedom from place have been found the main reasons underlying online banking acceptance (Polatoglu and Ekin, 2001; Black et al., 2002; Howcroft et al., 2002).

On the customer front, internet banking provides many advantages (Pikkarainen et al, 2004; multiple reasons for this. To start with, new online users need first to learn how to use the service (Mols et al, 1999. Secondly, customers have been afraid of security issues (Sathye, 1999; Hamlet and Strube, 2000; Howcroft et al., 2002). Ndubisi et al (2004) also established the importance of adequate security, in order to raise the confidence of consumers to use internet banking.

2.6.3 Advantages of e-banking services

The use of e -banking has a number of advantages as accounted by the literature including customers' retention, increased efficiency, market accessibility, reduced operation costs, intangible benefits such as goodwill and customer loyalty to the organization, offer convenient shopping to customers. And the following are advantages of e-banking: The first advantage is to retain customers, retained and expanded customer base and acquisition of a niche market. By the usage of internet and electronic fund transfer, banks are able to serve customers who are in places where they didn't have branches (Fraser et al. 2000; Rahul, Biju and Abraham 2001; Turban, et al, 2000). Other benefits include the increased efficiency since automation enables you to do more with less input, increased level of output and

employee satisfaction and motivation since they will not have to toil really hard. Larger market share through attraction of new customers and customer loyalty may be gained (Czerniawska and Potter, 2000). E-commerce enables accessibility of markets that would have been otherwise inaccessible without automation. This is for example customers who wish to carry out transaction at night were taken care of by the usage of ATMs. This process leads to transformation of traditional market chain (Fraser et al. 2000).

E- banking helps in reduced operation costs whereby, when people are replaced by machines in an organization, the amount of salary paid out is reduced and hence the operation cost decrease (Grover and Ramanlal, 2000; Kare-Silver, 1998). Another advantage is Intangible benefits, these are benefits that do not directly contribute to increase in revenue but may give goodwill and customer loyalty to the organization. They include, enhancing well-being and education of customers. By providing information to customers online, they are enabled to learn more about the organization and also how to carry out their transaction effectively and efficiently at reduced time and cost (Kalakota and Whinston, 1997; Lee 2001).

Improving consumer loyalty, when quality services and products are provided, customers are likely to make repeated purchase and relate themselves well with the organization (Lee 2001; Hoffman and Novak, 1999). Give organizations competitive advantage in such a way that, the organization which uses automated business processes are able to provide products and services at reduced prices than their competitors. This enables them to beat their competitors and close out entry of new entries (Kalakota et al.,1999; Hoffman et al. 1999; Straub, 2000; Kare-Silver, 1998). E-banking can offer convenient shopping to customers. Customers are enabled by ecommerce to carry out their transaction at any place in the world and at any time of the day that is convenient to their unique lifestyle. To extract benefits from e-commerce, it is important for businesses to overcome the e-commerce inhibitors and challenges. With payment services through electronic banking, customers can conduct banking transactions did not need go to the bank, not restricted by geographical area. They can sit at home to ordering, purchase a variety of goods and services quickly. Those services helped the customer saving time and costs. Therefore, in the short-term launch of electronic banking services, the number of customers using electronic banking service increased by favorable elements, as evidenced by the example, some government such as the Government and the State Bank of Vietnam, promoted commercial banks to develop electronic banking

payment system. The commercial banks had implemented core banking system based on modern technology, centralized data integration implemented with partners in the co-payment, provide a convenient e-banking payment method. When e-commerce grows, many enterprises have focused investment to develop this type of business. So those, commercial banks have a function as the payment system. This conjunction will have two-way interaction, banking payment services via electronic banking and e-commerce will grow.

2.6.4 Difficulties in implementing e-banking services

E-commerce challenges identified from the literature, are classified as technological, legal issues, managerial, and business related issues; Technological challenges are related to the acquisition, installation and maintenance of the necessary hardware and software. These challenges are Security and Web site issues (Koved et al. 2001); the organizations data may face threats from hackers and data loss occasioned by things like viruses. Hackers may also proliferate bank system to transfer money from one account to another and this may make both bank customers and the bank itself to lose huge sums of money. This may prove costly to the organization i.e. in their prevention Czerniawska & Potter, 1998; Alexander, 1998). Technology issues including costs, software and infrastructure; an e-commerce system requires great expenditure in monetary terms. You need to acquire the hardware, software both initial and maintenance etc. (Hoffman et al. 1999; Abeyesekera et al. 1999; Rahul et al. 2001).

Resistances by customers, to adopt the new technology since most traditional customers are still shy of technology. They still did not want to deal with machines when carrying out their transactions instead they still wanted to deal with a physically present customer service employee; hence, you may find that your system was not fully utilized (Summer, 1995).

In adopting the new technology also it will be very difficult for the aged customers, the older customer has limited to access new technologies and the usage of banking services on the computer as well as on mobile phone. Others are managerial challenges and include people and organizational issues; the people in the organization may resist the adoption of the new technology as they may fear that it would lead to loss of jobs. They may also be reluctant to adopt new methods as they may fear change. Another thing to consider is that, you may need to

restructure the organization and this may be the challenge in itself (Hoffman et al. 1999; Feeny 2000).

Every major activity in the organization, needs to have management support. A supporting management will provide the necessary resources. If the management does not support the e-commerce project, it means that the project will lack the necessary resources and is thus, bound to fail (Feeny 2000). Business challenges, include customer service where the bank will lose the personalized service that it offered its customers. When this personal feel was lost,

Customer loyalty may be reduced or entirely lost (Whinston et al. 1997; Alter, 1999; Lee 2001).

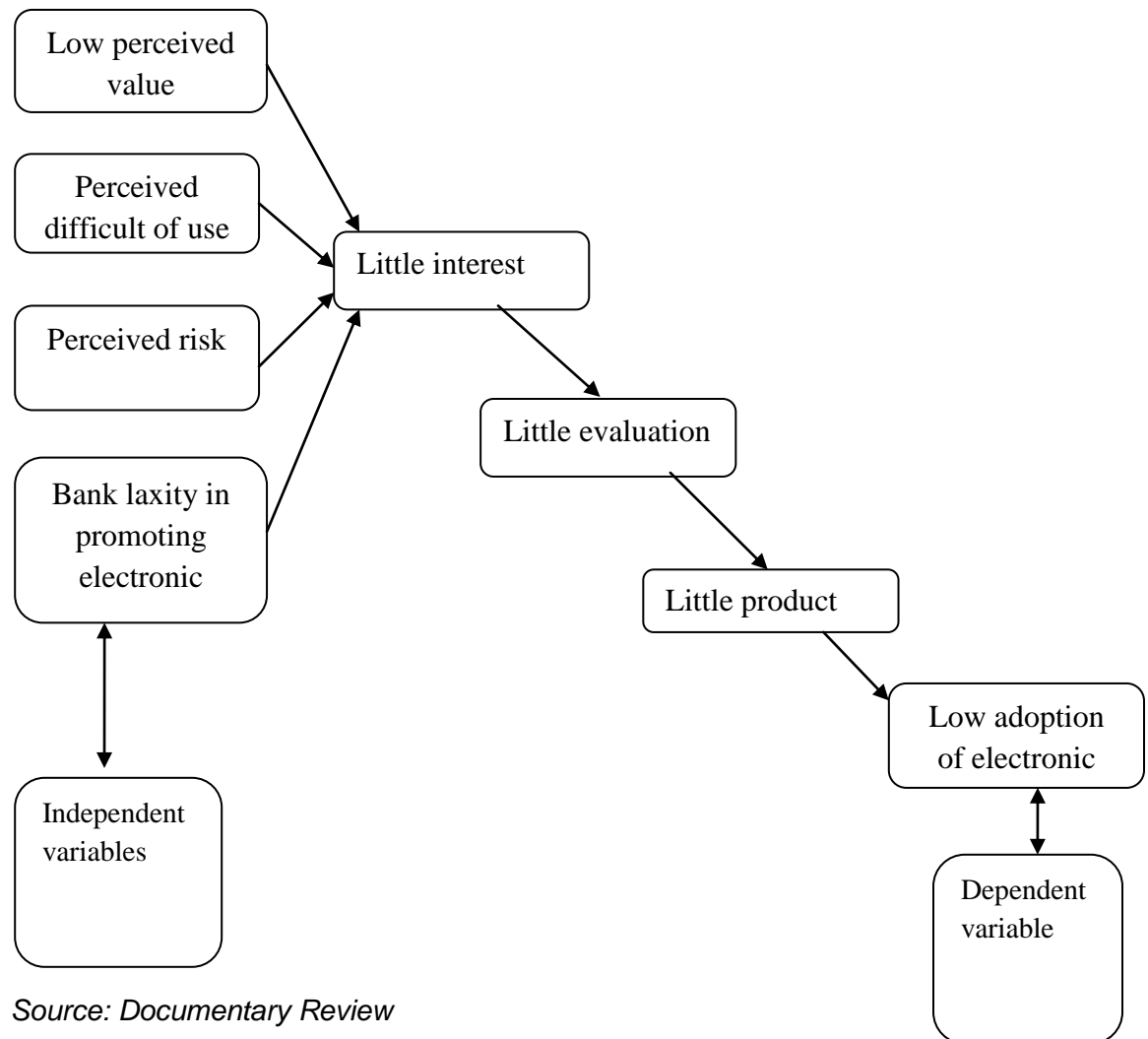
Customers may stick with the old habits and may not be ready to adopt changes. They may even lack trust for the new technology and hence, your ecommerce system may be underutilized (Schwartz, 1999). Legal issues may arise from the adoption of e-commerce. The organization, may be sued because of the loss suffered from the failure of their system. Again, the organization may find itself facing new kinds of legislations, which are continuously being enacted by the governing bodies (Lawrence et al. 1998; de Souza & Von Wiese, 2000).

All in all, the commercial banks need to invest in technology and infrastructure for effective implementation of e-banking services. Some banks have not invested properly, so infrastructure cannot meet the demand for payment transactions.

Generally, however, findings provided evidence on the possible consumer inertia and risk aversion, when a new banking technology was introduced. This is because non internet bank users, identified their reasons to delay the adoption as being happy with the existing banking methods and the aspects of uncertain security.

2.7 Conceptual Framework

Figure 2.6: Electronic Banking Adoption Process



The conceptual framework above, demonstrates the product adoption process. The process is determined by internal and external influences. Internal influences are like risk taking behaviour of the customer and perceived value of a product by the customer, while external influences are like the marketing campaigns of business firms, notably banks in this regard. The framework shows that these determinants of product adoption have led customers to develop a little interest in electronic banking. The process has continued causing a little product evaluation and even a little trial. Ultimately, few customers have adopted electronic banking services. Conceptually, therefore, the study asserts that, if the adoption was to improve, work needs to be done on the determinants.

2.8 Chapter Summary

The chapter above has discussed the terms that concerned electronic banking systems in general as an industry, but has also explained the historical development of the same in Tanzania in specific. The chapter has also explained the adoption process for the new products/services because it relates directly to the study and makes the conceptual framework of the study. The chapter has also has discussed previous related studies before concluding with the conceptual framework that shows factors, that were likely dwarfing the adoption of electronic banking system in Tanzania.

CHAPTER THREE

METHODOLOGY

3.1 Chapter Overview

The research methodology chapter, describes the techniques which were used in undertaking the study. More specifically, it defines the research design, setting and the targeted population. It additionally, presents the sample of the study and sampling techniques used, data collection instruments, processes, reliability and validity issues of the study and data analysis techniques which were used.

3.2 Research Design

This study used the descriptive design. This design is suitable and appropriate due to the fact that, the nature of the questions seeks for “what” and “how” responses.

According to Gates and McDaniel (2006), studies conducted to answer “what” and “how” questions, should follow the descriptive design. The researcher will use both quantitative and qualitative designs when appropriate and necessary.

This study was conducted in Dodoma Municipality a case of NMB and CRDB; they were adopted due to the advantages which were outlined by Kothari (2004)

- i. CRDB and NMB are fairly exhaustive entities which allowed the researcher to undertake a study deeply in different aspects.
- ii. For both entities it was easy to obtain information.
- iii. The elements of costs were reduced.

3.3 research techniques

Research techniques, which were used were qualitative techniques and in some circumstances when it was found necessary, quantitative techniques were used, this aimed at increasing the level of convenience of the report.

3.4 Scope of the study

This study was conducted in Dodoma Municipality, the reason for the selection of this study area was due to the fact that, it was the place where the bank branches (CRDB and NMB) are situated and hence, it was easy to get respondents (the customers and employees of both CRDB and NBC).

3.5 Population and sampling

3.5.1 Targeted population

The study was conducted in Dodoma Municipality, of which, the sample selected was drawn from customers and employees of both banks (CRDB and NMB), the sample drawn, was believed to contain and represented the general view without biasness.

3.5.2 Accessibility to the targeted population

The targeted population, was accessed easily, due to the reason that, there were so many customers of both CRDB and NMB and hence it was not a complicated matter to distribute the questionnaires and to collect them.

3.6 Sampling frame and sample size

The sample frame for this instance was the customers and employees of all banks of which, all questionnaires were distributed in a fair proportion

3.6.1 Sampling techniques

A random sampling technique was used in the collection of information, customers and employees were given questioners randomly (in the bank premises) depending on their presence and availability.

3.6.2 Sample size

The sample size was 100 of which 20 respondents were employees of both banks, and 80 respondents were customers of both banks, since the total population was unlimited and hard to estimate at the time.

From; the formula specified by Yamane, (1999); the sample size was derived from

$$n = \frac{N}{1 + N(x)^2}$$

e being standard error (10%),

N being Total population,

X being the degree of Precision (10%)

n being the sample size,

The estimated population is considered to be 6000 of which all employees and all customers are included, then

n as a sample required, will be obtained from

$$6,000/1+6,000+ 6000*(0.1)^2$$

=100

N =100

3.7 Data collection methods

3.7.1 Interview

Interview questions, were designed to seek information in verbal, of which some customers and employees, were asked questions, and replied with the required answer; employees and customers of both banks were involved (15 respondents were interviewed).

3.7.2 Questioners

All questionnaires, were issued (85 questionnaires) to customers and employees of CRDB and NMB, while all of them aimed at finding out factors hindering the adoption of electronic banking services.

3.7.3 Documentary reviews

Documents were downloaded from websites of CRDB and NMB, to access the cost structures, availability of services and respective ranges.

3.7.4 Types and sources of data

The researcher, used both secondary and primary data for the purpose of obtaining the relevant and valuable information. Primary data were obtained through direct interviews and questionnaires of which the researcher made sure that they were relevant to the study as stated by Parez & Kjell (2005). Secondary data were collected by the usage of documentary reviews, and all documents with advantages to the study from the banks' websites were accessed.

3.8 Reliability and Validity Issues

3.8.1 Reliability

Gall et al., (2005) defines reliability as a measure of the extent to which the test or other measures was free from measurement errors while validity was the appropriateness, meaningfulness and usefulness of specific inferences, made from test scores, soundness of research findings, based on the satisfaction of specific design criteria for various types of research.

3.8.1 Validity

To improve validity issues, the study used three techniques. First, data were collected from different sources, namely interviews, questionnaires and documentary reviews to avoid bias. Secondly, research instruments that were interview guides and questionnaires were pretested in a pilot research. Lastly, findings of the study, were presented to the three of the six participants of the interviews for proofreading.

3.9 Data Analysis and presentation

Data were entered, edited, coded and processed for an output by the usage of statistical package (computer software) called SPSS version 15 (Statistical Package for Social Sciences). The researcher indeed was interested in this software, due to the fact that, data entrance, coding and analysis was simple (user friendly) and it was the reliable software that the user could understand easily.

3.10 Ethical matters

- i. Informed consent; in this aspect, all respondents were given the required relevant information concerning the nature of the study, the need for the study, the issue of choosing to continue with the study or not, the risks of participating in the study and the benefits of it, of which the respondent him/her self-had to weigh the factors and choose to continue participating or not.
- ii. Privacy; privacy policy in conducting this research study was considered, in the manner that, all respondents, especially in conducting an interview, were distinguished from the population and there was a special place (a place, where no interaction with others) which was used in interviewing the respondents. The same procedure was followed in collection and handling questionnaires, of which, all questioners were collected separately.
- iii. Confidentiality: confidentiality was also considered, after gathering the information through questioners and interviews, all documents were kept safely in the locker in order to avoid the disclosure of names of the research participants.

3.11 Limitation of the study

There were limitations in the study but with enough knowledge and patience, It was possible to overcome them. In the process of undertaking the research to execution and finalization, the researcher tackled the following.

3.11.1 Time limitation

A research in normal circumstances, can take years for other studies, it was difficult to write the proposal, finding data and write the report in the short period while doing other normal duties. This made the task to be difficult and at all times there were sleepless nights.

3.11.2 Access to the busiest customers and employers

In conducting the research, especially in data collection through interviews and questionnaires, there were challenges, where some customers and employees were so busy to the extent that, filling in questionnaires was not an easy task to them, and thus, sometimes it became necessary to conduct direct interviews to them. Likewise, some customers were not willing to give their opinions and even to fill in questionnaires. To solve such a problem, there was a need to give an incentive of a token amount of money.

3.12 Dissemination of findings

This work, was not intended to be used just for academic qualifications only, but to be useful to the banking sector. For that reason, findings of this study were to be disseminated to Bank Officials and a few customers when it is finalized. A workshop to be attended by banks' customers, government officials, the academic, and bank workers as well their leaders together with some politicians, should be done for dissemination of findings of this research. The outcomes of such workshop will be used for improving and so attracting more customers.

3.13 Chapter Summary

Dodoma Municipality was the area where the study was carried out. Questionnaires and interviews were conducted to customers and employees of both CRDB and NMB totalling 83 (response rate being 83%). To reach almost at a fair proportion, data collected were from primary sources and secondary sources. A total of 68 respondents in the distribution of 25 from NMB and 27 from CRDB and employees from both banks, were 16 whom returned the questionnaires.

A total of 15 respondents were directly interviewed and these included the 2 branch managers, 6 busy bank employees and 7 customers whom needed an incentive to be interviewed.

Collected data were coded and analysed to provide meaningful results. The analysed data, were presented in tables and the descriptive explanation of the findings together, with the implications of whatever result were put forward. Ethical Issues have been provided to show the procedures of conducting this study.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Chapter Overview

Findings and results presented in this chapter, were obtained through questionnaires, of which 85 questionnaires were distributed and only 68 were collected and received back, all findings were analysed by the usage of SPSS data management software.

4.2 Study Sample Characteristics

4.2.1 General Response

In this study, a sample size of 85 respondents was drawn, only 68 questionnaires were returned and 15 respondents were directly interviewed. The following Table 4.1, shows clearly the way questionnaires were distributed and the degree of receipt, for each category namely customers, employees and managers of both NMB and CRDB branches. A total of 68 questionnaires were issued to customers of both banks, including employees of both banks (CRDB and NMB), and the Operation managers which were returned. These questionnaires were all analysed by SPSS and that all of them were aiming at finding out the factors that hinders the adoption of electronic banking for both banks.

Table 4.1: Respondents from NMB and CRDB

Number of questionnaires	Customers (NMB)	Customers (CRDB)	Employees and managers of CRDB and NMB	Total
Issued	30	30	25	85
Returned	25	27	16	68
Not returned	5	3	9	17
Direct interviewed	4	3	8	15
Total respondents	29	30	24	83

In addition, a total of 15 respondents were directly interviewed. This high response rate (83%) shows that, the questions in the questionnaires were designed properly and they had simple questions to answer, and the directly interviewed participants responded well despite the provision of the small incentive. All in all, the study was very topical and majority wanted to get its results especially the bank employees.

4.2.2 Personal Information

Personal information shows gender, age, education level and work experience of the respondents from CRDB and NMB of which customers, employees and managers were involved.

4.2.2.1 Gender structure of the respondents

The gender structure of the respondents are indicated in Table 4.2 below. Out of the 83 respondents, 40 of them were males and 43 females.

Table 4.2: Gender of the respondents

Category	Response	Percentage (%)
Male	40	48.2
Constrains	43	51.8
Total	83	100.0

Results indicate a fair gender balance, which created more representative sample of customers and employees of CRDB and NMB. This was also true as reflected by Mensah, 2013, in a similar study, which brought the fact that, the information generated for this research was not biased.

4.2.2.2 Age of the Respondents

On the collection of data from customers, employees and managers of CRDB and NMB in Dodoma Municipality, the distribution of age was strongly considered. Results presented in Table 4.3 below show how age have been distributed, where, as of ages of (20-29) years appeared to share 47%, of them 30-39 years shared 28.9%, (40-49) shared 14.5%, 50-59 corresponded to 7.2% and above 60 years old corresponded to 2.4% of the total respondents.

Table 4.3: Age of the respondents

Age in years	Frequency	Percentage (%)
20-29	39	47
30-39	24	28.9
40-49	12	14.5
50-59	6	7.2
60 and above	2	2.4
Total	83	100.0

Table 4.3 above shows that majority were between 20-29 years with 47%, 30-39 with a share of 28.9%, those of ages between 40-49, 50-59 and 60 and above shared 14.5%, 7.2 and 2.4% respectively. This implied that results obtained were from the active and the right sample with a mixture of experiences.

4.2.2.3 Education level of the respondents

The education level was also considered in this study, 18.1% of the total respondents were of primary level, 33.7% were of secondary level and a proportion of 48.2% of the respondents were of tertiary level.

Table 4.4: Education level of the respondents

Education level	Frequency	Percentage (%)
Primary	15	18.1
Secondary	28	33.7
Tertiary	40	48.2
Total	83	100.0

From Table 4.4 above, the biggest proportion of the respondents (48.2% and 33,7%) were well educated, in this manner, this showed that, the problem of understanding what the questions needed, language and communication barriers in receiving and giving the valuable information was avoided.

4.2.2.4 Experience of the Respondents

The experience of the respondents in banking services was also considered, those whom had experience of 1-3 years took a proportion of 22.9%, those with 3-6 years of experience took 45.8% of the total respondents, those with 6-10 years took 9.7% and those with more than 10 years of experience took 16.7%. a breakdown of respondents is shown in table 4.5 below.

Table 4.5: Years of experience of the respondent

Years of experience	Frequency	Percentage (%)
1-3	19	22.9
3-6	38	45.8
6-10	8	9.7
More than 10 years	14	16.7
Below 1 year	4	4.9
Total	83	100.0

Table 4.5 above shows the number of years of experience of customers and employees to use electronic banking service from both banks, the biggest proportion of 45.8% of them, had 3-6 years of experience in electronic banking services.

4.3 Awareness that banks provided electronic banking services

4.3.1 Awareness that banks provided electronic banking services through mobile banking

In responding to this question on whether customers were aware of the existence of electronic banking through mobile banking, 81.9% of them were aware. 12.1% were not aware of the presence and 6.0% did not respond to the question.

Table 4.6: Awareness that the bank provides electronic services via mobile banking

Category	Frequency	Percentage (%)
Yes	68	81.9
No	10	12.1
No response	5	6.0
Total	83	100.0

It is evidenced that, 81.9% of them were aware of the provision of electronic banking services through mobile, by being aware sets an alert that, one could use mobile banking services to perform a number of transactions like, on line payments to vendors, on line receipts of money, payments of bills through mobile banking and also review previous transactions performed in recent days.

4.3.2 Awareness that the bank provided electronic banking through mobile automated teller machines

In responding to this question on whether customers were aware of the existence of electronic banking through automated teller machines, 100% of them were aware of the presence of electronic banking services through automated teller machines (ATMs) the response is shown in Table 4.7 below:

Table 4.7: Awareness of customers on provision of electronic banking through automated teller machines (ATMs)

Response	Frequency	Percentage (%)
Yes	83	100.0
Total	83	100.0

From the questionnaires distributed, all respondents who were customers of both CRDB and NMB were aware of the presence of provision of electronic banking through the automated teller machines, owned and operated by the concerned banks. This implied that, customers utilised automated teller machines in performing different transactions.

4.3.3 Awareness that the bank provides electronic banking through internet banking

Out of 67.5% of the respondents were not aware of the presence of electronic banking system through internet banking, 30.1% were aware of the presence and 2.4% did not respond to the question. A breakdown of responses is listed in Table 4.8 below:

Table 4. 8: Awareness that the bank provides electronic services via internet banking

Response	Frequency	Percentage (%)
Yes	25	30.1
No	56	67.5
No response	2	2.4
Total	83	100.0

It is evidenced that, 67.5% of the respondents were not aware of the provision of electronic banking services through internet, by being un aware sets an alert that, there were a number of transactions (payments of bills, reviews of transactions, on line withdrawal of money, transfer of money from one account to another and review of the account balance on line), were not performed by the use of internet banking platforms. Results from this study matches with those of (IAMAI), that, the greater percentage of customers of banks were unaware of the presence of internet banking services, However, only a small portion of 23% of customers in India knew of the existence of internet banking. Jamaluddin (2013), also found out that, until the

revolution of automated teller machines (ATMs), people were not aware of the revolutions in the banking sectors, especially that, there was an existence of internet banking.

4.4 Challenges constraining the adoption of electronic banking services

4.4.1 Lack of enough electronic devices to customers

In response to the question on what degree, lack of enough electronic devices to the customers, hindered the adoption of electronic banking, 48.2% of them said that lack of electronic devices constrains much, 13.3% stated that it constrains to some degree and 21.7% stated that, lack of electronic devices did not, constrain and 16.8% did not respond to the question. A breakdown of responses is listed in Table 4.9 below.

Table 4.9: Lack of electronic devices to customers

Response	Response	Percentage (%)
Constraints much	40	48.2
Constrains	11	13.3
Does not	18	21.7
No response	14	16.8
Total	83	100.0

It is evidenced by 48.2% said that, lack of enough electronic devices to the customers, hindered the adoption of electronic banking, as a result, the perception of the value of a service declines, lack of and ability to purchase electronic devices which would help in performing transactions, (computers, cell phones and other electronic devices) would hinder the applicability of some of the electronic banking services like, the internet banking.

4.4.2 Perceptions to the value of mobile banking

In responding to the question to what degree the perceptions of value constraints, 27.7% of them said that the perceptions of customers towards mobile banking constrains were much, 38.6% stated that it constrains to some degree and 14.5% stated that, perceptions of customers towards internet banking did not have constrain and 19.2% did not respond to the question. A breakdown of responses is listed in Table 4.10 below.

Table 4.10: Perception to the value of mobile banking

Response	Response	Percentage (%)
Constraints much	23	27.7
Constrains	32	38.6
Did not	12	14.5
No response	16	19.2
Total	83	100.0

It is evidenced by 27.7%, and 38.6% that the perceptions of customers hindered the adoption of electronic banking. This implies that, customers from all banks perceived the value of electronic banking negatively, as they did not utilize electronic banking services to the fullest. A study conducted by Venkatesh & Davis (2000) have revealed that, the perceived usefulness of the technology hindered the adoption of electronic banking especially, internet banking, due to the reason that, internet banking offered services which were above the regular banking services and methods. The perception of the value will create a wall towards intentions to adopt and the usage.

4.4.3 Difficulty in usage of electronic banking services

The usage of technology may be associated with some difficulties, in cases where customers were aware of the presence of such service but they could not use it, difficulty can become a barrier. Out of the 83 respondents, 36.1% of the respondents mentioned had shown that, the difficulty in the usage of electronic banking constrains much, 30.1% to some degree and 14.5% did not have a constrain and 19.3% did not respond to the question. A breakdown of responses is listed in Table 4.11 below.

Table 4.11: Difficulty in usage of electronic banking service

Response	Frequency	Percentage (%)
Constraints much	30	36.1
Constrains	25	30.1
Does not	12	14.5
No response	16	19.3
Total	83	100.0

It is evidenced by 36.1% and 30.1% that the difficulty in using electronic banking hinders the adoption, in most cases respondents agreed that, they were aware of the presence of electronic banking services, but lack of knowledge on how to use it become a challenge, as a result a customer's could not perform the number of transactions like paying bills, money transfer, reviewing of previous transactions.

4.4.4 Laxity in advertising and promotion of electronic banking

The promotion of electronic banking creates a sense of awareness that a customer could perform some transactions without entering into the bank for a particular service. Through promotion or advertisement, information based on the particular service could be obtained and service efficiency could be known to the customer. Out of 38.5% of the respondents said that, laxity in promotion of electronic banking constrains much, 25.3% to some degree and 16.9% did not have a constrain while 19.3 % did not respond to the question. A breakdown of responses is listed in Table 4.12 below.

Table 4.12: Laxity in promoting electronic banking

Response	Frequency	Percentage (%)
Constraints much	32	38.5
Constrains	21	25.3
Does not	14	16.9
No response	16	19.3
Total	83	100.0

It is evidenced by 38.5%, and 25.3% that there was laxity in promoting and advertising electronic banking services, as a result customers could not communicate (through radio, television, and other medium of communication) about the advantages of using electronic banking, in services like mobile banking, many customers did not understand how to subscribe, even when they were subscribed, they could not use these services because they did not have knowledge on how to use these services. These results, comply with those of a study conducted by Karjaluoto et al (2002) that, the perceptions of customers towards internet banking and electronic banking in general, was caused by the lack of enough education and service advertisement. So the acceptance to customers goes together with provision of awareness, if an introduced technology was new to customers.

4.5.5 Perceptions of risks of electronic banking

In the usage of electronic banking services, especially those of mobile banking, there were a number of associated risks, and the way customers perceived these risks differed. In responding to the question on how customers perceived, 58 respondents corresponding to 69.9% of the customers, responded to the question indicated the perception to be of high risks, 13.3% perceived the risks to be normal and 16.8% perceived that, the usage of electronic banking was less risky. A breakdown of responses is listed in Table 4.13 below,

Table 4.13: Perception of the risk

Response	Frequency	Percentage (%)
High risk	58	69.9
Normal	11	13.3
Not risky	14	16.8
Total	83	100.0

58 respondents corresponding to 69.9% of the respondents, perceived negatively in relation to risks associated with the usage of electronic banking services. Risk perception is the state of losing a transaction, in some instances, the usage of mobile banking is said to be more riskier in such a way that, a transfer of payment, may fall in the wrong hands if there were errors in writing the phone number of the targeted receiver, this affected the performance and the adoption of electronic banking in that manner, customers who were not willing to take risks could not use that particular service.

These results, concur with a study conducted by Wong & Chang (2005), in a way that, the users' spread of adoption is limited by perception, and these consumers, are much influenced by the way risks are perceived, more likely, if consumers observe uncertainty and could not foresee the future effect, then they tend to deviate from using that particular technology. Pavlou (2001) argues that, if customers did not have a direct control over their transactions, they tend to perceive that service as the one with high risks and hence the speed of adoption decreases.

Results of this study also matches with that of Jamaluddin (2013), in his study he revealed that, people did not perform on line transactions especially by the usage of internet banking because of the security risks, associated with the service,

customers perceive these services to be risky due to the impersonal nature of the transactions they perform.

4.5.6 Perception of the customers on transaction costs

In the response to the question, on how did customers perceive the element of transaction costs in electronic banking, the following were the results, 46 respondents, corresponding to 55.4% said costs to be high, 30.1% normal and 14.5% of them perceived that, the usage of electronic banking was less costly. A breakdown of responses is listed in Table 4.14 below.

Table 4.14: Perception of customers on transaction costs

Response	Frequency	Percentage (%)
Costly	46	55.4
Normal	25	30.1
Not costly	12	14.5
Total	83	100.0

Table 4.14 above shows 55.4% of the respondents perceived that the usage of electronic banking was more costly in transactions. In the business or to an individual who performed a number of transactions per day, costs associated with those transactions could be of a greater value, As a result, the adoption of mobile banking in payments, receipts or even transfer of money was hindered, even when a customer of a particular bank was subscribed to the service.

4.5.7 Perceptions of customers on security

In responding to the question on how customers perceived the degree of safety (security) of electronic banking services, 33 respondents corresponding to 39.8% replied that, the electronic banking services were more secured while 50 60.2% stated negatively (less secured). Table 4.15 below.

Table 4.15: Customers' perception towards security

Response	Frequency	Percentage (%)
More secured	33	39.8
Less secured	50	60.2
Total	83	100.0

Results in the table 4.15 above shows that 60.2% of the respondents argued that services offered by electronic banking system were less secured in a manner that, stealing customer's identity could cause financial loss to the holder of a specific bank account, in some cases, some of the customers' identity cards (electronic cards) were stolen while to the bank customers who were subscribed and used mobile phones to access bank services, may find themselves in a situation where a theft of some amount has occurred in their absence.

Otaif et al (2009) stated that, in electronic banking services, security of the customer becomes a challenge; a practice that, a customer's identity is stolen becomes normal and measures have been developed to handle. In order to secure online systems, there are four things to consider; security, anonymity, authentication and divisibility, they argue that, if one of the four criteria are not met, there will be a great chance of loss to a customer. Schaechter &Nsouli (2002) argue that, a network security should be reviewed and checked to minimize the risks of attacks and vulnerabilities, which can cause a loss of big value of money to the customer. A study conducted by Carlon (2001) also confirms that, security is the main challenge for the adoption of electronic banking , especially that of internet banking services, in such a way that, customers in a big proportion were less likely to respond and reply an electronic message from their banks. In this study, it was revealed that, many customers had ideas of discontinuing using internet banking services in the future.

4.5 Challenges facing electronic banking

4.5.1 Low customer savings

Low customer savings, can be the factor that hindered the adoption of electronic banking, in responding to the question of what were the challenges facing electronic banking, 44.6% of the respondents answered Yes, while 55.4% answered No to the question. Table 4.16 below.

Table 4.16: Low customer savings

Response	Frequency	Percentage (%)
Yes	37	44.6
No	46	55.4
Total	83	100.0

As it is evidenced, 46 respondents, corresponding to 55.4% of the total correspondents said low saving is seemed not to be a prominent factor hindering the adoption of electronic banking services for both NMB and CRDB, this implied that, apart from low savings, there were dominant factors needed to be exposed.

4.5.2 Poor service network

In the response to the question, that poor service network can be among the challenges hindering the adoption of electronic banking; response are as follows. 79.5% of the respondents answered yes, while 18.1% answered No to the question. A breakdown of responses is listed in Table 4.17 below.

Table 4.17: Poor service network

Response	Frequency	Percentage (%)
Yes	66	79.5
No	15	18.1
No response	2	2.4
Total	83	100.0

79.5% of the respondents agreed that, poor service network (offered by CRDB and NMB) was one of the challenges hindering the adoption of electronic banking, delay in time for receipts or payments from the bank or even the absence of the network caused customers' perceptions towards the service to be poor. In services like those of mobile banking, payments of bills can take a long time as a result a customer may unsubscribed to stop) to the usage of electronic banking services.

In the study conducted by Schaechter &Nsouli (2002), network was an issue to consider in internet banking, they argue that, in most cases banks are owning a combined another electronic delivery channels that enhances internet banking services.

4.5.3 Long queues and overloads of networks

The response to whether long queues could be the challenges for the adoption of electronic banking especially, in automated teller -machines (ATM), 77.1% of the respondents answered yes, 18.1% answered No while 4.8% did not respond to the question. A breakdown of responses is listed in Table 4.18 below.

Table 4.18: Long queues

Response	Frequency	Percentage (%)
Yes	64	77.1
No	15	18.1
No response	4	4.8
Total	83	100.0

64 respondents corresponding to 77.1% of the total respondents agreed that, long queues was one of the challenges facing electronic banking services, ATMs, were designed to help in reduction of the number of customers to be served in a minute (and to increase the rate of service delivery). In the absence of enough tele-machines, the customers took a long time for the withdrawals service as result, the perceptions of the value of using electronic banking drops.

4.5.4 Number of teller machines to the banks (CRDB and NMB)

In responding to the question about challenges of electronic banking, many customers outlined the number of automated tele-machines to be main factor. Out of 83 respondents, 81.9%% of the respondents answered yes, 15.7% answered No while 2.4% did not respond to the question. A breakdown of responses is listed in Table 4.19 below.

Table 4.19: Number of machines to the banks (CRDB and NMB)

Response	Frequency	Percentage (%)
Yes	68	81.9
No	13	15.7
No response	2	2.4
Total	83	100.0

As it has been evidenced from table 4.19 above, 68 respondents making a proportion of 81.9% strongly agreed that, the number of electronic machines was the dominant factor that, hindered the adoption of electronic banking services for both CRDB and NMB, which implied that, the absence of enough number electronic devices like ATMs would cause the decrease in a rate of services delivery and hence long queues to customers which led to the decline in the value of electronic banking services. These results match with those in a study titled, E-Banking: Challenges and opportunities in India, Jamaluddin (2013) shows that, the number of

automated teller machines especially in rural areas were 32.7% only, as a result, the adoption of electronic banking through automated teller machines becomes a challenge. He kept on arguing that, the effects of the number of teller machines in rural area caused the decline of subscription of customers from 2007 to 2010 (from 43,500 persons to 8,100).

4.5.5 Language barrier

In responding to the question, on whether there was a language barrier as the limitation for adoption of electronic banking, 43.4%% of the respondents answered yes, 51.8% answered No while 4.8% did not respond to the question. A breakdown of responses is listed in Table 4.20 below.

Table 4.20: Language barrier

Response	Frequency	Percentage (%)
Yes	36	43.4
No	43	51.8
No response	4	4.8
Total	83	100.0

Table 4.2 above shows that, 43 respondents corresponding to 51.8% of the total respondents did not agree that, language was a barrier and a challenge for the adoption of electronic banking system, this implied that, some factors were dominant compared to the language barrier.

4.6 Measures to enhance the adoption of electronic banking services

4.6.1 Increasing promotion and advertisement of electronic banking services

In the response to the question on how to enhance electronic banking, some respondents said about promotions or advertisements of electronic banking services, out of 83 respondents, 55.5% of the respondents answered yes, 37.3% answered No while 7.2% did not respond to the question. A breakdown of responses is listed in table 4.21 below.

Table 4.21: Promotion and advertisements of electronic banking services

Response	Frequency	Percentage (%)
Yes	46	55.5
No	31	37.3
No response	6	7.2
Total	83	100.0

Table 4.21 above shows, the biggest proportion of respondents (55.5%) mentioned promotion of electronic banking services (internet banking, mobile banking and the usage of ATMs), promotion of electronic banking services will awaken customers and increase an awareness of its presence. The results concur with those of Suganthi et al (2001), which in turn had details of the creation of awareness to customers in the usage of electronic banking, especially internet banking services, he found out that, the level of awareness on the internet banking service was lacking to the non –users, and banks were recommended to initiate program of awareness creation to the services offered.

4.6.2 Adding more electronic machines

In responding to a question of what could be the solution to factors hindering the adoption of electronic banking, customers in a large proportion, mentioned about the addition of electronic machines like the ATMs. Out of 83 respondents, 79.5% of the respondents answered yes, 18.1% answered No while 2.4% did not respond to the question. Table 4.22 below.

Table 4.22: Adding more electronic machines

Response	Frequency	Percentage (%)
Yes	66	79.5
No	15	18.1
No response	2	2.4
Total	83	100.0

Results in table 4.22 above show that, many respondents (customers of NMB and CRDB) about 79.5% said an increase in the number of machines to be the factor, that will enhance the adoption of electronic banking, the effect on the increase of the electronic machines will be on the rate of service delivery to the customers, an increase would reduce lines (queues) by increasing service rates.

4.6.3 Keeping enough savings

In responding to the question about what could be the solutions to factors that hindered the adoption of electronic banking, some respondents outlined keeping enough savings as the solution and others did not said it. Out of 83 respondents 22.9% of the respondents answered yes, 69.9% answered No while 7.2% did not respond to the question. Table 4.23 below.

Table 4.23: Keeping enough savings

Response	Frequency	Percentage (%)
Yes	19	22.9
No	58	69.9
No response	6	7.2
Total	83	100.0

Results table 4.23 above indicate that, majority of the respondents, making a proportion of 69.9% did not mention “keeping enough savings” as the solution to the factors that hindered the adoption of electronic banking, only a small proportion agreed on kept savings to be the solution, this implied that, customers kept savings but still adoption of electronic banking became a problem to them.

4.6.4 Improving network access

In responding to the question about what could be the solutions to factors, that hindered the adoption of electronic banking, some respondents in a large proportion outlined the improvement of network access as the solution. Out of 83 respondents, 81.9% of the respondents answered yes, 15.7% answered No while 2.4% did not respond to the question. A breakdown of responses is listed in Table 4.24 below.

Table 4.24: Improving network access

Response	Frequency	Percentage (%)
Yes	68	81.9
No	13	15.7
No response	2	2.4
Total	83	100.0

Results table 4.24 above show that 68 respondents corresponding to 81.9% of them argued that, an improvement in network access will enhance electronic banking, some customers unsubscribe to the service because service delivery through the network was hard to achieve, there were moments in a day where the

bank networks become low or absent and hence, disrupted the ability to make a transaction, an efficient network will be attracting customers to use, because it will be time serving, and the customer will not need to line up in a queue for withdraws of money.

4.7 Chapter Summary

This chapter, has delivered a complete analysis of the data gathered from both questionnaires and interviews. All questionnaires, were distributed to customers, employees and managers of both CRDB and NMB. Interview questions and questionnaires, distributed were intended to access factors hindering the adoption of electronic banking services in Tanzania, a case of Dodoma Municipality, For both interviews and questionnaires admitted; there was a response rate of 83 out of 100. In the study, a total of 68 questionnaires were returned and 15 interviews were done. In answering to the questions, low customer savings and language seemed not to hinder the adoption process, as confirmed by their low response rates. Other dominant factors seemed to hinder the adoption process of electronic banking.

CHAPTER FIVE

CONCLUSION AND RECOMENDATIONS

5.1 Chapter Overview

This chapter presents the summary of key findings, all matters which were raised and the required recommendations. Presentations of all matters, findings and recommendations will be of a great help, to customers and other interest parties about factors that hindered the adoption of electronic banking services, furthermore, the suggestions for a further relevant studies are made available.

5.2 Summary of key findings

- a) There is an awareness to many customers of both NMB and CRDB, that, their banks offer electronic banking services through mobile phones. This is evidenced by a positive response of 81.9%.
- b) Customers from all banks (CRDB and NMB) are aware that, their banks offered electronic banking through automated teller machines; this was evidenced by 100% response for all customers.
- c) Customers from all banks in a big proportion, are not aware that, their banks offered electronic banking through internet banking, this was evidenced by a proportion of 67.5% of the total respondents and only a small portion, of about 30.1% were aware of the presence of internet banking.
- d) Lack of enough electronic devices (to both the banks and the customers) became a challenge and a factor that hindered the adoption of electronic banking for both CRDB and NMB PLC. This was evidenced by 48.2% of them who mentioned it to be one of the factors especially in the usage of internet banking and ATMs.
- e) The study has revealed that, the perceptions of the value of electronic banking also, hindered the adoption of electronic banking for both NMB and CRDB, with responses of 27.7% and 38,6% that this factor caused constraints.
- f) The biggest proportion of 36.1% and 30.1% agreed that, there were some difficulty in usage of electronic banking and was one of the factors that hindered the adoption of electronic banking, in such a way that, in

circumstances where a customer was subscribed to the service, there was a lack of knowledge on how to use it.

- g) There was laxity in the promotion and advertising of electronic banking (mobile banking, internet banking and other related services). This was evidenced by 38.5% and 25.3% which made the big proportion of customers responded to the questionnaires.
- h) Although customers, perceived the element of risks differently, the perception to the risks associated with the usage of electronic banking services seemed to be the big problem, and was evidenced by 69.9% of the respondents, whom responded positively that, they perceived the risks of using electronic banking to be the hindering factor for the adoption.
- i) The element of transaction costs also, was revealed to be another factor that hindered the adoption of electronic banking, though, customers did perceive it differently, the biggest proportion, of 55.4% responded positively that, this was one of the hindering factor for the adoption of electronic banking services.
- j) The Security issue was also revealed, towards the risks, that, they had a greater chance of losing a certain value of transaction and seemed to be of a greater concern, which was evidenced by 60.2% who responded that, electronic banking services were not secured.
- k) Many customers argued that, poor networks in most of the electronic banking services, was the dominant hindering factor, this was evidenced by the biggest proportion of customers (79.5%) who answered “ yes”, indicating that, poor network was one of the hindering factors.
- l) The number of automated teller machines in all banks seemed to be in sufficiently to cope with the number of customers, and was evidenced by 81.9% of them agreeing that, there were few machines compared to the number of customers and the requirements.
- m) The promotion of electronic banking, addition of electronic machines as well as improving network access are the factors which were highly mentioned by customers, from both banks, to become the solutions to the adoption of electronic banking services, as evidenced by 55.5%, 79.5% and 81.9 % respectively.

5.3 Conclusion

In this case of CRDB and NMB PLC, in Dodoma Municipality, majority have agreed that, they were aware of the presence of electronic banking services, through mobile banking and automated teller machines, the latest technology that used internet connection (internet banking) was not known by many customers of both banks, CRDB and NMB. By being aware of the presence of some of the electronic banking implied that to some extent, transactions like purchasing on line, payments of bills on line or by cell phones, through a mobile network, transferring of money from one account to another, receipts of funds electronically through mobile banking, cash withdraws in the ATMs by the usage of the electronic card, and other related services were used by customers of both CRDB and NMB. In spite of the usefulness of these services, there are limitations which hindered the adoption of electronic banking services, offered by CRDB and NMB. These challenges, are customers' perceptions towards the associated risks, transaction costs, perceptions of the value of electronic banking and the number of machines as well electronic devices for both banks and customers.

In comparison with other studies from other authors, Nsouli (2002), argues that, there has been a breakthrough in the growth and the adoption of electronic banking especially, the internet banking services and there were a range of transactions customers could perform on the particular bank's website, but there has been a concern that, some of the required data were missing. Furthermore, the study has revealed that, in most of the Scandinavian countries more than 75% of all banks offered an internet banking service and up to one third of the number of bank customers used such service, but in the United States (US), In mid-2001 at least 44% of the commercial banks in America, maintained their own transactional websites, but only 6% of the customers used the opportunities of internet banking. Jamaluddin (2013), revealed that, there were some perceived risks associated with the usage of electronic banking (through ATMs, mobile banking, fund transfer systems and internet banking), he also argues that, the perceived risks could be reduced by increasing regular periodical reviews on the regulations and compliance rules, screening methods to avoid identity theft and guidance with informing customers about how they could secure their own dealings.

In comparison to other findings, Otaif et al (2009) argues that, there have been a rapid expansion of electronic banking services, through different forms like the automated teller machines and the mobile banking, of which served a lot of customers at a time with reliability and low costs of transactions. In an actual sense the perception of transactional costs of customers in Dodoma Municipality, the case of CRDB and NMB PLC to be high, but in fact, it was as normal as performing the same transaction inside the bank by the bank tellers. Moreover, a study (unpublished thesis) conducted by Madirisha (2014), revealed that, if there will be a continuous provision of education and advertisement to customers, there was a greater chance remarkable growth of the use of internet banking in Tanzania.

A study conducted by Otaif et al (2009), also revealed about the issue of risks and customers' support in such a way that, in operations of electronic banking services, the regulators (banks), should be able to create a special department, that will be dealing with customers support as urgently and fast as they are needed to do so. He also argues that, lack of awareness and knowledge on the usage of electronic banking is a dominant hindering factor of the adoption. Based on other findings, from other studies, in most cases transaction costs seemed to be lower compared to what customers said and perceived. In a study conducted by Otaif et al (2009) show how transaction costs and time to obtain the service was reduced, compared to what customers perceived, perceptions of the services offered seem to be a dominant factor which hindered the adoption of electronic banking services by customers. These perceptions, are caused by the laxity of banks in promotion of electronic banking especially with the internet.

5.4 Recommendations

By the usage of the views from observations, key findings and conclusions, the following are the recommendations.

- i. The regulators of electronic banking systems (CRDB and NMB) especially those dealing with internet banking services, should strengthen the availability of a reliable and fast internet at the lowest cost as possible, this would help the banking sector and the customer in general in performing transactions.

- ii. There should be a periodical review of regulations and security complacencies to avoid loopholes of identity thefts, in so doing, the perceptions of risks associated with identity thefts would be eliminated, as a result, there will be a fastest growth of the application of electronic banking services in the near future.
- iii. Education to customers about electronic banking should be provided regularly, a campaign to awake customers and to make them aware should be a nonstop activity, in circumstances where, customers in large proportion did not know of the presence of internet banking while there is an existence of the advantages from using it, causes loss of money to the bank itself. If education would be provided regularly, there will be a chance of success in the adoption process. Education can be given to customers via televisions, social networks, radios, newspapers or other media channels, the customers should be emphasised much on the quality of the services, education on the perceptions of transaction cost, risks and others.
- iv. The government also, through TANESCO or any other bodies of electricity supply, should put an emphasis on supplying electricity in rural areas so that, all customers of banks can get an access to services like internet banking, because without stable power supply, electronic banking systems will be costly to banks and to customers also.
- v. The concerned bank (CRDB and NMB) should increase the number of electronic devices, especially automated teller machines, this would help the customers and even bank employees in service delivery, ATMs in particular would increase service rate to customers, if they were many in number, there is certainty that, there will be no queues.

5.5 Contribution of the research to knowledge

This research would give customers and bank operators, awareness and the way to strengthen electronic banking systems in Tanzania, especially in the form of automated teller machines, internet banking and mobile banking services, with creation of awareness to the employees and managers of specific banks that, they could have a greater role in promoting the usage of electronic banking, due to the fact that, electronic banking will reduce the degree of customer and an employee (customer server) contact, with an advantage in the increase in efficiency of services.

5.6 Suggestions for Further Studies

There are opportunities, which will be of a great help to interested bankers from this paper's coverage, for example, it will be very exciting to access quality service delivery through customers' satisfactions in the Tanzanian banking industry, or another interesting area will be to access the determinants of customers' choice of banking service in Tanzania and since many studies are conducted in urban areas, there will be a need for researchers to expand to the rural areas.

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APPENDICES

Appendix A: QUESTIONNAIRE FOR CUSTOMERS

My name is, a master's student at St. John's University of Tanzania. I am in the process of writing a thesis as part of the requirements for the award of the master's degree in Business Administration. In that regard, I am requesting for your cooperation in this short questionnaire. St. John's University of Tanzania and I guarantee you the strictest level of confidentiality.

Section One: Personal Profile (Mark with a ✓ in the space provided)

1. Gender of the respondent

Male	Female

2. Age in
years

Below 20	20-29	30-39	40-49	50-59	60 and above

3. Level of
education

No formal education	Primary	Secondary	Tertiary

4. Experience in using banking services

Less than a year	1 – 3	>3 – 6	>6 – 10	>10

Section Two: Customer Awareness of Electronic Banking Services (answer Yes or No by circling the answer)

5. Are you aware that your bank provides electronic banking services through mobile banking?
- a) Yes
 - b) No

6. Are you aware that, your bank provides for electronic banking services through automated teller machines?

a) Yes

b) No

7. Are you aware that, your bank provides for electronic banking services through internet banking?

a) Yes

b) No

Section Three: Factors constraining the adoption of Electronic banking systems in Tanzania (Mark with a √ in the space provided)

8. What do you think constrains you from using mobile banking services?

	<i>Constrains much</i>	<i>Constrains moderate</i>	<i>Does not</i>
Lack of electronic devices like mobile phones			
Low perceived value of mobile banking			
Perceived difficult of use			
Lack of awareness of mobile banking services			
Bank laxity in promoting electronic banking			
Perception on transaction costs			
Perception on security			
<i>Others</i>			

Section Four: Challenges of Electronic Banking Services

9. What challenges do you face in using electronic banking services?

- i. _____
- ii. _____
- iii. _____
- iv. _____
- v. _____

10. What measures do you think their effect would enhance your mobile banking experience?

- i. _____
- ii. _____

- iii. _____
- iv. _____
- v. _____

THANK YOU FOR YOUR PARTICIPATION

Appendix B: DODOSO KWA WATEJA

Jina langu ni, mwanafunzi wa Shahada ya Umahiri katika Chuo kikuu cha St. John cha Tanzania. Nipo katika mchakato wa kuandika tasnifu ili kukamilisha masomo ya Shahada ya Umahiri ya Biashara na Utawala. Hivyo, ninaomba ushirikiano wako kwa kujibu maswali ya dodoso hii fupi. Mimi na Chuo kikuu cha St. John tunakuahidi kuwa taarifa utazotupatia tutazitunza kwa usiri mkubwa.

Sehemu ya Kwanza: Taarifa Binafsi (Weka ✓ katika nafasi iliyo wazi)

1. Jinsia ya mtafitiwa

Mwanaume	Mwanamke

2. Umri

(miak

a)

Chini ya 20	20-29	30-39	40-49	50-59	60 na kuendelea

3. Kiwango

cha elimu

Sina elimu ya darasani	Misingi	Sekondari	Elimu ya juu

4. Miaka ya uzoefu wa masuala ya kibenki

Chini ya mwaka	1 – 3	>3 – 6	>6 – 10	>10

Sehemu ya Pili: Ufahamu wa wateja kuhusu huduma za kibenki za kielektroniki (Weka alama ✓ katika nafasi iliyo wazi)

5. Je, unafahamu kwamba benki yako hutoa huduma za kielektroniki, husasani benki za simuni?

- a) Ndio
- b) Hapana

6. Je unafahamu kwamba benki yako hutoa huduma za kieletroniki kupitia mashine za ATM?

- a) Ndio
- b) Hapana

7. Je unafahamu kwamba benki yako hutoa huduma za kieletroniki kupitia mtandao (internet)?

- a) Ndio
- b) Hapana

Sehemu ya Tatu: Sababu zinazokwamisha kutumiwa kwa mifumo ya kibenki ya kieletroniki nchini Tanzania (Weka alama ya ✓ katika nafasi iliyo wazi)

8. Je usababu zipi zinazokuzuia kutumia huduma za kibenki za kieletroniki?

	<i>Ni kikwazo sana</i>	<i>Kikwazo</i>	<i>Si kikwazo</i>
Ukosefu wa vifaa vya kieletroniki kama vile simu za mkoni			
Kuona thamani ndogo ya huduma ya benki za simuni			
Kuona ugumu kutumia huduma za benki simuni			
Kutofahamu uwepo wa huduma za benki za simuni			
Uzembe wa benki katika kutangaza huduma kibenki za kieletroniki			
Kudhani uwepo wa gharama kubwa katika kutumia huduma za benki kieletroniki			
Kuona hatari za kutumia huduma za kibenki kieletroniki			
<i>Sababu nyinginezo</i>			

Sehemu ya Nne: Changamoto za huduma za kibenki za kieletroniki

9. Je unakabiliana na chanagamoto gani katika kutumia huduma za kibenki za kieletroniki?

- i. _____
- ii. _____
- iii. _____
- iv. _____
- v. _____

10. Je, unafikiri ni hatua gani zinaweza kuboresha matumizi yako ya huduma za kibenki za simuni?

- i. _____
- ii. _____
- iii. _____
- iv. _____
- v. _____

ASANTE KWA USHIRIKIANO WAKO

Appendix C: QUESTIONNAIRE FOR EMPLOYEES

My name is, a master's student at St. John's University of Tanzania. I am in the process of writing a thesis as part of the requirements for the award of the master's degree in Business Administration. In that regard, I am requesting for your cooperation in this short interview. St. John's University of Tanzania and I guarantee you the strictest level of confidentiality.

Section One: Personal Profile (Mark with a ✓ in the space provided)

1. Sex of the respondent

Male	Female

2. Age
in
years

Below 20	20-29	30-39	40-49	50-59	60 and above

3. Level of
education

No formal education	Primary	Secondary	Tertiary

4. Years of banking
experience

Less than a year	1 – 3	>3 – 6	>6 – 10	>10

Section Two: Customer Awareness of Electronic Banking Services (Mark with a ✓ in the space provided)

5. Are you aware that your bank provides services electronically, notably mobile banking?

Yes	No

6. Does your customer subscribed to mobile banking?

Yes	No

Section Three: Factors constraining the adoption of Electronic banking systems in Tanzania (Mark with a √ in the space provided)

7. If the answer in question 6 above is no, what are the reasons that constrain your customer from subscribing?

	<i>Constrains much</i>	<i>Constrains moderate</i>	<i>Does not</i>
Lack of electronic devices like mobile phones			
Low perceived value of mobile banking			
Perceived difficult of use			
Lack of awareness of mobile banking services			
Bank laxity in promoting electronic banking			
Perceived risks of electronic banking			
<i>Others reasons</i>			

Section Four: Challenges of Electronic Banking Services

8. What challenges does your bank face in administering electronic banking services?

- i. _____
- ii. _____
- iii. _____
- iv. _____
- v. _____

9. What challenges do you think customers face in using electronic banking services?

- i. _____
- ii. _____
- iii. _____
- iv. _____
- v. _____

10. What measures do you think their effect would enhance customers adoption of mobile banking?

- i). _____
- ii). _____
- iii). _____
- iv). _____
- v). _____

THANK YOU FOR YOUR PARTICIPATION

Appendix D: INTERVIEW GUIDE FOR MANAGERS

1. Post at the bank
2. General working experience in the banking industry (in years)
3. Working experiences with the current bank
4. To what extent do you think customers know that your bank provides services electronically _____

5. To what extent are your customers accessing banking services electronically?

6. From your general understanding of the banking industry, to what extent to you think customers know that they can access banking services electronically, notably via their mobile phones?

7. From your general understanding of the banking industry, to what extent do you think customers are subscribed to electronic banking services?

8. From your general understanding of the banking industry, to what extent do you think subscribes of electronic banking use electric banking services?

9. Generally, what do you think are the reasons constraining the adoption of electronic banking systems in Tanzania?
 - i). _____
 - ii). _____
 - iii). _____

- iv). _____
- v). _____

10. What challenges do you face in administering electronic banking services?

- i). _____
- ii). _____
- iii). _____
- iv). _____
- v). _____

11. What challenges do you think customers face in accessing electronic banking services?

- i). _____
- ii). _____
- iii). _____
- iv). _____
- v). _____

12. What measures do you think their effect would enhance customer adoption of mobile banking?

- i). _____
- ii). _____
- iii). _____
- iv). _____
- v). _____


THANK YOU FOR YOUR PARTICIPATION

Product	Balance	10/1	10/2	11/01	11/1	11/2	11/3	11/4	11/5	11/6	11/7	11/8	11/9	11/10	11/11	11/12	11/13	11/14	11/15	11/16	11/17	11/18	11/19	11/20	11/21	11/22	11/23	11/24	11/25	11/26	11/27	11/28	11/29	11/30	12/01	12/02	12/03	12/04	12/05	12/06	12/07	12/08	12/09	12/10	12/11	12/12	12/13	12/14	12/15	12/16	12/17	12/18	12/19	12/20	12/21	12/22	12/23	12/24	12/25	12/26	12/27	12/28	12/29	12/30	12/31	1/01	1/02	1/03	1/04	1/05	1/06	1/07	1/08	1/09	1/10	1/11	1/12	1/13	1/14	1/15	1/16	1/17	1/18	1/19	1/20	1/21	1/22	1/23	1/24	1/25	1/26	1/27	1/28	1/29	1/30	1/31	2/01	2/02	2/03	2/04	2/05	2/06	2/07	2/08	2/09	2/10	2/11	2/12	2/13	2/14	2/15	2/16	2/17	2/18	2/19	2/20	2/21	2/22	2/23	2/24	2/25	2/26	2/27	2/28	2/29	2/30	3/01	3/02	3/03	3/04	3/05	3/06	3/07	3/08	3/09	3/10	3/11	3/12	3/13	3/14	3/15	3/16	3/17	3/18	3/19	3/20	3/21	3/22	3/23	3/24	3/25	3/26	3/27	3/28	3/29	3/30	3/31	4/01	4/02	4/03	4/04	4/05	4/06	4/07	4/08	4/09	4/10	4/11	4/12	4/13	4/14	4/15	4/16	4/17	4/18	4/19	4/20	4/21	4/22	4/23	4/24	4/25	4/26	4/27	4/28	4/29	4/30	5/01	5/02	5/03	5/04	5/05	5/06	5/07	5/08	5/09	5/10	5/11	5/12	5/13	5/14	5/15	5/16	5/17	5/18	5/19	5/20	5/21	5/22	5/23	5/24	5/25	5/26	5/27	5/28	5/29	5/30	5/31	6/01	6/02	6/03	6/04	6/05	6/06	6/07	6/08	6/09	6/10	6/11	6/12	6/13	6/14	6/15	6/16	6/17	6/18	6/19	6/20	6/21	6/22	6/23	6/24	6/25	6/26	6/27	6/28	6/29	6/30	7/01	7/02	7/03	7/04	7/05	7/06	7/07	7/08	7/09	7/10	7/11	7/12	7/13	7/14	7/15	7/16	7/17	7/18	7/19	7/20	7/21	7/22	7/23	7/24	7/25	7/26	7/27	7/28	7/29	7/30	7/31	8/01	8/02	8/03	8/04	8/05	8/06	8/07	8/08	8/09	8/10	8/11	8/12	8/13	8/14	8/15	8/16	8/17	8/18	8/19	8/20	8/21	8/22	8/23	8/24	8/25	8/26	8/27	8/28	8/29	8/30	8/31	9/01	9/02	9/03	9/04	9/05	9/06	9/07	9/08	9/09	9/10	9/11	9/12	9/13	9/14	9/15	9/16	9/17	9/18	9/19	9/20	9/21	9/22	9/23	9/24	9/25	9/26	9/27	9/28	9/29	9/30	10/01	10/02	10/03	10/04	10/05	10/06	10/07	10/08	10/09	10/10	10/11	10/12	10/13	10/14	10/15	10/16	10/17	10/18	10/19	10/20	10/21	10/22	10/23	10/24	10/25	10/26	10/27	10/28	10/29	10/30	10/31	11/01	11/02	11/03	11/04	11/05	11/06	11/07	11/08	11/09	11/10	11/11	11/12	11/13	11/14	11/15	11/16	11/17	11/18	11/19	11/20	11/21	11/22	11/23	11/24	11/25	11/26	11/27	11/28	11/29	11/30	12/01	12/02	12/03	12/04	12/05	12/06	12/07	12/08	12/09	12/10	12/11	12/12	12/13	12/14	12/15	12/16	12/17	12/18	12/19	12/20	12/21	12/22	12/23	12/24	12/25	12/26	12/27	12/28	12/29	12/30	12/31	1/01	1/02	1/03	1/04	1/05	1/06	
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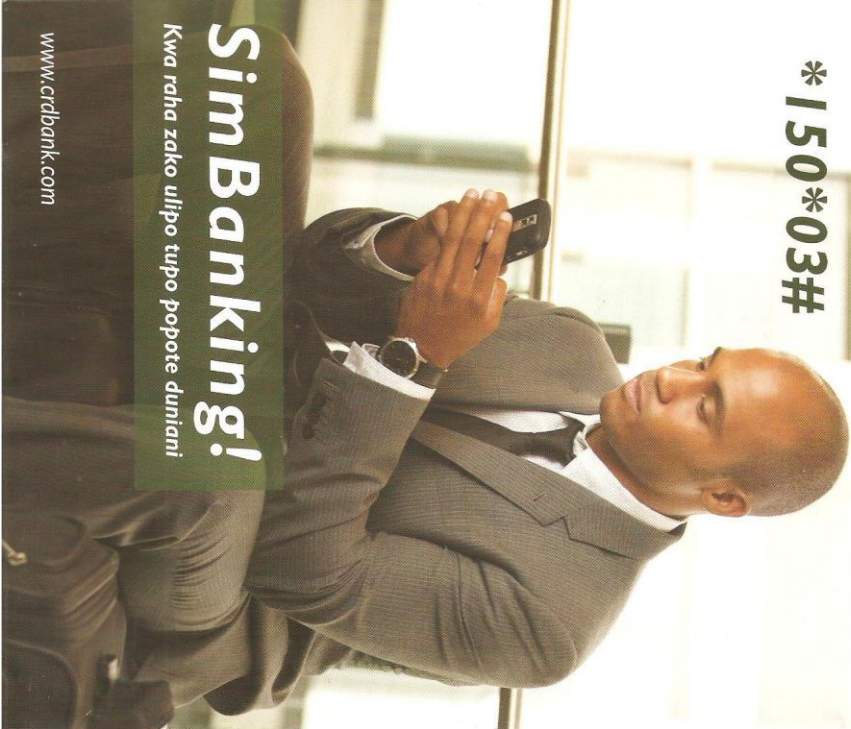
NMB
Close to you

**NMB Tariff Guide 2016
Extract for Retail
Banking**

[illegible]



***150*03#**



SimBanking!

Kwa raha zako ulipo tupo popote duniani

www.crdbank.com

Gharama za kila mwezi

	TZS	USD /EUR	GBP
Akaunti ya Hundi	12,500	12	8
Akaunti ya Akiba	1,500	2.5	2.5
Akaunti ya Mshahara	1,500	2.5	2.5
Akaunti ya Busara	Bure	-	-
Akaunti ya Scholar	1,500	2.5	2.5
Akaunti ya Tanzaniaite	1,500	2.5	2.5
Akaunti ya Junior Jumbo	Bure	Bure	Bure
Akaunti ya Malkia	Bure	Bure	Bure

Kutoa fedha

	TZS	USD /EUR	GBP
Kaunta (Tawini)			
Akaunti ya Hundi	3,000	1% ya kiasi chote, gharama ya chini 5	1% ya kiasi chote, gharama ya chini 5
Akaunti ya Busara	Bure	-	-
Akaunti ya JJ	Bure	-	-
Akaunti ya Malkia	Bure	Bure	Bure
Akaunti zingine	2,200	1% ya kiasi chote, gharama ya chini 5	1% ya kiasi chote, gharama ya chini 5
ATM			
Ndani ya mtandao wa Benki ya CRDB	800	-	-
Benki nyingine nchini	3,000	-	-
Benki nyingine nje ya nchi	5,000	Equivalent	-
FahariHuduma Wakala			
Kiasi hadi TZS 99,999	1,000	-	-
TZS 100,000 - 299,999	1,500	-	-
TZS 300,000 - 499,999	3,000	-	-
TZS 500,000 - 1,999,999	5,000	-	-
TZS 2,000,000 - 2,999,999	6,000	-	-
TZS 3,000,000 - 3,999,999	7,000	-	-
TZS 4,000,000 - 4,999,999	8,000	-	-
TZS 5,000,000 na zaidi	9,000	-	-

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Uchukwaji wa fedha nyingi (kaunti)

	TZS	USD /EUR	GBP
Akaunti ya Hundi			
Kiasi zaidi ya milioni TZS 20	0.1% ya kiasi chote, gharama ya juu 150,000	-	-
Akaunti ya Aibba			
Kiasi zaidi ya milioni TZS 5	0.1% ya kiasi chote, gharama ya juu 150,000	-	-

Kitabu cha Hundi

	TZS	USD /EUR	GBP
Gharama ya kitabu cha Hundi	350 kila Hundi	0.3 kila Hundi	0.3 kila Hundi
Kustisha malipo ya Hundi	1% ya kiasi chote, gharama ya chini 50,000 gharama ya juu 300,000	1% ya kiasi chote, gharama ya chini 30, gharama ya juu 300	1% ya kiasi chote, gharama ya chini 15 gharama ya juu 150
Kustisha/ kufungua Hundi	20,000 gharama ya juu 40,000	Wanisha na TZS	Wanisha na TZS
Kustisha/ kufungua kitabu cha Hundi	40,000	Wanisha na TZS	Wanisha na TZS
Kulipwa taslimu kwa mtu asiyekuwa na akaunti	2,000	Wanisha na TZS	Wanisha na TZS
Hundi iliyorejeshwa bila kulipwa "kwa kutokuwepo fedha kwenye akaunti"	1% ya kiasi chote, gharama ya chini 150,000 gharama ya juu 300,000	100	100

Ulipaji wa Hundi za Benki Nyingine

	TZS	USD /EUR	GBP
Ulipaji wa kawaida	Bure	Bure	Bure
Ulipaji wa haraka (special clearance)	50,000	40	-
Hundi za nje ya mkoa	0.5% ya kiasi chote, gharama ya chini 15,000, gharama ya juu 50,000	0.5% ya kiasi chote, gharama ya chini 10 gharama ya juu 35	-

Hundi Maalum ya Benki(Banker's Cheque)

	TZS	USD /EUR	GBP
Gharama ya Hundi	30,000	20	-
Kustisha Hundi	20,000	20	-

Kujua Salio

	TZS	USD /EUR	GBP
Kwenye kaunti	500	Bure	Bure
ATM	200	-	-
ATM za Benki ya CRDB	500	-	-
ATM za Benki zingine nchini	2,000	1	-
SimBanking	250	-	-
Internet Banking	Bure	Bure	Bure
FahariHuduma wakala	Bure	Bure	Bure

Taarifa ya Akaunti (Statement)

	TZS	USD /EUR	GBP
Taarifa ya hadi miezi 12 iliyopita	10,000	10	10
Taarifa ya zaidi ya miezi 12 iliyopita	25,000	20	12
FahariHuduma Wakala	1,000	0.45	-
E-Statement	Bure	Bure	Bure

Kuongeza Salio la Simu

		TZS	USD /EUR	GBP
SimBanking	Kila muamala	Bure	-	-
Internet Banking	Kila muamala	Bure	-	-

Kufufua Akaunti

	TZS	USD /EUR	GBP
Akaunti ya Hundi	10,000	10	6
Akaunti za amana isipokuwa Junior	5,000	5	5
Jumbo na Akaunti ya Maikla			

TemboCard

	TZS	USD /EUR	GBP
Kupata kadi kwa mara ya kwanza			
TemboCardVisa/ MasterCard	Bure	Bure	-
TemboCardVisa Gold	Bure	Bure	-
Ada ya kila Mwaka			
TemboCardVisa/ MasterCard	15,000	6	-
TemboCardVisa Gold	25,000	12	-
TemboCard Fahari	Free	-	-
Kupata Kadi nyingine baada ile ya awali kuisika muda wake			
TemboCard Fahari	5,000		
TemboCardVisa/ MasterCard	10,000	5	-
TemboCardVisa Gold	10,000	5	-
Ubadilishaji wa kadi			
TemboCardVisa/ MasterCard	20,000	10	-
TemboCardVisa Gold	20,000	10	-
Kupata namba ya siri (PIN) mpya	5,000	3	-

4 CRDB BANK PLC

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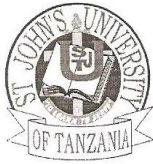
Kuhamisha Fedha

		TZS	USD /EUR	GBP
Ndani ya Mipandao wa Benki ya CRDB				
Kaunti (Tawini)	Kovenda akaunti nyingine	Bure	Bure	Bure
SimBanking	Akaunti yako nyingine	250	-	-
	Akaunti ya mtu mwingine	600	-	-
	Cardless	1,000	-	-
Internet Banking	Kila muamala	750	1.7	1.7
Faharihuduma Wakala	Kila muamala	1,000	0.5	-
Hamisha Fedha kwenda benki nyingine				
TISS	Kila muamala	10,000	10	-
EFT	Kila muamala			
		0.25% ya kiasi chote, gharama ya chini 150,000 jiu 50,000	0.25% ya kiasi chote, gharama ya chini 150,000 jiu 50	0.25% ya kiasi chote, gharama ya chini 150,000 jiu 50
Fedha kutoka benki nyingine				
TISS	Kila muamala	Bure	Bure	-
Fedha za Kigeni				
Kutumana fedha nje ya nchi	-	Wianisha na USD	0.25% wianisha na USD 50	Wianisha na USD
Fedha kutoka nje ya nchi		5,000	5	3

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Appendix G: RESEARCH CLEARANCE CERTIFICATE



ST JOHN'S UNIVERSITY OF TANZANIA
DIRECTORATE OF RESEARCH AND CONSULTANCY
INTERNAL REVIEW COMMITTEE

RESEARCH CLEARANCE CERTIFICATE

FOR MASTER'S AND DOCTORAL STUDENTS

Date of meeting: **19th, April, 2016**

Project title: **ASSESMENT OF FACTORS HINDERING ADOPTION
OF ELECTRONIC BANKING SYSTEMS IN TANZANIA**

Researcher: **NYANJIGA HEZEKIAH MUJUBERI**

Supervisor: **DR. BATIMO SEBYIGA**

Faculty / Institute / School: **Faculty of Commerce and Business**

Degree being studied for: **Masters of Science in Finance**

This is to certify that the research proposal herein detailed has been
examined and approved by the Internal Review Committee of St
John's University of Tanzania

A handwritten signature in purple ink, appearing to read "Dr. Michael Msendekwa".

Dr. Michael Msendekwa

Ag, Director, DRCPGS

A handwritten signature in purple ink, appearing to read "Prof. Casmir Rubagumya".

Prof. Casmir Rubagumya

DVCA

Appendix H: LETTER GRATING ETHICAL APPROVAL FOR DATA COLLECTION

ST JOHN'S UNIVERSITY OF TANZANIA

Directorate of Research, Consultancy and
Postgraduate Studies

Tel: +255 26-2390044
Fax: +255 26-2390025
Website: www.sjut.ac.tz



PO Box 47
DODOMA
Tanzania

Date: 19.04.2016

TO WHOM IT MAY CONCERN

Graduate Student's Research Clearance

This letter serves to introduce NYANJIGA H MUJUBERI (Registration Number M.2014/5097), who is a bona fide student of St John's University of Tanzania in the Faculty of Commerce and Business.

She is currently in the research stage of her Masters studies and is required to collect data. She has already obtained ethical clearance from SJUT Internal Review Committee/

Her approved research topic is:

ASSESSMENT OF FACTORS HINDERING ADOPTION OF ELECTRONIC BANKING SYSTEMS IN TANZANIA

I request that you grant this student all possible assistance to facilitate the completion of her research study.

Should you need further clarification please contact my office.

I wish to thank you for your kind assistance for this student.

Yours sincerely

A handwritten signature in purple ink, appearing to read "Dr. M. Msendeckwa".

Dr M. Msendeckwa
Ag, Director of Research, Consultancy and Postgraduate Studies
Email mmsendeckwa@sjut.ac.tz

