AN ASSESSMENT OF CONSUMER AWARENESS AND USAGE OF E-BANKING TRANSACTIONS THROUGH MOBILE PHONES: A CASE OF VODACOM TANZANIA LIMITED
AN ASSESSMENT OF CONSUMER AWARENESS AND USAGE OF E-BANKING TRANSACTIONS THROUGH MOBILE PHONES

A CASE OF VODACOM TANZANIA LIMITED

By
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A Dissertation Submitted in Partial/Fulfillment of the Requirements for Award of the Degree of Master of Science in Marketing Management of Mzumbe University

November, 2014
CERTIFICATION

We, the undersigned, certify that we have read and hereby recommend for acceptance by the Mzumbe University, a dissertation entitled; an assessment of consumer awareness and usage of e-banking transactions through mobile phones in partial/fulfillment for the award of Master of Science in Marketing Management Degree of Mzumbe University.

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ACKNOWLEDGMENTS

I am grateful to express my sincere gratitude to all people to who I am indebted in the cause of producing this thesis. Infact it would not have been possible without the contributions and assistances from various people.

My sincere gratitude should first go to my research supervisor Professor Dams Muna from Mzumbe University who encouraged and enabled me to complete this study, his constructive comments, criticism and suggestions made this study successful.

I have to thanks my lovely parents Mr. & Mrs. Mohamed Bakari, my lovely wife Grace Ngailo and our beautiful daughters Erica and Noreen for their love and support throughout my life. Thanks you both for giving me strength to reach for the stars and chase my dreams. My sister and uncle deserve my wholehearted thanks as well.

Special and sincere thanks are extended to Vodacom staffs for their outstanding assistance and their active participation and responses to this work during data collection. In particular I also wish to acknowledge with thanks the active responses by employees from different offices that spared their time to respond to the questionnaire.

Finally, it is difficult to mention all those with whom I came across during preparing this thesis. However I would like to take this opportunity to thank all of them that I have failed to mention them by names. I greatly appreciated and valued their support to my work.

Thanks you, Lord, for always being there for me. This thesis is only beginning of my journey.
DEDICATION

This dissertation is lovingly dedicated to my loving and supportive wife, Grace Ngailo, our two beautiful little girls, Erica and Noreen, may you also be motivated and encouraged to reach your dreams.
ABSTRACT

A study was conducted to assess consumer awareness and usage of e-banking transactions through mobile phones using a case of Vodacom Tanzania limited. The specific objectives of this study were to: identify factors influencing the adoption intention of e-banking transactions through mobile phones, identify attitudes towards usage intention of e-banking transactions through mobile phones, identify barriers on usage intention of e-banking transactions through mobile phones and suggest measures that should be instituted to improve the situation.

The study adopted case study design; purposive sampling and simple random sampling were used to select respondents. Questionnaires and interview were used in data collection and a sample size of 55 respondents was used in the study. Findings revealed that 36%, 18% and 24% of respondents identified benefits, self-efficacy and ease of use respectively as key factors influencing the adoption intention of e-banking transactions. Findings also revealed that 45% and 27% of interviewed respondents identified perceived usefulness and perceived ease of use respectively as key attitudes towards usage intention of e-banking transactions through mobile phones. Moreover, the findings revealed that 42% and 25% of interviewed respondents identified insufficient understanding of the services and technical issues as the key barriers on usage intention of e-banking transactions through mobile phones.

The study concluded that, benefits, self-efficacy, and ease of use exert significant influences on consumers’ perception towards e-payment. Also, attitude is the major determinant of mobile banking adoption intention, perceived usefulness and perceived ease of use from the technology acceptance model influence usage of e-banking transactions. Similarly, with the recent and forecasted high growth of electronic banking, it has the potential to develop into a world-scale internet economy which has potential barriers that requires examination. Henceforward, the study recommends that, Policy makers and service providers should have an advanced knowledge since it has provided information on the current state of e-banking acceptance and use, particularly among Tanzanians as they develop strategies directed at increasing e-banking acceptance and use. Service providers should educate consumers through demonstrations and training in order to better equip them to master e-banking transactions in mobile banking systems so as to mitigate barriers on usage intention of e-banking transactions through mobile phones. Service providers should promote the use of mobile banking services to enhance e-banking transactions.
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<th>Full Form</th>
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<tr>
<td>BOT</td>
<td>Bank of Tanzania</td>
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<tr>
<td>CRDB</td>
<td>Cooperative Rural Development Bank</td>
</tr>
<tr>
<td>CRM</td>
<td>Customer Relationship Management</td>
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<tr>
<td>GSM</td>
<td>Global System for Mobile Communication</td>
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<tr>
<td>ICT</td>
<td>Information Communication Technology</td>
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<tr>
<td>MBSs</td>
<td>Mobile Banking Services</td>
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<tr>
<td>PC</td>
<td>Perceived Credibility</td>
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<tr>
<td>PE</td>
<td>Perceived Expressiveness</td>
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<td>PEOU</td>
<td>Perceived Ease of Use</td>
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<tr>
<td>PU</td>
<td>Perceived Usefulness</td>
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<tr>
<td>SEM</td>
<td>Structural Equation Modeling</td>
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<tr>
<td>SPSS</td>
<td>Statistical Package for Social Science</td>
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<tr>
<td>TAM</td>
<td>Technology Adoption Model</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
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<td>USA</td>
<td>United States of America</td>
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CHAPTER ONE
INTRODUCTION AND BACKGROUND TO THE STUDY

1.0 Introduction
This chapter presents the introduction and background to the study, regulations of E-Banking in Tanzania, guidelines and regulations of electronic banking, statement of the problem, research objectives, research questions, significance, limitations and scope of the study.

1.1 Background of the study
Banking activities in Tanzania could be traced back to the 1900s; banking practices are a result of the colonialists who for the purpose of facilitating their economies in Tanzania and East Africa at large introduced Banks. The earlier banks were a product of the Germany regime in Tanganyika (Binamungu and Ngwilimi, 2006). A great deal of banking regulations was made by the British regime in 1919 in Tanzania. Apart from introducing more banks, the Germans enacted a number of laws to regulate banking activities. After independence the banks carried colonial banking legacies, but after Tanganyika Arusha declaration of 1967 all private owned banks were nationalized. Come early 1990s a report on the inquiry into Monetary and banking systems in Tanzania by the Nyirabu Commission was delivered. Its major contribution in banking development is substantial; it is the cause of the various laws on banking business such as the Banking and Financial Institution Act, 1991. Despite its remarkable contribution the latter did not point out a thing on electronic banking, because Information Communication Technology (ICT) had not ventured into use by most Financial Institutions in the country though its impacts were felt already by the developed countries such as United States of America (USA) and the United Kingdom (UK).

Since then financial service providers have been using electronic message transmitted through proprietary software system (intranets) for some time before ICT introduced internet (Mollel, 2011). Come the 21st century and the introduction of
internet caused a dramatic revolution in the old traditional methods of transactions which has necessitated most banks and financial institutions in most countries introduce the use of such technology in most commercial activities (George, 2011). Electronic banking in Tanzania is in its early stages, though a great response of use is witnessed. The adoption of Automated Teller Machines by various banks and financial institutions is of pride, the adoption of m-banking by various communication Companies such as Tigo, Vodacom and Airtel gear habits for deposits and quick transfers of money or payments via electronic payments services. The adoption of electronic banking by Cooperative Rural Development Bank (CRDB) evidently indicates the role played by electronic banking in the country.

1.1.1 Regulation of E-Banking in Tanzania
Despite the ages of deregulations of laws governing banking business from the 1990s to the year 2006, the set of laws such as Bank of Tanzania Act 2006, the Banking and Financial Institutions Act 2006, The Bills of Exchange Act 2006, the Law of Contract Act 2002 and the recently 2010, Electronic and Postal Communication Act 2010, in which one would expect the laws to cater on matters related to electronic transactions, no single provision in the laws, which specifically regulates electronic banking in Tanzania. Instead the salient features of the 2006 laws provide for mandatory, writing, handwritten signatures making them same to the old regime despite their being enacted during the era of electronic concentration in all the spheres of life. For a further elaboration the provision of section 6(1) of the Bank of Tanzania Act, for example does not expressly provide for electronic banking regulation.

Inexistence of such specific provision in the substantive part of the law, which establishes the rights, duties and offences as against the parties, makes it worth pointing out that, the substantive part of the law in Tanzania does not regulate electronic banking as a result, a need for new laws. Inexistence of clear provisions in these laws appear to be contrary to the country’s policy on information communication and technologies which identifies the need for legislative instruments
on privacy, security, cybercrime, ethical and moral conduct and encryption (ICT policy, 2003). As a result of its being silent a cyber-criminal is penalized under Economic Sabotage Act 2007, this practice is contrary to the other jurisdiction that instead has a set of laws to cater for electronic crimes independently of the criminal law act.

1.1.2 Guidelines and Regulation of Electronic Banking
The Outsourcing Guidelines for Banks and Financial Institution, 2008 under the provision of section 5(h) point out the outsourcing arrangement to include Back office management, electronic funds transfer, payroll processing, custody operations, quality control, printing and purchasing and issue directives. The guidelines are a creation of section 71 of the Banking and Financial Institution Act, which empowers the Governor to make prudential guidelines or requirements not expressly mentioned in the act, it is the requirement of the guidelines that each financial institution when adopting the use of ICT provides a scheme of risk management.

Regarding the Bank of Tanzania (BOT) guidelines it is worth pointing out that there are in place procedures to be complied by a bank adopting e-banking, while much of the essential rights and obligations to be covered under a substantive part of the law is left unregulated. It a considered opinion, that electronic banking with its wider coverage cannot be regulated by a mere provision of a guideline which in itself is unclear, unlike the guidelines in Nigeria which are meant at regulating the whole of electronic banking.

1.2 Statement of the Problem
The adoption in mobile banking by the banked and unbanked presents a mobile banking technology acceptance by the urban-rural banked and unbanked. The number of mobile phone users has long exceeded the number of people with bank accounts across the world. Various researchers have studied the factors and intentions of customers to use mobile banking services and others focused on the influence of religion on Islamic mobile phone banking services adoption, intentions
of customers to use mobile phone credit cards and attitudes towards online mobile banking. Most of the reviewed empirical studies on consumer awareness and usage of e-banking transactions through mobile phones are in context of the factors, attitudes and intentions of customers on the adoption of mobile banking services in other countries and there are missing literatures in this study of consumer awareness and usage of e-banking transactions through mobile phones segment in Tanzanian context. Also, the adoption of the service remains low, suggesting the service is largely unnoticed and underutilized in spite of its availability. Therefore, the study needs to assess consumer awareness and usage of e-banking transactions through mobile phones.

1.3 Research Objectives
1.3.1 Main Objective
The main objective of the study was to assess consumer awareness and usage of e-banking transactions through mobile phones using Vodacom Tanzania Limited.

1.3.2 Specific Objectives
i. To identify factors influencing the adoption intention of e-banking transactions through mobile phones.
ii. To identify attitudes towards usage intention of e-banking transactions through mobile phones.
iii. To identify barriers on usage intention of e-banking transactions through mobile phones.
iv. To suggest measures that should be instituted to improve the situation.

1.4 Research Questions
i. What are the factors influencing the adoption intention of e-banking transactions through mobile phones?
ii. What are the attitudes towards usage intention of e-banking transactions through mobile phones?
iii. What are the barriers on usage intention of e-banking transactions through mobile phones?

iv. What measures should be instituted to improve the situation?

1.5 Significance of the study
The study provides new knowledge on awareness and usage of e-banking transactions to service organizations using a case of Vodacom Tanzania Limited. To policy makers, the study assists on usage of e-banking transactions policy implementation and supervision to secure mobile transactions fairly in the market place.

To service providers, the study benefits service providers through knowledge acquired to strategically deal with mobile banking transactions through better innovation to enhance organization profitability.

1.6 Limitations of the Study
Time and financial constraints were the major limitations in this study. Another limitation was respondent’s unwillingness to respond to questionnaires at a required time. However, the researcher used different methods of data collection to collect data from different respondents from service providers to maintain data confidentiality. Moreover, the researcher was committed on follow-up measures in collecting all questionnaires from respondents timely and efficiently without delay.

1.7 Scope of the Study
The research was limited only to consumer awareness and usage of e-banking transactions through mobile phones using Vodacom Tanzania Limited. As such the findings of the study cannot be generalized for all mobile financial transactions.
CHAPTER TWO
LITERATURE REVIEW

2.0 Introduction
This chapter is divided into four distinct parts. The chapter presents the definitions of key terms, theoretical literature review, empirical literature review and conceptual framework as used and explained by different scholars on consumer awareness of e-banking transactions.

2.1 Definition of key terms
This part defines the key concepts used in the study. These concepts are electronic banking and mobile transactions as used in the study.

2.1.1 Electronic banking
The telecommunications industry worldwide has scrambled to bring what is available to networked computers to mobile devices (Schofield and Kubin, 2002). Presently, the use of electronic banking is considerably high and as more and more users sign up for electronic-banking, the maturity as regards remote banking (i.e. banking outside the banking hall) is on the increase. With electronic banking, users can now conveniently carry out banking transactions, but this convenience cannot be achieved if the user does not have access to the internet, hence, in other words, the user cannot carry out a banking transaction while waiting for a bus, or perhaps while having lunch in a restaurant. With m-banking, convenience can be achieved 24/hrs a day. This is because a user has access to his mobile phone all day, at all times. So, to effectively achieve a truly convenient banking mode, a truly mobile mode of banking has to be explored, hence the need for m-banking (Schofield and Kubin, 2002).

2.1.2 Mobile Transactions
One view is that mobile technology is just another, although highly innovative, access channel; an alternative is that mobile telecommunications networks are becoming the „front office” for financial services leaving the existing banks as
providers of back office functions. But there is also another view which seeks to define the competitive advantages of the banking and mobile finance business models and then explore the ways in which these could give rise to new market structures within which the existing portfolio of financial services (savings, credits and transactions) can be unbundled. There are a number of mobile transaction initiatives in the developed and developing world. Most are bank-led and largely provide an information and transaction channel which complements existing bank access channels such as branches, telephone banking and online services (Nick Hughes and Susie Lonie, 2007).

2.1.3 M-Commerce
The phrase mobile commerce was originally coined in 1997 to mean "the delivery of electronic commerce capabilities directly into the consumer’s hand, anywhere, via wireless technology (Niranjanamurthy & Kavyashree, 2013).

2.1.4 Y-Generation
This is a generation of people born during the 1980s and early 1990s. The name is based on Generation X, the generation that preceded them. Members of Generation Y are often referred to as “echo boomers” because they are the children of parents born during the baby boom (the “baby boomers”). Because children born during this time period have had constant access to technology (computers, cell phones) in their youth, they have required many employers to update their hiring strategy in order to incorporate updated forms of technology (Schejter et al., 2010).

2.2 Theoretical Literature Review
This section presents different theories concerning the study in order to get different insights regarding the subject matter.

2.2.1 Trends in Mobile Banking
The advent of the Internet has revolutionized the way the financial services industry conducts business, empowering organizations with new business models and new
ways to offer 24 hour accessibility to their customers. The ability to offer financial transactions online has also created new players in the financial services industry, such as online banks, online brokers and wealth managers who offer personalized services, although such players still account for a tiny percentage of the industry. Over the last few years, the mobile and wireless market has been one of the fastest growing markets in the world and it is still growing at a rapid pace. According to the Global System for Mobile Communication (GSM) Association and Ovum, the number of mobile subscribers exceeded 2 billion in September 2005, and now exceeds 2.5 billion (of which more than 2 billion are GSM). According to a study by financial consultancy Celent, 35% of online banking households will be using mobile banking by 2010, up from less than 1% today. Upwards of 70% of bank center call volume is projected to come from mobile phones. Mobile banking will eventually allow users to make payments at the physical point of sale. "Mobile contact less payments” will make up 10% of the contact less market by 2010. Many believe that mobile users have just started to fully utilize the data capabilities in their mobile phones (Salzaman M, Palen L, Harper R., 2001).

In Asian countries like India, China, Bangladesh, Indonesia and Philippines, where mobile infrastructure is comparatively better than the fixed-line infrastructure, and in European countries, where mobile phone penetration is very high (at least 80% of consumers use a mobile phone), mobile banking is likely to appeal even more. This opens up huge markets for financial institutions interested in offering value added services. With mobile technology, banks can offer a wide range of services to their customers such as doing funds transfer while traveling, receiving online updates of stock price or even performing stock trading while being stuck in traffic. According to the German mobile operator Mobilecom, mobile banking will be the "killer application" for the next generation of mobile technology.

2.2.2 Adoption and use of mobile phones in Tanzania
Mobile telephony adoption is on the rise and the related technological innovations have dramatically enhanced the capabilities of the mobile phones (Salzaman et al,
About two billion people worldwide are using a mobile phone. As the number of mobile phone increases there has been a pervasive impact on people’s lives (ITU, 2006). Mobile phones adoption and use has a positive and significant impact on economic growth, and this impact may be twice as large in developing countries as in developed countries (ITU, 2005; Salzaman et al, 2001). In Africa particularly it has been said “people in Africa use mobile phones very differently. Most strikingly is the accessibility of mobile as the overall impact of mobile extends well beyond what might be suggested by the number of subscriptions alone (ITU, 2005).

In Tanzania there has been a sporadic mobile phone subscription by the rural and urban populations. The number of mobile subscribers in Tanzania has risen to 12 million subscribers from 6.5 million subscribers in June 2006, from the country’s two operators (Vodacom and Airtel) against 293,400 fixed lines (ITU, 2007). This increased accessibility to mobile phones has introduced changes in most sectors of the economy and particularly the urban informal sector. Consequently, Tujiungee Business has changed their business and operation environment, thereby creating an impact to Tanzania’s fastest growing sector and employer (ITU, 2007).

2.2.3 Risks on the Implementation of Electronic Banking

Operational risks: E-banking has some special characteristics that lead to increased and changing risks considered traditional banking activities. These characteristics are extraordinary speed of change in technology; open and global nature of electronic networks; integration of electronic banking with the core of banking; increasing dependence of banks from third parties, which develops software applications necessary to run the e-banking. Due to rapid changes occurring in technology, banks are faced with specific risks of electronic banking and electronic money activities.

Legal risks: Appears through the non-compliances with the laws, rules, regulations or practices prescribed or where the rights and legal obligations of the parties participating in a transaction are not set correctly. Non divulgence or secrecy is the duty of the banker to his customers account; if electronic banking is misused by its agents or employees who are at the exposure of one’s account status and disclose
such information to the public or his competitors then the bank shall be liable. As such involvement of independent contractor who are equipped with ICT knowledge is the other legal challenge, such personnel at times tend to use such knowledge to steal from various accounts (Binamungu and Ngwilimi, 2006).

Reputation risks: Is the risk due to a significant and negative public opinion which consists of a critical loss of the funds or bank’s customers. Reputation risk can occur when the bank fails to fulfill critical functions. Continuous loss of money by fraud via internet or through the use of the Automated Teller Machines may cause destruction of the banks reputation henceforth its demise, as customers would always wish for a secured place to trust for the deposit of their funds. The pending case at Kisutu involving two Bulgarians, Nedko Lazarov Stancev (35) and Stella Peteva Nedelcheva (23), the accused are said to have been nabbed in the process of stealing a total of 70m/ from various customers’ accounts through ATMs in Dar-es-Salaam banks. The incident is believed to be part of a rising wave of similar cases of cybercrime that has hit banking institutions in different parts of Tanzania in recent months (Mambi, 2010).

2.2.4 Challenges on the Implementation of Electronic Banking

Security codes control challenges: It is argued that electronic banking is global thus anyone can transact at any time from any place, this in turn is a challenge on the whole question of protection of customers’ accounts or information, a mere knowledge of one’s code which serves as ones identity transacting via electronic means that if someone else has your codes, he/she can transact on your account as if he/she were you.

Phishing and spoofing challenges: Electronic Banking is challenged by cybercrimes, as one can maneuver the whole aspect from a distance and becomes unrecognized acts of phishing in which one creates an email in the name of the financial Institution and delivers it to customers, would cause a serious challenge by giving out information which are used to draw money from a person’s account. The
latter challenge is with individuals who would steal by creating website resembling that of one’s bank and attain data that enable him take someone else’s money as if he is the real owner.

**A legislative Framework appropriate for electronic banking:** The other challenge is with the current legal system on electronic banking, it does not provide for adequate safeguards to create an environment of trust for electronic banking. Consequently, institutions cannot set up related provisions to support electronic transactions of their own. In the words of (Mambi) “while one would expect the accused to face cyber-crimes or computer crime charges, the accused faced three counts of economic sabotage” (Rosemary, 2009). All these is the result of lack of cyber laws in the country to address them.

**Traditional Market Mechanism as a challenge:** The continued use of traditional market mechanism such as the use of actual currency remains a challenge in the country on electronic banking, various literatures support that the promise of electronic commerce, banking swinging in has been recognized in Tanzania, but the fact is that it has not been realized at the rate which policy documents of the country claim (Aleksandra, 2001).

**Convertibility of electronic currency as challenge:** Electronic banking is faced by the challenge on its payment mechanism, electronic payment system operation which suffers from lack of convertibility of electronic currency. The balance in any electronic cash account is not convertible like cash without the help of an intermediating third party.

### 2.2.6 Background Theory

Literature on technologies adoption and diffusion suggest to us to be open to more than one approaches of technology adoption to identify relevant factors of any technology adoption (Khalifa & Davison, 2006). Abrahamson (1991) also advocates for using multiple perspective in innovation research. He argues that under the
condition of uncertainty, ‘fad’ or ‘fashion’ model, based on institutional theory of innovation, better suits with innovation research than ‘rationalistic goal oriented’ model. The underlying notion of rationalistic goal oriented or efficient theory is individual make choice regarding adoption of an innovation based on goals and technical consideration. Inclusion of more than one theoretical perspective enriches the depth and breadth of innovation research (Poole and Van de Ven, 1999; Wolfe, 1994). In this paper we present four dominants technology adoption model. Out of four, Technology Adoption Model (TAM) (Davis, 1995) and TOE framework (Tornatzky & Fleischer, 2000) are known as rationalistic goal oriented model. Institutional Intervention Theory of King et al., (1994) and Institutional Theory of DiMaggio and Powell (1993) are two dominant institutional theories in technology adoption.

2.2.7 Institutional Intervention Theory
In the adoption and diffusion of an innovation, influence and regulatory actions are important (King et al., 1994). King et al. (1994) provide a list of institutions in their seminar paper and claim that potential institutional action may take two dimensions and draw a model in line with that. Institutions can exert pressure through influence and regulatory power and ‘Supply push’ and ‘Demand pull’ forces lay down the context for those actions to take place (King et al.1994). Both ‘Supply push and ‘Demand pull’ are required for innovation adoption (See Exhibit 4 for details). Supply push innovation comes from the supplier of innovation and demand pull generates from the users to enjoy the innovation. This theory has been used in many technology adoption studies like e-commerce adoption (Scupola, 2003); EDI adoption (Dansgaard and Lyytinnen, 2001).

2.3 Empirical Literature Review
Hanudin (2008), studied the factors affecting the intentions of customers in Malaysia to use mobile phone credit cards. Mobile phones have provided an opportunity for banking institutions to introduce new services to the public. The latest service, which is now available in Malaysian banking institutions, is the mobile phone credit card.
The purpose of this paper is to provide a preliminary investigation of the factors that determine whether Malaysia's bank customers will use the new mobile phone credit card technology. This paper extends the applicability of the technology acceptance model (TAM) to mobile phone credit cards and includes “perceived credibility (PC)”, the “amount of information about mobile phone credit cards (AIMCs)” and “perceived expressiveness (PE)”, in addition to “perceived usefulness (PU)” and “perceived ease of use (PEOU)”. The results indicate that PU, PEOU, PC and the amount of information contained on mobile phone credit cards are important determinants to predicting the intentions of Malaysian customers to use mobile phone credit cards. However, PE is not an important determinant in predicting the intentions of Malaysian customers to use mobile phone credit cards. The study conducted in Eastern Malaysia contains a small sample size and a limited number of measures in the model developed for the study. Nevertheless, it provides new information about an emerging market and technology. The results will be primarily of benefit to the commercial banks in Malaysia since this study offers banking institutions an insight on the intentions of their customers to use mobile phone credit cards. The study extends the understanding of TAM to newly emerging contexts such as the mobile phone credit card.

Susan et al (2012), studied the influence of religion on Islamic mobile phone banking services adoption. The purpose of this paper is to explore the effects religious affiliation and commitment has on Southeast Asian young adults' intention to adopt Islamic mobile phone banking. An online self-administered survey questionnaire was distributed to Southeast Asian young adults through convenience and snowball sampling and a total of 135 responses obtained. The study found that Islamic mobile phone banking to be a novelty service, with little consumer awareness and experience, especially among non-Muslims. Religious affiliation and commitment were both effective segmentation strategies, as differences in adoption intention were found between Muslims and non-Muslims, as well as devout and casually religious Muslims. Overall, devout Muslims were socially-oriented with their adoption criteria whereas casually religious and non-Muslims relied upon the utilitarian attributes. The
paper contributes to the existing mobile banking adoption literature by providing evidence of consumers' adoption intentions toward Islamic mobile phone banking. It also uses religious commitment in addition to affiliation as segmentation tools, an approach which has not been used in previous Islamic mobile banking research.

Sylvie and Xiaoyan (2005), did a study on consumers’ attitudes towards online and mobile banking in China. The aim of this study is to investigate the market status for online/mobile banking in China. With the recent and forecasted high growth of Chinese electronic banking, it has the potential to develop into a world-scale internet economy and requires examination. The demographic, attitudinal and behavioural characteristics of online and mobile bank users were examined. Respondents from six major Chinese cities participated in the consumer survey. The results showed that Chinese online and mobile bank users were predominantly males, not necessarily young and highly educated, in contrast with the electronic bank users in the West. The issue of security was found to be the most important factor that motivated Chinese consumer adoption of online banking. Main barriers to online banking were the perception of risks, computer and technological skills and Chinese traditional cash-carry banking culture. The barriers to mobile banking adoption were lack of awareness and understanding of the benefits provided by mobile banking. This study offers an insight into online/mobile banking in China, which has not previously been investigated. Distinct differences and common trends between Chinese and other countries were observed with clear indication of marketing strategy to be deployed by the service providers.

Peter (2012), did a study towards a model of adoption in mobile banking by the unbanked: a qualitative study. This paper presents a qualitative study on mobile banking technology acceptance by the rural unbanked. The number of mobile phone users has long exceeded the number of people with bank accounts across the world. The purpose of this paper is to determine the factors that will affect the acceptance of mobile banking by the rural unbanked. The main purpose of this qualitative research is to discover the deeper motivations and associations that underlie an unbanked
consumer's intentions to adopt mobile banking services. The use of open-ended questions in the group discussions allowed participants to explain, comment and share experiences, attitudes, opinions, and beliefs, with specific focus on the consumer (his cognition and emotions as a result of the consumption intentions). Focus groups provide an opportunity to capture the meaning that consumers give to different aspects of reality they live in through group dynamics and interactions.

The findings of the study indicate that perceived usefulness and perceived ease of use from the technology acceptance model, economic factors and trust influence the rural unbanked intention to adopt and use mobile banking services. Although the qualitative study brings out the underlying motives of the rural unbanked, it does not statistically test the extension of the technology acceptance constructs and its antecedents that are discovered. Also, there was a limitation in the use of language and transcribing from a native language into English. The demand for mobile banking services by the unbanked can be linked to their demand for savings and loan services. Therefore, for successful adoption of mobile banking by the unbanked, operators should promote the use of mobile banking services for savings and loans. Firms should further consider educating consumers through demonstrations and training to better equip them to master mobile banking systems. Once consumers feel more competent in utilizing the system, they would find it easier to use and will be encouraged to use it. The value of the paper lies in the use of a focus group discussion to unveil new determinants of technology acceptance by the rural unbanked and the identification of convenience and affordability as antecedents to perceived usefulness.

Rakhi and Mala (2013), did a study on customer usage intention of mobile commerce in India: an empirical study. Mobile commerce is a broad term used for mobile banking, mobile ticketing, mobile coupons, purchasing of goods and services using mobile phones. Considering mobile penetration and changing lifestyles of the Indian population, it has a huge potential. The purpose of this paper is to investigate the factors influencing the adoption intention of mobile commerce. For the study, a
A research model was developed based on constructs from the technology acceptance model and innovation resistance theory and a literature review on research related to usage intention of similar technologies which was then empirically tested using second generation statistical technique of SEM. Perceived usefulness, perceived ease of use and social influence are found to be significant dimensions of technology adoption readiness to use mobile commerce while facilitating conditions were not found to be significant. The results also indicate perceived credibility risk defined by security risk and privacy risk is significantly associated with behavioural intention in negative relation, which indicates that security and privacy concerns are important in deterring customers from using mobile commerce.

This study proposed and validated a new construct—technology adoption readiness. The study developed an integrated model for behavioural intention towards financial innovations. Knowing the factors affecting customers' behaviour towards mobile commerce and the relationship between these factors, various banks, merchants and mobile service providers can develop their marketing strategies to ensure that people use this new service. This in turn will influence the behavioural intention and change these intentions to actual adoption of this new technology. This study is one of the few empirical studies which have investigated the adoption of mobile commerce in India, which is considered one of the fastest growing countries in terms of mobile usage. The study relates to inclusion of both utilitarian and credibility aspect of adoption intention. It gives an empirical basis on which mobile and banking companies can base their mobile payments marketing strategy.

ChauShen (2013), did a study on perceived risk, usage frequency of mobile banking services, in Taiwan. This study discusses the effects of diffusion and adopters of mobile banking services (MBSs), perceived risk, brand awareness, and brand image of MBS providers, on attitude toward using MBSs, and on intention to use MBSs. In accordance with sample usage frequency in MBSs, this study subgroups the sample population into several behavioral segments (frequent/infrequent users) to concentrate sample characteristics and the behavioral models. Data from the 610
valid questionnaires collected in Taiwan were analyzed by SPSS and LISREL. In accordance with sample usage frequency in MBSs, this study groups the sample population into several behavioral segments (frequent/infrequent users) and concentrate on sample characteristics and the behavioral models. Analytical results demonstrate that mobile banking users with different behavioral patterns have dissimilar perceptions of innovation benefits and risk. Moreover, brand awareness and brand image of the MBSs provider are crucial exogenous factors associated with attitude and intention to use MBSs. Finally, this study presents several suggestions for researchers, bankers, and marketers.

This study examined MBSs in Taiwan, with an enhanced investigation model includes diffusion of innovation, TPA, second-order risk sub-dimensions, and brand effects on attitude and intention. The contributions of this study include: this is the first study that incorporate brand awareness, and brand image in discussing mobile banking adoption behavior; meanwhile, this study incorporate a five factors risk structure, discussing financial risk, performance risk, time risk, psychological risk, and privacy risk. Furthermore, this study is the first study that has differentiated between different consumer types: frequent and infrequent users. The findings of this study are practical in providing MBS for bankers.

Rakhi and Mala (2014), studied the adoption readiness, personal innovativeness, perceived risk and usage intention across customer groups for mobile payment services in India. This research seeks to accomplish two objectives-to test the functional relationship between adoption readiness, perceived risk and usage intention for mobile payments in India and to investigate the stability of proposed structural relationships across different customer groups. The literature concerning major attributes of technology acceptance was systematically reviewed to develop construct of adoption readiness. Comprehensive model consisting of adoption readiness, personal innovativeness and perceived risk was put together. The model was then empirically tested using structural equation modeling. On appraising the proposed model, five out of six hypotheses were fully supported while one
hypothesis was partially supported. Test of invariance showed significant variance among users and non-users. The results of the study may vary with national context, service offerings, regulatory framework, and other customer personal variables (i.e. lifestyle) suggesting future research opportunities. The results facilitate the comprehension of the role of different factors on the mobile payments usage intention among customers. In addition, the results expand the knowledge on consumer behaviour towards financial technological innovations. The results expand one’s knowledge on this relationship, propounding interesting empirical evidence of the model invariance among different consumer groups.

Wendy et al (2013), studied the factors affecting consumers’ perception of electronic payment: an empirical analysis. In view of the promising growth of e-payment in Malaysia, this study aims to discover the factors influencing perception towards electronic payment (e-payment) from the Malaysian consumers’ perspective. Literature indicates that factors such as benefits, trust, self-efficacy, ease of use, and security influence consumers’ perception towards e-payment. A self-reporting questionnaire was developed and disseminated to 200 respondents, out of which 183 valid responses were considered for further statistical analysis. The multiple linear regression results reveal that benefits, self-efficacy, and ease of use exert significant influences on consumers’ perception towards e-payment. However, the insignificant results obtained for trust and security warrant further investigation. This study proposes five factors for measuring consumers’ perception towards e-payment which is replicable across different economies. However, the small sample size raises the issue of generalizability which future studies should seek to address. The use of e-payment by the majority of respondents confirms that there is a great potential for future expansion of such payment devices. The challenge is to ensure that it continues to meet consumers’ expectations which will subsequently lead to its increased adoption and use. This study has advanced knowledge for it has provided information on the current state of e-payment acceptance and use, particularly among Malaysians. The significant factors identified are beneficial to the policy maker,
banking institutions, online transaction facilities providers, and software developers as they develop strategies directed at increasing e-payment acceptance and use.

Felix and Alain (2013), did a study on the analysis of the determinants of consumer’s' m-commerce usage activities. The purpose of this paper is to examine the factors examining the determinants of users’ mobile commerce (m-commerce) usage activities. Data were collected from 402 users in Malaysia, and structural equation modeling analysis was employed to test the research model. The results showed that different demographic, motivation and security perceptions variables have different relationships with the types of m-commerce usage activities. The results from this study will be useful for m-commerce companies in formulating appropriate marketing strategies, as well as developing appropriate applications that will attract more consumers. Although past literatures have focused on technological aspects of m-commerce, few studies have examined the applications and strategies of m-commerce. Furthermore, most studies on m-commerce adoptions have focused on the relationships between technology adoption factors and behavioural intentions of users. There are few studies which have investigated the actual m-commerce usage activities of users.

Kim and David (2012), did a study on culture and behavioural intent to adopt mobile commerce among the Y Generation: comparative analyses between Kazakhstan, Morocco and Singapore. This study aims to investigate perceived risk and trustworthiness in relationship to the diffusion of innovation theory to understand the determinants of behavioural intent to adopt mobile commerce among the Y Generation. It also seeks to investigate the impact of culture on mobile commerce adoption. Five hundred and thirty randomly distributed questionnaires in six tertiary education institutions in Kazakhstan, Morocco and Singapore were used. Multivariate analysis of variance was conducted using SPSS and structural equation modeling using AMOS 7.0 to test for construct validity and for hypothesis testing. Perceived risk, trustworthiness and Rogers’ five perceived characteristics of innovation (namely, observability, trialability, compatibility, complexity and relative
advantage) determined behavioural intent to adopt mobile commerce among the Y Generation. Culture had a moderating effect on these determinants in Kazakhstan and Morocco. This study has not yet explored cost, goods offerings and payment systems that may influence users' intention to adopt mobile commerce. Differential experience of respondents with different mobile portals would have differential effect on the perceived ease of use of mobile commerce, affecting the result of this study. This study suggested that the Y Generation are concerned about privacy violation and risk associated with mobile commerce. Mobile service providers should consider trials and permission-based mobile marketing to fill trust in mobile commerce. This study integrates trustworthiness and perceived risk with Rogers' DOI innovation characteristics, resulting in greater understanding of the behavior intent to adopt mobile commerce among the Y Generation. Further, few studies delved into the comparative impact of culture on the behaviour intent to adopt mobile commerce among the Y Generation in Asian and African countries.

Ulun and Nuray (2012), studied the mobile banking adoption of the youth market: Perceptions and intentions in Istanbul, Turkey. This study aims to investigate consumers' mobile banking adoption through an integration of the technology acceptance model (TAM) with work on perceived benefits and perceived risks. Data were collected from 435 university students who were non-users but future prospects, and analyzed by structural equation modeling (SEM). It was found that perceived usefulness, perceived social risk, perceived performance risk and perceived benefit directly affect attitudes towards mobile banking, and that attitude is the major determinant of mobile banking adoption intention. In addition, no direct relationship between perceived usefulness and intention to use, perceived ease of use and attitude, financial risk, time risk, security/privacy risk and attitude was detected. This study reflects the perceptions of non-users and university students-potential future prospects-in an emerging country. The main theoretical contribution of this research is the development of a risk-benefit model by extending TAM. Banks should rely on increasing the benefit perceptions of mobile banking. Simultaneously, decreases in social and performance risk should be promoted strongly. In the study,
the adoption intention of mobile banking is tested by integrating TAM with perceived benefits and perceived risks-social risk, performance risk, financial risk, time risk, security risk and privacy risk.

Wei-Tsong and Hui-Min (2012), studied the factors influencing mobile services adoption: a brand-equity perspective in Taiwan, Japan. The purpose of this study is to develop and validate empirically a research model that depicts the relationships between the identified key value proposition attributes of mobile value-added services and the core factors of brand equity. Survey data collected from 497 mobile value-added service consumers were examined using structural equation modeling to validate the research model. The results indicate that the mobile service attributes of personalization, identifiability, and perceived enjoyment have significant positive influences on the key brand equity factors, including brand loyalty, perceived quality, brand awareness, and brand associations. Additionally, the results confirm the significance of all four of the brand equity factors in interpreting consumer purchase intention in the context of mobile value-added service consumption. The research results provide insights into how mobile value-added services may be better designed and delivered to enhance brand equity and, in turn, profits. While the market potential of mobile value-added services and the importance of brand equity have both been widely recognized, the development and empirical validation of a model that specifically depicts the determinants of mobile value-added service consumption from a brand-equity perspective has not yet been undertaken. Consequently, this study investigates the relationships among key m-commerce attributes, core brand-equity components, and consumer behaviors. The research results have extended the application and advanced the understanding of previous mobile-commerce and brand-equity theories in the context of mobile value-added service consumption.

Purnima and Preety (2011), did a study on consumer's expectations from mobile CRM services: a banking context in India. The purpose of this paper is to develop an understanding of the primary concerns of a customer when they use mobile banking
services and identify factors that can be used for making better mobile customer relationship management (mobile CRM) services in banking. The paper empirically explores the underlying factors by the application of exploratory factor analysis. The study sample consists of 272 respondents, with a usable response rate of 68 per cent. The empirical findings reveal that perceived utility value is regarded as the most important factor for mobile CRM services. The other factors which emerged were ease of use, context, compatibility, cost, risk, and personal innovativeness. In addition, negative attitude towards technology also emerged as a factor, which needs further investigation. The study had a few limitations, such as selection of the sample from a limited number of places, which may induct some bias due a particular geographical and economic advantage of the place. Based on the findings, banks should focus on increasing the value perceptions of the customers by considering easy design of the services, service context and compatibility of the services offered. The service cost reduction and risk mitigation strategies also need attention. The findings provided insight into the factors that contribute to the acceptance of mobile CRM practices in banking from the consumers' perspective. This study demonstrated that in the case of mobile CRM the factors related to the service aspect dominate over the technical aspect.

Joaquín et al (2009), studied the role of consumer innovativeness and perceived risk in online banking usage in Spain. The purpose of this paper is to analyze how consumer innovativeness can be used as a variable to positively influence internet banking adoption both directly and reducing consumer perceived risk. The impact of innovativeness and risk on internet banking adoption has been tested through structural equation modeling techniques. The sample consists of 511 Spanish internet banking services users accessed through an internet survey. Risk has been measured as a formative construct. Results reveal consumer innovativeness as a key construct to improve e-banking adoption both directly and by its effective role in reducing consumer risk perception of using internet channel in the financial services context. Practical guidelines are provided to bank managers on how to use consumer innovativeness level as a segmentation variable to increase the use of internet
banking among actual customers who are non-users or light users of the electronic channel. There is a lack of studies which connect consumer innovativeness and perceived risk in the electronic commerce context and especially on e-banking research. Formative configuration of risk is quite an innovative approach to measure this construct.

2.4 Conceptual Framework
This section explains the conceptual framework which was used to assess consumer awareness and usage of e-banking transactions through mobile phones. This framework conceptualizes a clear and direct relationship between factors, perceived risks and barriers on usage of e-banking transactions through mobile phones.

Figure 2.1: Conceptual Framework of e-banking Usage

Source: Researcher’s Construction, 2014
Literature indicates that factors such as benefits, trust, self-efficacy, ease of use, and security influence consumers’ usage towards e-banking transactions.

Main barriers on usage of e-banking transactions through mobile phones adoption are lack of awareness, insufficient understanding of the service, problem of mobile transactions agents and technical issues provided by mobile banking. This study offers an insight into mobile banking transactions in Tanzania, which has not previously been investigated. Distinct differences and common trends between Tanzania and other countries will be observed with clear indication of e-banking transactions to be deployed by the service providers.

For the study, a research model is developed based on constructs from the consumer awareness and usage of e-banking transactions through mobile phones. Literature indicates that factors such as benefits, trust, self-efficacy, ease of use, and security influence consumers’ awareness and usage of e-banking transactions through mobile phones. Benefits, trust, self-efficacy, ease of use and security exert significant influences on consumers’ awareness towards e-banking. This study proposes five factors for measuring consumers’ awareness and usage of e-banking transactions through mobile phones which is replicable across different economies.
CHAPTER THREE
RESEARCH METHODOLOGY AND PROCEDURES

3.0 Introduction
This Chapter presents area of the study, research design, unit of inquiry (population), sampling procedures/techniques, sample size, data collection techniques, data analysis and finally reliability and validity of data.

3.1 Area of the study
This study was conducted in Dar es Salaam using a case of Vodacom Tanzania Limited. The prime of the study area was influenced by being largest cosmopolitan city of Tanzania, it offered all types of sample needed by the study and it was also convenient for the researcher.

3.2 Research Design
A case study design was employed in this study. A case study is an in-depth comprehensive study of a person, a social group, a process, a situation, a program, a community, an institution or any other social unit (Krishna, 2006). According to Krishna (2006), case studies are flexible with respect to data collection methods (all methods of data collection are useful to case studies). The design is a highly fruitful approach for the purpose of group or process analysis as against the analysis of individual traits alone.

3.3 Unit of Inquiry (Population)
In order to assess consumer awareness and usage of e-banking transactions through mobile phones, two main populations were studied in this study. These were as follows: Service providers and members of the public (target customers).

3.4 Sampling Procedures/Techniques
Sampling technique is a definite plan for obtaining a sample from a given population. Kothari (2004), refers to sampling technique as a procedure that the researcher would
adopt to select items for the sample. Sampling techniques lay down the number of items to be included in the sample. Baker (1999), argued that there are two major goals that sampling can achieve. The first is to establish representatives of what is being studied and conversely to reduce bias. The second was to be able to make inferences from findings based on a sample to a larger population from which that sample is drawn. Sampling is important in reducing bias in the findings (Veal, 1997 and Flick, 1998). The study employed simple random and purposive samplings techniques.

3.4.1 Simple Random Sampling
In this study simple random sampling was chosen over other sampling methods for two reasons. First, the method ensured the likelihood of any individual element in the population having an equal chance of being selected and being representative, hence minimizing sampling biases (Krishna, 2006 and Bouma, 2000). Secondly, it had a homogenous nature of the population i.e. dependency on natural resources for their livelihood. According to William, (2005), simple random sampling is used when the population is uniform or has similar characteristics. Simple random sampling was considered to be simpler and more cost-efficient than multi-stage, systematic and clustered sampling (Henn et al, 2006). Simple random sampling was used as follows:

First, a list of customers was established from the population, then customers were numbered from 1, 2 up to the total number of customers in the population. Then, the researcher used sort of random number generating process to obtain a simple random sample size from the population of integers 1, 2 to the total number. The simple random sample of customers consisted of customers in the list that correspond to the numbers in the simple random sampling (SRS) of numbers.

3.4.2 Purposive Sampling
This study also employed purposive sampling. The choice of this technique was based on the fact that it catered for specific purpose and Mason (2008) argues that purposive sampling is a set of procedures where the researcher manipulates the
analysis, approach and sampling activity interactively during the research process to a much greater extent than in statistical sampling. In addition, Kothari (2004), pointed out that purposive sampling is a deliberate selection of particular units of the universe for constituting a sample that represents the universe. Purposive sampling technique was used to select respondents from service providers.

3.5 Sample size
The sample size of this study consisted of 55 respondents. This included 5 Executives, 5 Experts and 5 staffs from M-pesa department and 40 customers who are using mobile phones for e-banking transactions.

3.5 Data Collection Techniques
This study used different techniques to collect data. This was done intentionally because no single method was adequate in itself in collecting valid and reliable data on a particular problem. Similarly, Bogdan and Biklen (1992), observe that exclusive reliance on one method might bias or distort the researcher’s picture of a particular reality. Therefore literature review, questionnaires and interviews were used as techniques in data collection.

3.5.1 Primary Data Collection Methods
Primary data are those which are collected afresh and for the first time and thus happen to be original in character (Kothari, 2004:95). In this study, primary data were collected directly from respondents by means of questionnaire and interview.

- Questionnaire
A questionnaire was essentially a technique for collecting primary data. It was generally a series of written questions for which the respondents have to provide the answers (Gay, 2001). A questionnaire survey was used in the data collection exercise among respondents from M-pesa department and customers from the study area. The questionnaire comprised of both restricted or closed and unrestricted or open ended
questions. The reasons for using open and closed ended questionnaire was to enable the coding process of data in the SPSS program.

Questionnaires were pre-tested before being used. The aim was to test whether the instrument elicited responses required to achieve the research objectives, to test whether the content of the instrument was relevant and adequate, to test whether the wording of questions was clear and suit to the understanding of the respondents and to develop appropriate procedure for administering the instrument with reference to field conditions (Krishna, 2006). Also, pre-testing assessed whether the questions were clear, specific, answerable, interconnected and substantially relevant (Punch, 2000). The exercise helped to "fine-tune" the questionnaire. Some ambiguous questions were removed and others were re-phrased. After revision, the questionnaires were duplicated ready for use. After a pre-test, the questionnaires were revised; some questions were rephrased in order to make them more understandable. The time for pre-testing was about 25 minutes per respondent.

The questionnaires were administered to establish rapport and to explain the purpose of the study as well as to clarify the meaning of the items that may not be clear as noted by Gay, (2001), Best and Khan, (2003). Closed and open form questionnaire types were administered mainly to the respondents from marketing department and customers.

- **Interviews**

According to Cohen (2001), an interview is regarded as an interchange of views between two or more people on a topic of mutual interest and emphasizes the social situations of research data. It is a research instrument for data collection that involves a collection of data through verbal interaction between the interviewee and the interviewer. Patton (2007), advocates that it enables participants to discuss their interpretations of the world in which they live and express how they regard the situation from their own point of view and it is associated with very high response rate. Wenden (2002), considers that the general interview guide approach is useful as
it ‘allows for in-depth probing while permitting the interviewer to keep the interview within the parameters traced out by the aim of the study.’ In this study, semi-structured interviews were used to collect data from the executives and experts and it was a major means of obtaining deeper information. This technique was purposely selected because it normally provides opportunity to probe further issues that need more information.

3.5.2 Secondary Data Collection Methods
Review of the published and unpublished literature especially those considered more relevant and pertinent to the research problem were undertaken. The sources were books, records, government publications and official statistics. Borg and Gall (1989), argue that often the insights gained through the review of literature saves as much time in conducting the research as the review it is required. Also, literature review helped a researcher to identify other people’s works in the same fields and increase breadth of knowledge of a researcher’s subject area (ibid).

3.6 Data analysis
In this study, the questionnaires and interview guides data were analyzed by using a SPSS program for windows 20.0. Before the detailed data analysis, questionnaires and interview guides were thoroughly examined, variables coded and then imported into the SPSS software package. This process was done to all questionnaires and interview guides questions that were used during the field. This meant that the information in the questionnaires and interview guides were coded—they were converted into numerical codes and organized in a systematic, ‘machine-readable’ manner. Therefore, the coding process helped to analyze the data in more details. The study used statistical techniques such as graphs and charts to present the findings.

3.7 Validity and reliability of data
This section presents the issue of validity and reliability concerning the data collected from respondents in the study area.
3.7.1 Validity of data
In this study, interview was generated in conjunctions with the fieldworker. This ensured that the interview guides focused on the topic under investigation and the purpose of the study was clearly explained to the respondents and issues of concerned were resolved satisfactorily. The procedures of the interview were explained to the respondents. Lastly, respondents were assured of anonymity and confidentiality. This encouraged frankness during the interview.

The above steps ensured that the multiple sources of data collection such as literature, interviews and questionnaires were conducted under conditions and in an environment acceptable to the respondents and therefore, this ensured that the process and findings were trustworthy and valid.

3.7.2 Reliability of data
Babbie (2005) describes reliability as a condition in which the same results are achieved whenever the same technique is repeated to do the same study. In this study the result were achieved by the following means.

The anonymity and confidentiality of the respondents were ensured so that they were able to provide information for use strictly for the purpose of the study. A rapport with the respondents was successfully established during the preliminary fieldwork study. The relationship of trust with the respondents was built and the credibility of the study was reinforced. Also pre-testing of the instrument like the questionnaires was done during the field study just to observe whether it yielded the same results. And the utilization of trained fieldworker ensured that the discussion level was high where necessary and relevant to the study.

3.8 Ethical Considerations
Respondent’s information that was confidential was protected by the researcher. Sullivan (2001), argues that social researchers are bound to ethical considerations in their studies. The researcher observed the rights of all respondents including the
information given by them which were kept confidential to avoid harming the respondents. The study followed and considered all research directives, such as seeking permission from the required offices and officers. Also, all the respondents were respected and the information which was provided by them was kept confidential.
CHAPTER FOUR  
PRESENTATION, ANALYSIS AND DISCUSSION OF THE FINDINGS

4.1 Introduction  
This chapter presents the findings obtained from the field. The first part of the chapter provides demographic profiles of the respondents. The second part focuses on the factors influencing the adoption intention of e-banking transactions through mobile phones. The third part identifies attitudes towards usage intention of e-banking transactions through mobile phones. The fourth identifies barriers on usage intention of e-banking transactions through mobile phones. The fifth part suggests measures that should be instituted to improve the situation.

4.2 Respondents Demographic Profile  
This section presents the respondents demographic profile in the study area. It focuses on sex, age, marital status, level of education and occupation.

4.2.1 Sex  
Respondents were asked to indicate their sex. Table 4.1 and Figure 4.1 respectively indicate their responses.

Table 4.1: Gender of respondents

<table>
<thead>
<tr>
<th>Sex</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>37</td>
<td>67</td>
</tr>
<tr>
<td>Female</td>
<td>18</td>
<td>33</td>
</tr>
<tr>
<td>Total</td>
<td>55</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Study findings, 2014
Figure 4.1: Gender of the respondents

Source: Study findings, 2014

Table 4.1 and Figure 4.1 above indicate the number of female respondents were 33% while male respondents were 67%. Results indicate that male respondents were higher than female respondents. The findings showed that e-banking users were predominantly males, not necessarily young and highly educated, in contrast with the electronic bank users in Tanzania. This implies there is a wide disparity between the male and female responses. However, this does not mean that the responses are biased based on the gender.

4.2.2 Age

Respondents were asked to indicate their age. Table 4.2 and Figure 4.2 respectively indicate their responses.
Table 4.2: Age group of respondents

<table>
<thead>
<tr>
<th>Age group</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-25</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>26-35</td>
<td>13</td>
<td>24</td>
</tr>
<tr>
<td>36-45</td>
<td>25</td>
<td>46</td>
</tr>
<tr>
<td>46-55</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>56 and above</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>55</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Study findings, 2014

Figure 4.2: Age of the respondents

Source: Study findings, 2014

Table 4.2 and Figure 4.2 above indicate that 13%, 24%, 45%, 11% and 7% age group of respondents were the categories of 18-25, 26-35, 36-45, 46-55 and 56+ respectively. Findings indicate that the majority of respondents belonged to the age group of 36-45 categories. This implies that most of the respondents who were involved in the study were in their prime age and they had ample knowledge on the subject matter.
4.2.3 Marital Status

Respondents were asked to indicate their marital status. Table 4.3 and Figure 4.3 respectively indicate their responses.

Table 4.3: Marital status of the respondents

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>16</td>
<td>29</td>
</tr>
<tr>
<td>Married</td>
<td>36</td>
<td>65</td>
</tr>
<tr>
<td>Widow</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>55</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Study findings, 2014

Figure 4.3: Marital status of the respondents

Source: Study findings, 2014

Table 4.3 and Figure 4.3 above indicate that 29%, 65% and 5% were single, married and widow respectively. Findings indicate that the majority of respondents were married.
4.2.4 Level of education

Respondents were asked to indicate their education level. Table 4.4 and Figure 4.4 respectively illustrate the findings.

Table 4.4: Level of education of the respondents

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>University</td>
<td>31</td>
<td>56</td>
</tr>
<tr>
<td>College</td>
<td>15</td>
<td>27</td>
</tr>
<tr>
<td>Secondary</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>Primary</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>55</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Study findings, 2014

Figure 4.4: Level of education of the respondents

Source: Study findings, 2014

Table 4.4 and Figure 4.4 above reveal that 56%, 27%, 13% and 4% of respondents had university, college, secondary and primary level of education respectively. Findings indicate that the majority of respondents were having a university level of education. This implies that most of the respondents were able to comprehend and respond to the questionnaire appropriately.
4.2.5 Occupation

Respondents were asked to indicate their occupations. Table 4.5 and Figure 4.5 respectively illustrate the findings.

Table 4.5: Occupation of Respondents

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-employed</td>
<td>24</td>
<td>44</td>
</tr>
<tr>
<td>Employed</td>
<td>31</td>
<td>56</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>55</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Study findings, 2014

Figure 4.5: Occupation of Respondents

Source: Study findings, 2014

Table 4.5 and Figure 4.5 above reveal that 56% and 44% of respondents were employed and self-employed respectively. Findings indicate that the majority of respondents were employed. This implies that the respondents were drawn from diverse professions meaning their views about the subject of study were varied.
4.3  Factors influencing adoption of e-banking transactions through mobile phones

Respondents were asked to identify factors influencing the adoption intention of e-banking transactions through mobile phones. Table 4.6 and Figure 4.6 indicate the responses from the respondents.

Table 4.6: Factors influencing adoption of e-banking transactions

<table>
<thead>
<tr>
<th>Factors</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefits</td>
<td>20</td>
<td>36</td>
</tr>
<tr>
<td>Trust</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>Ease of use</td>
<td>13</td>
<td>24</td>
</tr>
<tr>
<td>Security</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>55</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Study findings, 2014

Figure 4.6: Factors influencing adoption of e-banking transactions

Table 4.6 and Figure 4.6 above indicate that 36%, 13%, 18%, 24% and 9% of interviewed respondents identified benefits, trust, self-efficacy, ease of use and
security respectively as factors influencing the adoption intention of e-banking transactions through mobile phones. The majority of respondents identified benefits, self-efficacy and ease of use as key factors influencing the adoption intention of e-banking transactions. Findings imply that benefits, self-efficacy, and ease of use exert significant influences on consumers’ perception towards e-payment. The findings correspond with the study done by Wendy et al (2013) on the factors affecting consumers’ perception of electronic payment: an empirical analysis. In view of the promising growth of e-payment in Malaysia.

4.3.1 Benefits of e-banking transactions influence its adoption through mobile phones

Respondents were asked to rate whether benefits of e-banking transactions influence its adoption through mobile phones. This was done using a point 5 Likert scale. Table 4.7 and Figure 4.7 indicate the responses from the respondents.

Table 4.7: Benefits of e-banking transactions influence its adoption

<table>
<thead>
<tr>
<th>Ratings</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>37</td>
<td>67</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>10</td>
<td>19</td>
</tr>
<tr>
<td>Neutral</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Disagree</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>55</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Study findings, 2014
Table 4.7 and Figure 4.7 above show that 5% of interviewed respondents strongly disagreed and 7% disagreed that benefit of e-banking transactions influence its adoption through mobile phones; whereas 2% were neutral. On the other hand 67% of interviewed respondents agreed and 19% strongly agreed that benefits of e-banking transactions influence its adoption through mobile phones. Thirteen percent 13% either disagreed or strongly disagreed that benefits of e-banking transactions influence its adoption through mobile phones. Moreover total of 85% either agreed or strongly agreed that benefits of e-banking transactions influence its adoption through mobile phones. Findings imply that there is a great relationship between benefits obtained from e-banking transactions and its adoption.

4.3.2 Trust of e-banking transactions influence its adoption through mobile phones

Respondents were asked to rate if trust of e-banking transactions influences its adoption through mobile phones. This was done using a point 5 Likert scale. Table 4.8 and Figure 4.8 provide their responses.
Table 4.8: Trust of e-banking transactions influence its adoption

<table>
<thead>
<tr>
<th>Ratings</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>12</td>
<td>22</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>Neutral</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Disagree</td>
<td>25</td>
<td>45</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>55</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Study findings, 2014

Table 4.8 and Figure 4.8 above indicate that 15% of interviewed respondents strongly disagreed and 45% disagreed that trust of e-banking transactions influence its adoption through mobile phones; while 5% were neutral. On the other hand 22% of interviewed respondents agreed and 13% strongly agreed that trust of e-banking transactions influence its adoption through mobile phones. Sixty percent 60% either disagreed or strongly disagreed that trust of e-banking transactions influence its adoption through mobile phones. Moreover total of 35% either agreed or strongly
agreed that trust of e-banking transactions influence its adoption through mobile phones. Findings imply that trust does not influence greatly the adoption of e-banking transactions.

4.3.3 Self-efficacy of e-banking transactions influence its adoption through mobile phones

In the same line, respondents were asked to rate if self-efficacy of e-banking transactions influences its adoption through mobile phones. This was done using a point 5 Likert scale. Table 4.9 and Figure 4.9 illustrate the findings.

Table 4.9: Self-efficacy of e-banking transactions influence its adoption

<table>
<thead>
<tr>
<th>Ratings</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>30</td>
<td>54</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>15</td>
<td>27</td>
</tr>
<tr>
<td>Neutral</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Disagree</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>55</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Study findings, 2014
Figure 4.9: Self-efficacy of e-banking transactions influence its adoption

<table>
<thead>
<tr>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>30</td>
<td>15</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Percent</td>
<td>54</td>
<td>27</td>
<td>4</td>
<td>9</td>
</tr>
</tbody>
</table>

Source: Study findings, 2014

Table 4.9 and Figure 4.9 above indicate that 6% of respondents strongly disagree and 9% disagreed that self-efficacy of e-banking transactions influences its adoption through mobile phones; while 4% were neutral. On the other hand, 54% agreed and 27% of respondents strongly agreed that self-efficacy of e-banking transactions influences its adoption through mobile phones. Fifteen percent 15% either disagreed or strongly disagreed that self-efficacy of e-banking transactions influences its adoption through mobile phones. Moreover total of 82% either agreed or strongly agreed that self-efficacy of e-banking transactions influences its adoption through mobile phones. Findings imply that there are significant results on self-efficacy towards adoption of e-banking transactions.

4.3.4 Ease use of e-banking transactions influence its adoption through mobile phones

Respondents were asked to rate if ease use of e-banking transactions influences its adoption through mobile phones. This was done using a point 5 Likert scale. Table 4.10 and Figure 4.10 indicate the findings.
Table 4.10: Ease use of e-banking transactions influence its adoption

<table>
<thead>
<tr>
<th>Ratings</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>34</td>
<td>62</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>11</td>
<td>20</td>
</tr>
<tr>
<td>Neutral</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Disagree</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>55</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Study findings, 2014

Figure 4.10: Ease use of e-banking transactions influence its adoption

Table 4.10 and Figure 4.10 above indicates that 7% of respondents strongly disagreed and 9% disagreed that ease use of e-banking transactions influences its adoption through mobile phones; whereas 2% were neutral. On the other hand, 62% of respondents agreed and 20% strongly agreed that ease use of e-banking transactions influences its adoption through mobile phones. Sixteen percent 16% either disagreed or strongly disagreed that ease use of e-banking transactions influences its adoption through mobile phones. Moreover total of 82% either agreed
or strongly agreed that ease use of e-banking transactions influences its adoption through mobile phones. Findings imply that ease use of e-banking transactions by the majority of respondents confirms that there is a great potential for future expansion of such services.

4.3.5 Security of e-banking transactions influence its adoption through mobile phones

Respondents were asked to rate if security of e-banking transactions influences its adoption through mobile phones. This was done using a point 5 Likert scale. Table 4.11 and Figure 4.11 illustrate the findings.

Table 4.11: Security of e-banking transactions influence its adoption

<table>
<thead>
<tr>
<th>Ratings</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>11</td>
<td>20</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td>Neutral</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Disagree</td>
<td>17</td>
<td>30</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>14</td>
<td>26</td>
</tr>
<tr>
<td>Total</td>
<td>55</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Study findings, 2014
Table 4.11 and Figure 4.11 above indicate that 26% of respondents strongly disagreed and 30% disagreed that security of e-banking transactions influences its adoption through mobile phones; whereas 9% were neutral. On the other hand, 20% of respondents agreed and 15% strongly agreed that security of e-banking transactions influences its adoption through mobile phones. Fifty six percent 56% either disagreed or strongly disagreed that security of e-banking transactions influences its adoption through mobile phones. Moreover total of 35% either agreed or strongly agreed that security of e-banking transactions influences its adoption through mobile phones. Findings imply that, the insignificant results obtained for security warrant further investigation.

### 4.4 Attitudes towards usage intention of e-banking transactions

The respondents were asked to identify attitudes towards usage intention of e-banking transactions through mobile phones. The findings are presented in Table 4.12 and Figure 4.12 below.
Table 4.12: Attitudes towards usage intention of e-banking transactions

<table>
<thead>
<tr>
<th>Attitudes</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived usefulness</td>
<td>25</td>
<td>45</td>
</tr>
<tr>
<td>Perceived social risks</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Perceived performance risks</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Perceived benefits</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>Perceived ease of use</td>
<td>15</td>
<td>27</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>55</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Study findings, 2014

Figure 4.12: Attitudes towards usage intention of e-banking transactions

Table 4.12 and Figure 4.12 above indicate that 45%, 9%, 6%, 13% and 27% of interviewed respondents identified perceived usefulness, perceived social risks, perceived performance risks, perceived benefits and perceived ease of use respectively as attitudes towards usage intention of e-banking transactions through mobile phones. The majority of respondents identified perceived usefulness and perceived ease of use as key attitudes towards usage intention of e-banking transactions through mobile phones. Findings imply that attitude is the major
determinant of mobile banking adoption intention, perceived usefulness and perceived ease of use from the technology acceptance model influence usage of e-banking transactions. The findings resemble with the study done by Peter (2012) towards a model of adoption in mobile banking by the unbanked: a qualitative study presents a qualitative study on mobile banking technology acceptance by the rural unbanked.

4.4.1 Perceived usefulness of e-banking transactions influence its usage intention through mobile phone

On the other hand, respondents were asked to rate if perceived usefulness of e-banking transactions influences its usage intention through mobile phones. This was done using a point 5 Likert scale. The findings are presented in Table 4.13 and Figure 4.13 below.

<table>
<thead>
<tr>
<th>Ratings</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>35</td>
<td>63</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>12</td>
<td>22</td>
</tr>
<tr>
<td>Neutral</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Disagree</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>55</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Study findings, 2014
4.4.2 Perceived social risks of e-banking transactions influence its usage intention through mobile phone

On the other hand, respondents were asked to rate if perceived social risks of e-banking transactions influence its usage intention through mobile phones. This was
done using a point 5 Likert scale. The findings are presented in Table 4.14 and Figure 4.14 below.

**Table 4.14: Perceived social risks of e-banking transactions influence its usage intention**

<table>
<thead>
<tr>
<th>Ratings</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>Neutral</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Disagree</td>
<td>23</td>
<td>42</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>12</td>
<td>22</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>55</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Study findings, 2014

**Figure 4.14: Perceived social risks of e-banking transactions influence its usage intention**

Source: Study findings, 2014

Table 4.14 and Figure 4.14 above indicates that 22% of respondents strongly disagreed and 42% disagreed that perceived social risks of e-banking transactions
influence its usage intention through mobile phones; whereas 7% were neutral. On the other hand, 18% of respondents agreed and 11% strongly agreed that perceived social risks of e-banking transactions influence its usage intention through mobile phones. Sixty four percent 64% of respondents either disagreed or strongly disagreed that perceived social risks of e-banking transactions influence its usage intention through mobile phones. Moreover total of 29% of respondents either agreed or strongly agreed that perceived social risks of e-banking transactions influence its usage intention through mobile phones. Findings imply that social influence are found to be significant dimensions of technology adoption readiness to use mobile commerce.

4.4.3 Perceived performance risks of e-banking transactions influence its usage intention through mobile phone

Respondents were asked to rate if perceived performance risks of e-banking transactions influence its usage intention through mobile phones. This was done using a point 5 Likert scale. The findings are presented in Table 4.15 and Figure 4.15 below.

Table 4.15: Perceived performance risks of e-banking transactions influence its usage intention

<table>
<thead>
<tr>
<th>Ratings</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>11</td>
<td>20</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>Neutral</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Disagree</td>
<td>22</td>
<td>40</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>55</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Study findings, 2014
Figure 4.15: Perceived performance risks of e-banking transactions influence its usage intention

Table 4.15 and Figure 4.15 above indicate that 18% of respondents strongly disagreed and 40% disagreed that perceived performance risks of e-banking transactions influence its usage intention through mobile phones; whereas 9% were neutral. On the other hand, 20% of respondents agreed and 13% strongly agreed that perceived performance risks of e-banking transactions influence its usage intention through mobile phones. Fifty eight percent 58% of respondents either disagreed or strongly disagreed that perceived performance risks of e-banking transactions influence its usage intention through mobile phones. Moreover total of 33% of respondents either agreed or strongly agreed that perceived performance risks of e-banking transactions influence its usage intention through mobile phones. Findings imply that service providers should rely on increasing the benefit perceptions of mobile banking. Simultaneously, decreases performance risks should be promoted strongly.

4.4.4 Perceived benefits of e-banking transactions influence its usage intention through mobile phone

Respondents were asked to rate if perceived benefits of e-banking transactions influence its usage intention through mobile phones. This was done using a point 5 Likert scale. The findings are presented in Table 4.16 and Figure 4.16 below.
Table 4.16: Perceived benefits of e-banking transactions influence its usage intention

<table>
<thead>
<tr>
<th>Ratings</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>21</td>
<td>38</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>9</td>
<td>16</td>
</tr>
<tr>
<td>Neutral</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Disagree</td>
<td>15</td>
<td>27</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>55</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Study findings, 2014

Figure 4.16: Perceived benefits of e-banking transactions influence its usage intention

Table 4.16 and Figure 4.16 above indicate that 13% of respondents strongly disagreed and 40% disagreed that perceived benefits of e-banking transactions influence its usage intention through mobile phones; whereas 6% were neutral. On the other hand, 38% of respondents agreed and 16% strongly agreed that perceived benefits of e-banking transactions influence its usage intention through mobile
phones. Forty percent 40% of respondents either disagreed or strongly disagreed that perceived benefits of e-banking transactions influence its usage intention through mobile phones. Moreover total of 55% of respondents either agreed or strongly agreed that perceived benefits of e-banking transactions influence its usage intention through mobile phones. Findings imply that perceived benefit directly affect attitudes towards mobile banking, and that attitude is the major determinant of mobile banking adoption intention.

4.4.5 Perceived ease use of e-banking transactions influence its usage intention through mobile phone

Respondents were asked to rate if perceived ease use of e-banking transactions influence its usage intention through mobile phones. This was done using a point 5 Likert scale. The findings are presented in Table 4.17 and Figure 4.17 below.

Table 4.17: Perceived ease use of e-banking transactions influence its usage intention

<table>
<thead>
<tr>
<th>Ratings</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>33</td>
<td>60</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>Neutral</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Disagree</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>55</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Study findings, 2014
Figure 4.17: Perceived ease use of e-banking transactions influence its usage intention

<table>
<thead>
<tr>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>33</td>
<td>10</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Percent</td>
<td>60</td>
<td>18</td>
<td>4</td>
<td>13</td>
</tr>
</tbody>
</table>

Source: Study findings, 2014

Table 4.17 and Figure 4.17 above indicate that 5% of respondents strongly disagreed and 13% disagreed that perceived ease use of e-banking transactions influence its usage intention through mobile phones; whereas 4% were neutral. On the other hand, 60% of respondents agreed and 18% strongly agreed that perceived ease of use of e-banking transactions influence its usage intention through mobile phones. Eighteen percent 18% of respondents either disagreed or strongly disagreed that perceived ease use of e-banking transactions influence its usage intention through mobile phones. Moreover total of 78% of respondents either agreed or strongly agreed that perceived ease use of e-banking transactions influence its usage intention through mobile phones. Findings imply that perceived ease of use is found to be significant dimensions of technology adoption readiness to use mobile commerce.

4.5 Barriers on usage intention of e-banking transactions through mobile phones

The respondents were asked to identify barriers on usage intention of e-banking transactions through mobile phones. The findings are presented in the context of lack
of awareness, insufficient understanding of the services, problem with mobile money agents and technical issues.

Table 4.18: Barriers on usage intention of e-banking transactions

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of awareness</td>
<td>11</td>
<td>20</td>
</tr>
<tr>
<td>Insufficient understanding of the services</td>
<td>23</td>
<td>42</td>
</tr>
<tr>
<td>Problem with mobile money agents</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>Technical issues</td>
<td>14</td>
<td>25</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>55</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Study findings, 2014

Figure 4.18: Barriers on usage intention of e-banking transactions

Source: Study findings, 2014

Table 4.18 and Figure 4.18 above indicate that 20%, 42%, 13% and 25% of interviewed respondents identified lack of awareness, insufficient understanding of the services, problem with mobile money agents and technical issues respectively as barriers on usage intention of e-banking transactions through mobile phones. The majority of respondents identified insufficient understanding of the services and technical issues as the key barriers on usage intention of e-banking transactions.
through mobile phones. Findings imply that with the recent and forecasted high growth of electronic banking, it has the potential to develop into a world-scale internet economy which has potential barriers that requires examination. The findings correspond with the study done by Sylvie and Xiaoyan (2005) on consumers’ attitudes towards online and mobile banking in China to investigate the market status for online/mobile banking in China.

4.5.1 Lack of awareness hinders usage intention of e-banking transactions

On the other hand, respondents were asked to rate if lack of awareness hinders usage intention of e-banking transactions through mobile phones. This was done using a point 5 Likert scale. Table 4.19 and Figure 4.19 provide their responses.

Table 4.19: Lack of awareness hinders usage intention of e-banking transactions

<table>
<thead>
<tr>
<th>Ratings</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>29</td>
<td>53</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>Neutral</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Disagree</td>
<td>12</td>
<td>22</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>55</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Study findings, 2014
Table 4.19 and Figure 4.19 above indicate that 4% of respondents strongly disagreed and 22% disagreed that lack of awareness hinders usage intention of e-banking transactions through mobile phones; whereas 9% were neutral. On the other hand, 53% of respondents agreed and 12% strongly agreed that lack of awareness hinders usage intention of e-banking transactions through mobile phones. Twenty five percent 25% of respondents either disagreed or strongly disagreed that lack of awareness hinders usage intention of e-banking transactions through mobile phones. Moreover total of 65% of respondents either agreed or strongly agreed that lack of awareness hinders usage intention of e-banking transactions through mobile phones.

**4.5.2 Insufficient understanding of services hinders usage intention of e-banking transactions**

Respondents were asked to rate if insufficient understanding of services hinders usage intention of e-banking transactions through mobile phones. This was done using a point 5 Likert scale. Table 4.20 and Figure 4.20 provide their responses.
Table 4.20: Insufficient understanding of services hinders usage intention of e-banking transactions

<table>
<thead>
<tr>
<th>Ratings</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>36</td>
<td>65</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>Neutral</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Disagree</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>55</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Study findings, 2014

Figure 4.20: Insufficient understanding of services hinders usage intention of e-banking transactions

Table 4.20 and Figure 4.20 above indicate that 6% of respondents strongly disagreed and 9% disagreed that insufficient understanding of services hinders usage intention of e-banking transactions through mobile phones; whereas 2% were neutral. On the other hand, 65% of respondents agreed and 18% strongly agreed that insufficient understanding of services hinders usage intention of e-banking transactions through
mobile phones. Fifteen percent 15% of respondents either disagreed or strongly disagreed that insufficient understanding of services hinders usage intention of e-banking transactions through mobile phones. Moreover total of 84% of respondents either agreed or strongly agreed that insufficient understanding of services hinders usage intention of e-banking transactions through mobile phones. Findings imply that, issue of insufficient understanding of services was found to be the most important barrier that hinders Tanzania consumer adoption of e-banking.

4.5.3 Problem with mobile money agents hinders usage intention of e-banking transactions

Respondents were asked to rate if problem with mobile money agents hinders usage intention of e-banking transactions through mobile phones. This was done using a point 5 Likert scale. Table 4.21 and Figure 4.21 provide their responses.

Table 4.21: Problem with mobile money agents hinders usage intention of e-banking transactions

<table>
<thead>
<tr>
<th>Ratings</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>13</td>
<td>23</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>Neutral</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Disagree</td>
<td>20</td>
<td>36</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>12</td>
<td>22</td>
</tr>
<tr>
<td>Total</td>
<td><strong>55</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Study findings, 2014
Table 4.21 and Figure 4.21 above indicates that 22% of respondents strongly disagreed and 36% disagreed that problem with mobile money agents hinders usage intention of e-banking transactions through mobile phones; whereas 6% were neutral. On the other hand, 23% of respondents agreed and 13% strongly agreed that problem with mobile money agents hinders usage intention of e-banking transactions through mobile phones. Fifty eight 58% of respondents either disagreed or strongly disagreed that problem with mobile money agents hinders usage intention of e-banking transactions through mobile phones. Moreover total of 36% of respondents either agreed or strongly agreed that problem with mobile money agents hinders usage intention of e-banking transactions through mobile phones.

4.5.4 Technical issues hinder usage intention of e-banking transactions

Respondents were asked to rate if technical issues hinder usage intention of e-banking transactions through mobile phones. This was done using a point 5 Likert scale. Table 4.22 and Figure 4.22 provide their responses.
Table 4.22: Technical issues hinder usage intention of e-banking transactions

<table>
<thead>
<tr>
<th>Ratings</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>32</td>
<td>58</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>9</td>
<td>16</td>
</tr>
<tr>
<td>Neutral</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Disagree</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>55</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Study findings, 2014

Figure 4.22: Technical issues hinder usage intention of e-banking transactions

Table 4.22 and Figure 4.22 above indicate that 7% of respondents strongly disagreed and 13% disagreed that technical issues hinder usage intention of e-banking transactions through mobile phones; whereas 6% were neutral. On the other hand, 58% of respondents agreed and 16% strongly agreed that technical issues hinder usage intention of e-banking transactions through mobile phones. Twenty percent 20% of respondents either disagreed or strongly disagreed that technical issues hinder usage intention of e-banking transactions through mobile phones. Moreover
total of 75% of respondents either agreed or strongly agreed that technical issues hinder usage intention of e-banking transactions through mobile phones. Findings imply that technical issues was found to be another important barrier that deters consumers adoption of e-banking services.

4.6 Measures to improve usage of e-banking transactions via mobile phones

Respondents were asked to suggest measures to be taken to improve the usage of e-banking transactions through mobile phones. Table 4.23 and Figure 4.23 present the responses.

Table 4.23: Measures to improve usage of e-banking transactions via mobile phones

<table>
<thead>
<tr>
<th>Measures</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operators promote the use of mobile banking services</td>
<td>24</td>
<td>44</td>
</tr>
<tr>
<td>Firms consider educating consumers to master e-banking transactions</td>
<td>31</td>
<td>56</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>55</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Study findings, 2014

Figure 4.23: Measures to improve usage of e-banking transactions via mobile phones

Source: Study findings, 2014
Table 4.23 and Figure 4.23 above suggest that, operators should promote the use of mobile banking services to easiest e-banking transactions as indicated by 44%. Firms should further consider educating consumers through demonstrations and training to better equip them to master e-banking transactions in mobile banking systems as indicated by 56%. Once consumers feel more competent in utilizing the system, they would find it easier to use and will be encouraged to use it.
CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction
This chapter presents the summary of the findings, conclusions and recommendation made with regard to the study findings and objectives. The chapter also provides areas for further studies.

5.2 Summary of findings
The findings revealed that, benefits, trust, self-efficacy, ease of use and security were factors influencing the adoption intention of e-banking transactions through mobile phones. A total of 36%, 18% and 24% of respondents identified benefits, self-efficacy and ease of use respectively as key factors influencing the adoption intention of e-banking transactions.

Also, findings revealed that, 45% and 27% of interviewed respondents identified perceived usefulness and perceived ease of use respectively as key attitudes towards usage intention of e-banking transactions through mobile phones. Moreover, the findings revealed that, 42% and 25% of interviewed respondents identified insufficient understanding of the services and technical issues as the key barriers on usage intention of e-banking transactions through mobile phones. Furthermore, the findings suggest that, operators should promote the use of mobile banking services to easiest e-banking transactions. Firms should consider educating consumers through demonstrations and training to better equip them to master e-banking transactions in mobile banking systems.

5.3 Conclusions
Present study findings show that respondents identified benefits, trust, self-efficacy, ease of use and security respectively as factors influencing the adoption intention of e-banking transactions through mobile phones. Based on the findings that, majority of respondents identify benefits, self-efficacy and ease of use as key factors
influencing the adoption intention of e-banking transactions, therefore it is concluded that, benefits, self-efficacy, and ease of use exert significant influences on consumers’ perception towards e-payment.

Also, present findings show that respondents identified perceived usefulness, perceived social risks, perceived performance risks, perceived benefits and perceived ease of use respectively as attitudes towards usage intention of e-banking transactions through mobile phones. Based on the findings that, the majority of respondents identified perceived usefulness and perceived ease of use as key attitudes towards usage intention of e-banking transactions through mobile phones, therefore it is conclude that, attitude is the major determinant of mobile banking adoption intention, perceived usefulness and perceived ease of use from the technology acceptance model influence usage of e-banking transactions.

Moreover, present findings show that respondents identified lack of awareness, insufficient understanding of the services, problem with mobile money agents and technical issues respectively as barriers on usage intention of e-banking transactions through mobile phones. Based on the findings that, the majority of respondents identified insufficient understanding of the services and technical issues as the key barriers on usage intention of e-banking transactions through mobile phones, therefore it is conclude that, with the recent and forecasted high growth of electronic banking, it has the potential to develop into a world-scale internet economy which has potential barriers that requires examination.

Furthermore, present findings show that interviewed respondents suggest measures to be taken to improve the usage of e-banking transactions through mobile phones. Based on the findings that, firms promote the use of mobile banking services to easiest e-banking transactions and also consider educating consumers through demonstrations and training to better equip them to master e-banking transactions in mobile banking systems, therefore it is conclude that, consumers feel more
competent in utilizing the system, they would find it easier to use and will be encouraged to use it.

5.4 Recommendations
Basing on the conclusion, the following recommendations are put forward in consumer awareness and usage of e-banking transactions through mobile phones.

i. Service providers should put emphasis on the factors that influence the adoption and usage intention of e-banking transactions through mobile phones in order to effectively change these intentions to actual adoption of this new technology.

ii. Policy makers and service providers should have an advanced knowledge for it has provided information on the current state of e-banking acceptance and use, particularly among Tanzanians as they develop strategies directed at increasing e-banking acceptance and use.

iii. Service providers should educate consumers through demonstrations and training in order to better equip them to master e-banking transactions in mobile banking systems so that to mitigate barriers on usage intention of e-banking transactions through mobile phones.

iv. Service providers should promote the use of mobile banking services to easiest e-banking transactions.

5.5 Areas for further research
This study has revealed areas which call for further research:
There is a need to conduct a study on mobile banking adoption of the youth market: Perceptions and intentions.
Other researchers should mainly focus on customer usage intention of mobile commerce in Tanzania.
REFERENCES


Boston: Houghton Mufflin Company.


ChauShen Chen, (2013), Perceived risk, usage frequency of mobile banking services", Managing Service Quality, Vol. 23 Iss: 5, pp.410 – 436


International Journal of Advanced Research in Computer and Communication Engineering, 2(6). 2360-2370


Rakhi Thakur, Mala Srivastava, (2014), Adoption readiness, personal innovativeness, perceived risk and usage intention across customer groups for mobile payment services in India", Internet Research, Vol. 24 Iss: 3


71


Susan Sun, Tiong Goh, Kim-Shyan Fam, Yang Xue, Yang Xue, (2012), The influence of religion on Islamic mobile phone banking services adoption", Journal of Islamic Marketing, Vol. 3 Iss: 1, pp.81 – 98


The Banking and Financial Institution Act, (2006), under this act it is no possible to apply for a license online due to the fact that all application must be in writing and signed manually as opposed to data message and digital signatures, the same is mandatory under section 5 of the law.


APPENDICES

Appendix I: Questionnaire to customers

The researcher of this study is a student of Mzumbe University pursuing a Master of Science in Marketing Management. The researcher is currently doing a dissertation which is a prerequisite for the award of the Master degree.

It is the aim of this questionnaire to seek for your feelings, perception and opinion regarding the consumer awareness and usage of e-banking transactions through mobile phones in telecommunication industry.

Being one of the participants, you are asked to respond freely to this questionnaire and all answers you provide will be kept strictly confidential.

Part A: Personal information

Please put a tick (X) against the appropriate answer and fill in the gap

Gender: Male ( ) Female ( )
Age Group: 18 - 25 ( ); 26 - 35 ( ); 36 - 45 ( ); 46 - 55 ( ); 56 - above ( )
Marital Status: Single ( ); Married ( ); Widow ( )
Education Level: University ( ); College ( ); Secondary ( ); Primary ( )
Occupation: Self - Employed ( ); Employed ( )

Part B: Factors influencing the adoption of e-banking transactions

Please put a tick (X) against the appropriate answer

1. What are the factors influencing the adoption intention of e-banking transactions through mobile phones?
   1=Benefits ( )
   2=Trust ( )
   3=Self-efficacy ( )
   4=Ease of use ( )
   5=Security ( )

2. Benefits of e-banking transactions influence its adoption through mobile phones?
   1=Agree ( )
   2=Strongly Agree ( )
3. Trust of e-banking transactions influence its adoption through mobile phones?
   1=Agree  ( )
   2=Strongly Agree  ( )
   3=Neutral  ( )
   4=Disagree  ( )
   5=Strongly Disagree  ( )

4. Self-efficacy of e-banking transactions influences its adoption through mobile phones?
   1=Agree  ( )
   2=Strongly Agree  ( )
   3=Neutral  ( )
   4=Disagree  ( )
   5=Strongly Disagree  ( )

5. Ease use of e-banking transactions influence its adoption through mobile phones?
   1=Agree  ( )
   2=Strongly Agree  ( )
   3=Neutral  ( )
   4=Disagree  ( )
   5=Strongly Disagree  ( )

6. Security of e-banking transactions influences its adoption through mobile phones?
   1=Agree  ( )
   2=Strongly Agree  ( )
   3=Neutral  ( )
   4=Disagree  ( )
Part C: Attitudes towards usage intention of e-banking transactions

Please put a tick (X) against the appropriate answer

7. What are the attitudes towards usage intention of e-banking transactions through mobile phones?
   1=Perceived usefulness ( )
   2=Perceived social risks ( )
   3=Perceived performance risks ( )
   4=Perceived benefits ( )
   5=Perceived ease of use ( )

8. Perceived usefulness of e-banking transactions is an attitude towards your usage intention?
   1=Agree ( )
   2=Strongly Agree ( )
   3=Neutral ( )
   4=Disagree ( )
   5=Strongly Disagree ( )

9. Perceived social risks of e-banking transactions is an attitude towards your usage intention?
   1=Agree ( )
   2=Strongly Agree ( )
   3=Neutral ( )
   4=Disagree ( )
   5=Strongly Disagree ( )

10. Perceived performance risks of e-banking transactions is an attitude towards your usage intention?
    1=Agree ( )
    2=Strongly Agree ( )
    3=Neutral ( )
4=Disagree ( )
5=Strongly Disagree ( )

11. A perceived benefit of e-banking transactions is an attitude towards your usage intention?
1=Agree ( )
2=Strongly Agree ( )
3=Neutral ( )
4=Disagree ( )
5=Strongly Disagree ( )

12. Perceived ease of use of e-banking transactions is an attitude towards your usage intention?
1=Agree ( )
2=Strongly Agree ( )
3=Neutral ( )
4=Disagree ( )
5=Strongly Disagree ( )

Part D: Barriers on usage intention of e-banking transactions

Please put a tick (X) against the appropriate answer

13. What are the barriers on usage intention of e-banking transactions through mobile phones?
1=Lack of awareness ( )
2=Insufficient understanding of the services ( )
3=Problems with mobile money agents ( )
4=Technical issues ( )

14. Lack of awareness hinders usage intention of e-banking transactions through mobile phones?
1=Agree ( )
2=Strongly Agree ( )
3=Neutral ( )
4=Disagree ( )
15. Insufficient understanding of the services hinders usage intention of e-banking transactions through mobile phones?
1=Agree ( )
2=Strongly Agree ( )
3=Neutral ( )
4=Disagree ( )
5=Strongly Disagree ( )

16. Problems with mobile money agents hinder usage intention of e-banking transactions through mobile phones?
1=Agree ( )
2=Strongly Agree ( )
3=Neutral ( )
4=Disagree ( )
5=Strongly Disagree ( )

17. Technical issues hinder usage intention of e-banking transactions through mobile phones?
1=Agree ( )
2=Strongly Agree ( )
3=Neutral ( )
4=Disagree ( )
5=Strongly Disagree ( )

18. What measures should be taken to improve the usage of e-banking transactions through mobile phones?
........................................................................................................................................................................
........................................................................................................................................................................
........................................................................................................................................................................

THANK YOU FOR YOUR PARTICIPATION.
Appendix II: Interview guides to service provider

1. What are the factors influencing the adoption intention of e-banking transactions through mobile phones in your company?

2. What are the attitudes towards usage intention of e-banking transactions through mobile phones in your company?

3. What are the barriers on usage intention of e-banking transactions through mobile phones in your company?

4. What measures should be taken to improve the usage of e-banking transactions through mobile phones?

THANK YOU FOR YOUR PARTICIPATION.