

**DETERMINANTS OF ADOPTION OF ELECTRONIC BANKING
AMONG THE COMMERCIAL BANKS STAFF: A CASE OF
COMMERCIAL BANKS, KISII COUNTY, KENYA**

BY

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DECLARATION

This project is my original work and has not been presented for the award of any degree in any university or institution of higher learning.

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DEDICATION

I dedicate this work to my wife Mary Nyambura Mwathi and my mother Endelina Kang'aria for their support socially and morally throughout the period of developing this project.

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ABBREVIATIONS AND ACRONYMS

TAM : **Technology Acceptance Model**

TRA : **Theory of Reasoned Action**

PC : **Personal Computer**

PDI : **Power Distance**

IDV : **Individualism and Collectivism**

ABSTRACT

Internet banking entails the use of internet as a channel for banking services which includes all traditional services such as balance enquiry, printing statement, funds transfer and bill payment. Though large number of people make use of internet in their day to day activities, it's seen that internet use in banking has remained low a scenario attributed to various factors. The Purpose of this study was therefore to establish the determinants of electronic banking adoption among the commercial banks staff, a case of commercial banks, Kisii County Kenya where the objectives of the study were; to establish the extent to which relevance influence adoption of electronic banking among the commercial banks staff in Kisii county, to examine the extent to which bank marketing strategies influence adoption of electronic banking among the commercial banks staff in Kisii county, assessing how bank culture influence adoption of electronic banking among the commercial banks staff in Kisii county, to establish the extent to which ease of use influence adoption of electronic banking among the commercial banks staff in Kisii county and the extent to which socio- demographic factors influence adoption of electronic banking among the commercial banks staff in Kisii county . The theory upon which the study was grounded was the Davis's Technology Acceptance Model. The study involved descriptive research design in order to extract data from the target population of 700 and with a sample size of 248 respondents whereby both purposive and simple random sampling techniques were used to select the respondents who aided in data collection. The study also involved questionnaires and interview schedules in order to obtain data whose validity and reliability was established through the results of the pilot study, through focusing on the objectives of the study and carrying out a pre-test among few staff in the county by issuing questionnaires to the informants twice but within an interval of two weeks after which results were recorded and correlated to determine the level of consistency using Pearson's product moment formula for test-retest. The quantitative data collected was analyzed by categorizing it into themes that met the objectives of the study and then coding them for ease of analysis using the Statistical Package for Social Sciences (SPSS) through running frequencies, percentages and presenting it in form of frequency distribution tables, while qualitative data was analyzed by involving thematic frameworks that coded data into themes. Results of the study indicated that determinants of e-banking adoption in context influenced e-banking adoption that is relevance of e-banking, ease of use, banks marketing strategy, socio-demographic factors and bank culture. The recommendation of the study includes, increased banks consistency of staff training sessions, going slow on paperwork, working to change staff attitude, putting into considerations specific courses undertaken by staff at tertiary levels and lowering cost of doing transactions by e-banking. The study suggests that further studies should be conducted to establish which courses are capable of producing staff who are ready to take up new systems introduced and also suggests a study involving quantitative methods to be conducted to allow results to be generalized and made more replicable.

CHAPTER ONE

INTRODUCTION

1.1. Background to the study

According to banking and finance on internet by Schwarzer,R,1992 online banking was first introduced in the early 1980s in New York where a number of banks; Citi bank, Chase Manhattan, Chemical bank and Manufactures Hanover are said to have introduced its services to various customers.

In UK it was introduced during the same year by Nottingham building society in 1983 through its collaboration with Prestel, a computerized information service owned by British Telecom Schwarzer,R,1992

In 1994, online banking was built into Microsoft money personal finance software which was a creation of Stanford credit union and was inform of first online banking website, Alex Kocic 1995. Kocic also notes that it was during this time that Yodlee created first account aggregate software hence enabling customers interact with their account in one place. By 2001 over eight US banks had secured over a million online customers and by 2009 there was a shift from the use of personal computers to smart phones, Fiserv inc,2010.

Today, most commercial banks and micro finance institutions have adopted e-banking technology in their banking systems. The adoption of such technology has been drove by the need to command huge market share, profit maximization and promotion of customer satisfaction Joppe, M, 2000.

The use of e-banking has therefore been on the rise since the early 1980s where it was adopted by both United States and United Kingdom especially after the expansion of the World Wide Web where traditional banks offered their client's software to access their account online and also on their own pc's using the modem Joppe, M, 2000

In America, the internet explosion of 1990s made many people more comfortable with e-banking. It's out of this that by the year 2000, 80% of American banks offered e banking services to their client, a development embraced by banks like American bank, Amazon bank, American express bank, Wells Fargo, J.P Morgan chase bank (Marlin, 2005) etc.

In 2001 the bank of America recorded 3 million online banking customers, more than 20% of its customer base Gartner group report, (2001). The same report provided that J.P Morgan chase bank was estimated to have more than 750000 online customers, while wells Fargo had 2.5 million online users.

A survey conducted by Fiserv(2010) reviewed that nearly 72.5 million US households with internet access or 80 % of the total households bank online. Out of this estimate, 36.4 m household's bill payment is online up from 32.6m the previous year. According to this report, such an increase in e banking has been attributed to increased knowledge on technology, trust towards online banking and the privacy policy put in place to protect customer information.

In China, online banking is so far regarded as in its early stages according to (Laforet and Li, 2005). The nature of e banking adoption in china is mainly influenced by different levels of internet experience and the environment be it social, economic or legal. The adoption of e-banking in China has for long been influenced to a large extent by privacy policy and the ease of use which determines the level of trust hence decision making (Avinandan and Prithwiraj, 2003).

In Nigeria, e-banking has been adopted by many clients though studies have reviewed that the adoption is low mainly due to frauds, forgeries, erosion of public confidence, threats of cybercrimes and regulatory challenges (Ezeoha, 2000). Studies have also reviewed that Nigerian population has been affected to a large extent by poor knowledge on e- banking among the residents. This is based on the study by Auta M.E (2007) that reviewed 56% of males compared to 43% of females were seen to embrace e- banking, where 79% of the sampled population who adopted the technology was aged between 25-35 years while the rest were above 35 years.

In Kenya e-banking was first introduced by Barclays bank in 1996 while the first local bank to introduce the service was First American bank in 2003, Ogandi, (2013), which is a clear indication that internet banking in Kenya was clearly introduced in the early 2000. Though it's a decade since its introduction, e banking in Kenya is still in its nascent stages as demonstrated by the length of usage response recorded Ogandi, 2013. This is a clear indication that drastic measures have to be undertaken by various banking institutions in order to promote the usage of a technology that was received with a lot of excitement due to its promising speed, inexpensive and convenience in different parts of the world.

Several studies that have been conducted in Kenya have revealed that e- banking adoption is very low; 20.82% despite high rate of internet access recorded (Kamau, Ritho, Olweny, & Mwangi, 2012). Due to

such low rates of e-banking adoption in Kenya, the graduation of banking services from the physical branches well known as 'bricks and mortar' to the modern information technology systems better known as 'clicks and mortar' is yet to be accomplished as predicted by (Bradley & Stewart,2002).

Kenya commercial banks should therefore embark on campaigns to sensitize the staff on the usefulness and the importance of e-banking as a promotional and marketing strategy, as well as making a deliberate move to understand what internal customers require, and design their products and services in a manner that is in line with their needs, beliefs and how they are used to work (Bradley & Stewart,2002).

Gikandi & Bloor (2010) considered privacy and security to be the aspects that most customers consider before making decisions to adopt the e-banking. These and many other determinants have been examined by various writers not only in Kenya, but also in other parts of the world. The aspects of perceived usefulness, perceived ease of use, perceived self-efficacy, perceived compatibility and relative advantage are the factors that determine adoption and usage of internet banking in Kenya (Kamau, Ritho, Olweny, &Mwangi,2012). Determinants like risk and its influence on the intention of various customers to adopt e banking is a worthy aspect that should be examined as it may have an influence in forming attitude towards either adoption or failure to adopt the technology.

Kisii County has many commercial banks that have well established branches from which marketing ventures targeting various parts of the county have been stretched. However these ventures seem not to bear fruits as expected as evidence from long queues and congestion in most commercial banks in Kenya, Kamau, Ritho, Olweny, &Mwangi, 2012 and Kisii County is no different from other counties. This to some extent may be attributed to factors relating to bank staff commitment to selling e banking as a product to clients, a phenomena that necessitates the need to establish whether individual staff are involved in making use of e-banking while dealing with their own accounts in such instances like purchases at points of sale, transfer of funds and balance inquiries (Gikandi & Bloor 2010). As brought out by Ogandi 2003 the culture embraced by banks has great impacts on how e banking in to be favored by most clients that is, in line with parameters that are of great concern to the bank. In Kenya, most commercial banks count on how many clients a staff is likely to serve in a day as a parameter, a scenario that may affect the levels of staff determination to embrace e-banking as this may lead to fewer clients in the banking hall hence low performance (Bradley & Stewart, 2002),a scenario that is also shared by commercial banks in Kisii county. There is therefore a need to establish the extent to which such banks culture affect commercial banks staff self-efficacy with regard to e-banking usage.

1.2. Statement of the problem

The paradigm shift in the technological development in the world today has attracted great changes in the field of banking (Ongadi, 2013). In Kenya most commercial banks have moved to establish infrastructure to aid in promoting internet banking as well as acting as a defensive mechanism against competition Hughes- (2003) although these systems have remained unnoticed by the customers and certainly are underused in spite of their availability (Kariuki,2003). This move by the banks is manifested through marketing strategy meant to create awareness on the usefulness and benefits of internet banking with regard to making transactions at the comfort of the PCs.

Kisii County is dominated by many commercial banks which have employed many staff who assist client in making many transactions on a daily basis. However it's seen that most staff though they are aware of electronic banking, they are not able to make use of this system as its evident from the interaction with liquid money in the purchase of goods and services at the points of sale Hughes-(2003).The rationale behind establishment of e-banking was to bring about transformation from physical banks to virtual banking (Frust, Lang, and Nolle,2000) where the end results would be decreased number of physical banks country wide, on contrary Kisii county is currently experiencing increased number of physical banks As Kariuki 2003 notes the use of e-banking as to be promoted by the banks deliberate move to create awareness of its use. However this can only be possible if individual staffs in banks are able to make use of the system which could give them the awareness of the system use hence ability to do marketing to the customers (Kariuki 2003). What has been the trend is that bank staff fails to understand and use e banking and as a result poor marketing is done to clients hence low uptake of e-banking by external customers as evident from long queues and congestion in most banking halls among commercial banks in Kisii county. According to Bradley & Stewart,2002, although e-banking is there to reduce banks emphasis on paper work not only at account opening but also on loan processing where clients are required to process facilities online most banks have not taken this development with the seriousness it deserves. Most staff in commercial banks are therefore not guiding customers on how to make use of this technology as evident from low income generated from virtual banking (Kisii county commercial banks 2014 annual reports). This therefore necessitates the need to establish what factors are behind commercial bank staff adoption of e-banking that is to what extent do such factors either influence or hinder adoption of e-banking. Thus this study seeks to establish the determinants for adoption of e-banking among the bank staff, a case of commercial banks, Kisii County, Kenya.

1.3. Purpose of the Study

The purpose of this study is to establish the determinants for adoption of e- banking among commercial banks staff in Kisii County Kenya.

1.4. Objectives of the Study

This study will be guided by the following objectives;

- 1.To establish the extent to which relevance influence adoption of electronic banking among the commercial banks staff in Kisii County.
- 2.To examine the extent to which bank marketing strategies influence adoption of electronic banking among the commercial bank staff in Kisii County
- 3.To assess how bank culture influence adoption of electronic banking among the Commercial banks staff in Kisii County.
- 4.To examine the extent to which the ease of use influence adoption of electronic banking among the commercial bank staff in Kisii County.
- 5.To establish the extent to which socio-demographic factors influence adoption of electronic banking among the commercial bank staff in Kisii County

1.5. Research questions

This study will be guided by the following research questions

- 1.To what extent does the relevance influence adoption of electronic banking among the commercial banks staff in Kisii County?
2. To what extent does the bank marketing strategies influence adoption of electronic banking among the commercial banks staff in Kisii county?
- 3.To what extent does the bank culture influence adoption of electronic banking among the Commercial bank staff in Kisii Count

4. To what extent does the ease of use influence adoption of electronic banking among commercial bank staff in Kisii County.
5. To what extent does socio-demographic factors influence adoption of electronic banking among the commercial bank staff in Kisii County.

1.6 Significance of the study

The study was an important topic in the field of banking as its focused on e-banking adoption by staff working in commercial banks in the county. The information gained from this study is expected to be crucial in making major decisions among various banking institutions for example on the most effective ways of reaching to the not only the internal but also external customers and how to ensure their continuous usage of the system. The findings of this study are expected to help the banks to evaluate the impacts of marketing strategies already in place hence assisting in making recommendations for future marketing. The study findings are also expected to bridge the existing knowledge gaps in e-banking, providing reference to other researchers as well as adding to existing literature. The information gathered is meant to contribute to banking approaches to e- banking to be carried out by various commercial banks. The results of this study are also expected to provide feedback to various banking institution's policy makers on measures to be put in place to realize the goals of e-banking adoption.

1.7 Limitations of the study

The assessment of e-banking use by commercial banks staff in Kisii County is an activity that was expected to be carried out within the banking halls and within the working hours. Therefore data collection was done concurrently with other activities involving serving customers within the bank which made the activity tedious. Kisii county experiences heavy rainfall especially in the afternoon and this was expected to affect the research process. Challenge of securing appointments with key informants to carry out research was also a challenge during the research period. The research process was also limited by the resources in terms of finances. These challenges were overcome through scheduling the research time to take place during morning hours when chances of having rainfall were low. As far as appointment with key informants was concerned the research left the interview schedules

with informants for filling to be collected later whenever appointments proved difficult. In order to secure adequate time to interact with respondents at the place of work, the researcher took study leave to ensure enough time was there as far as research was concerned. For finances the researcher, ensured that the available finances were directed towards this noble activity.

1.8 Delimitations of the study

The study was directed towards the target population sampled from the staff working with commercial banks within Kisii County with a reasonable sample size that aided in gathering information that could be analyzed to give out come for the entire county. Kisii County is located within Nyanza region where many commercial banks have established their branches a venture that is supported by big businesses in the region. It's in these branches that we have many staff who are expected to make use of electronic banking services in their various transactions. The study therefore focused on commercial bank staff within Kisii county in terms of how they make transactions though e-banking. The county was selected due to many commercial banks operating within the county and consequently many staff working with them. The study was delimited to Kisii County because of the researcher's knowledge of the county and administration.

1.9 Basic assumptions of the study

It was assumed in the study that the size of the sample adopted would be sizeable enough to represent the target population in the study. It was also assumed that the respondents chosen would be ready to take part in the study and that information given would be in their best knowledge. It was also assumed that e-banking knowledge is available to the staff working in various commercial banks and are required to make use of the system in their day to day transactions. The study was also based on the assumptions that the questions asked in the questionnaires at the time of research were fully understood by the respondents and that there was no communication barrier between the respondents and the researcher. Additionally, the answers by the respondents were true to the best of their knowledge hence information gathered was correct.

1.10 Definition of significant terms used in the study

- E- banking:** This refers to the process by which a customer may perform banking transactions without visiting the physical bank institutions that is, the customer is able to perform financial transaction on their personal computers or online.
- Commercial bank staff:** Those working in banks under permanent and pensionable terms
- Determinants:** Factors influencing adoption of e banking.
- Commercial Banks:** Banking institution within Kisii County with outstanding loan book of over 0.8 billion
- Perceived relevance:** The expected significance of electronic banking among its users in terms of its numerous uses and ability to save on cost and time.
- Perceived ease of use:** The extent to which an innovation is perceived not to be difficult to understand, learn and operate.
- Self-efficacy:** Refers to the peoples beliefs about their capabilities to produce the required levels of performance that exercise influence over events that affect their lives.
- Socio-cultural factors:** Refers to the socially and culturally defined factors that influence the adoption of e-banking.
- Adoption:** The uptake of electronic banking system use by the non- users.

1.11 Organization of the study

The study was organized into five chapters. The first chapter provides details on the background to the study, purpose of the study, statement of the problem, objectives of the study, research questions and significance of the study, limitations and delimitations of the study, definition of terms used in the study.

The second chapter offers a review of the existing literature that provides the framework within which the information obtained would be used to justify the research findings. This chapter therefore involves, the concept of adoption of electronic banking, relevance of e banking, influence of bank marketing strategies on e-banking adoption, influence of bank culture on e-banking adoption, the influence of ease of use and also the role of socio-demographic factors in determining e-banking adoption. The chapter also covers knowledge gaps, theoretical framework, conceptual framework and summary of literature review. Chapter three includes the research methodology that was used to acquire, process and analyze the data. It includes; introduction, research design, target population, sample size, sampling techniques, data collection instruments, data collection and procedures, operationalization table, data analysis techniques and ethical considerations. Chapter four contains data analysis, presentation and interpretation. Chapter five contains summary of study findings, conclusions and recommendations, contribution to the existing knowledge and suggestions for further research

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter discusses theoretical and empirical literature related to the concept of e-banking; relevance of e banking, influence of bank marketing strategies on e-banking adoption, influence of bank culture in e banking adoption, the influence of ease of use and also the role of socio-demographic factors in determining e-banking adoption.

2.2 Concept of electronic banking adoption

Electronic banking that traces its roots in the early 1980s is said to have took off with the arrival of the World Wide Web where most banks started offering customers accounts to operate on line Gartner group report (2001).Internet banking entails the use of internet as a channel for banking services which includes all traditional services such as balance enquiry, printing statement, funds transfer, bill payment (Frust, Lang, and Nolle,2000).By the year 2000, over 80% of US banks were offering electronic banking services to customers, a development that has been embraced in the last one decade. The adoption of electronic banking as a technology for carrying out banking services has continued to increase worldwide where this rise has been attributed to its usefulness, ease of use, self-efficacy and relative advantage (Liao and Cheung (2006). The individual banks have also put effort in order to promote and market electronic banking in addition to understanding what customers' needs in an effort to come up with products that satisfy their needs, that are cost effective, that enhance performance improvement, wider market coverage and revenue growth (Mattila 2003). From the customers perspective electronic banking enhances effective and efficient ways of managing personal finances as its available 365 days in a year without visiting the physical banks (Rotchanakitumunai & Speece, 2003). However the adoption of electronic banking under the influence of various determinants has remained low; this trend has been same globally and it has been realized that potential users either do not adopt internet banking or do not use it constantly after adoption. According to Brown 2001 observed that out of the 61% online users, only 20% of customers carries online banking in USA.

2.3. Relevance of electronic banking

The world is experiencing change where technology is viewed as the drive towards such a change. According to Heikki et al (2002) many activities are handled technologically due to information acceptance at home and workplaces. Internet banking is thus a global phenomenon that has made time and distance irrelevant to many transactions.

According to a report by Office of National Statistics (2006) in UK, the subscription to internet has grown more than 50% from 15m in the year 2000 to 35m in 2005 which has created a better prerequisite for internet banking adoption among many citizens.

The fundamental shift towards the involvement of clients in management of their financial transactions with the help of technology has helped in cost reduction of financial institutions as well as helping clients to use the service at their own convenient time and virtually everywhere (Bradley & Stewart,2002). This has at the same time removed the banking personnel and placed additional responsibilities on the customer to transact the service. Electronic banking is doing away with situations where transactions take place after exchange of notes from the buyer to the seller which limits liquidity and velocity of money hence making things go on slowly (Bradley & Stewart,2002). Electronic banking is accelerating the economic growth by making people more productive and integrating them into the global economy (Daniel E, 1999).In a study conducted by Liao and Cheung (2006) in Singapore that sought to establish consumer attitude towards usefulness of and willingness to use internet in retail banking found that the aspects of accuracy, network speed and convenience were the key attributes defining perceived usefulness and relevance.

As opposed to arm chair banking, virtual banking has resulted into creative ways of reaching more discerning and sophisticated clients through technologically designed financial products and services (Meidan 1996). According to Meidan (1996), this has not only strengthened the financial base of financial institutions but also led to acquisition of new business, maintenance and improvement of market share both locally and internationally. However of great concern according to Kamau, Ritho, Olweny & Mwangi (2010) is how banks are going to maintain customer relationships with the system as personal interaction with customers will be reduced. Additionally, there is a need to establish whether electronic banking can stand alone as an entity that is, without integrating it with the existing banking operations.

Banks in their move to promote electronic banking have to examine the actual status with regard to the awareness of the system among the staff, explore the alternative systems that staff are familiar with and which may challenge their attempts to introduce the new system Kamau, Ritho, Olweny&Mwangi (2010), an idea that is seen to equip the banks with knowledge on the strengths and the weaknesses on alternative systems that staff use hence designing their new system in a manner that will boost relevance of e banking among its staff. Additionally this is believed to shape the attitude of the customers towards e banking as the system will be perceived as relevant to the end-users. Of great concern according to Rodgers (1962) is the extent to which banks are able to make staff aware about how banks have integrated their systems with other institutions of equal importance to them hence making them able to transact from the comfort of their machines without necessarily travelling from one point to another either to do purchase or delivery.

2.4 Commercial banks marketing strategy influence on electronic banking adoption

One of the most important factors of innovation adoption is the creation of awareness amongst the consumers in a manner that will influence their uptake through attitude formation and development of the intention to make use of the new system (Suganthi et al 2001).

Rodgers and Shoe maker (1971) argued that individuals go through a process of knowledge, conviction, decision making and confirmation before they make decision either to adopt or not adopt e-banking. It's out of this that Howard and Moore (1982) emphasize on banks creating awareness on e-banking among bank customer if intended levels of adoption have to be realized. It should also be noted that creation of awareness among customers leads to the feeling of security by users as brought out by Prasad and Arumbaka (2009) in their studies in India based on internet banking uptake.

Financial services are characterized by individuality, independence of time and place, and flexibility. According to Mattila et al (2003) this has therefore posed challenge on the part of banks in managing their customer base and as a result most have resorted to electronic banking as a strategy for satisfying the ever changing customer demands and innovative business needs. Mattila 2003 also argues that what has become a challenge is how the banks can maintain a stable customer relationship through this system. As a result banks have embarked on marketing strategies to reach as many staff as possible whereby the product is made available to them hence overcoming competition from the likeminded

banking institutions. Though electronic banking is critical to the future of banking industry, its seen that its usage is low, Kamau, Ritho, Olweny & Mwangi (2010) have noted that in Kenya only 24% of the staff within commercial banks are able to make use of the new system. This requires banks to put up measures to promote electronic banking through marketing, understanding the staff needs and how they change with time, promotion of skills and understanding of system use by the staff. Sohail & Shanmughan (2004) has noted that accessibility to internet, awareness of e- banking and attitude change towards e- banking are critical in understanding staff e-banking adoption behavior.

However what is not clear according to Sohail & Shanmughan (2004) is how banks can promote staff accessibility to electronic banking use as well as overcoming resistance to change by staff as this brings in economic and socio-cultural aspects of customer life which banks may have little influence over.

Meidan (1996) notes that banking services are required to meet general needs of various market segments which calls for banks to design their market mix to meet such needs. According to Meidan (1996) banks have embarked on marketing strategies to reach on to the staff through training in banks and e-learning sessions to create awareness about the existence of electronic banking, its benefits and the technical aspects of it. Although information on e- banking is available online, media has also played a key role in educating staff on electronic banking and the benefits attributed to its usage. However according to Petersen & Rajan, 2002, these efforts have been frustrated by low technical knowledge on the part of staff as most fear situations where their funds may get lost in the process of making online transactions. This has posed challenges on the part of banks to instill technical knowledge to staff which may seem expensive and with little forthcoming benefits. Additionally, Petersen & Rajan argue that the greatest segment of staff have little access to internet services outside the bank premises either on the general website or on their own machines which limits technical knowledge on the system use and also affects attitude formation towards internet banking usage hence most staff have no options to choose from other than handling their cash physically.

According to Petersen & Rajan, banks are therefore required to design their marketing strategy in a manner that will incorporate various aspects of both users and potential users of electronic banking in Kisii County. This will involve marketing strategy that will lead to attitude change and formation towards electronic banking that is, in terms of how clients will access internet, the efficiency associated with e banking, security measures available and cost involved.

In marketing electronic banking, most banks are seen to have integrated their products and services with other institutions and firms that supply various products to customer businesses such as wholesalers and supermarkets (Ramayah and Lo 2007). However the level at which this has been done is still at its nascent stages as only huge suppliers and super markets have been involved while ignoring medium retail and wholesale points of sale that makes staff ignore e-banking especially after considering one stop economies in making sales and purchases, (Petersen & Rajan, 2002).Its, however critical to note that the marketing strategy design adopted by most banks affects the level of adoption of e banking by staff.

2.5. Influence of bank culture on e-banking

The impacts of bank culture on electronic banking are deep rooted and much is yet to be done in order to reveal the level of influence. According to Crabbe.m, Standing.c, Standing.s, & Karjaluoto. (2008) the aspect of elite is shaped not only by economic factors but social and cultural perception as to what is considered appropriate for someone of a certain social status. Culture on the other hand is said to influence adoption based on beliefs held by individual in certain age and income bracket, occupation, education and gender groups. Of equal importance is the subjective norm as developed by Fishbein and Ajzen (1975) where its attributed to what others are likely to think of you upon manifestation of a certain behavior. This has determined attitude formation by staff towards adoption of electronic banking hence determining the direction of the intent for adoption.

Therefore existing cultural factors are determinants for adoption of electronic banking and it can also be said that the level of new system adoption is an indicator of cultural differences. Hofstede (1980) developed a widely accepted theoretical framework that examines the aspect of culture whereby differences in these aspects may influence the extent to which the bank fosters new technology adoption. This therefore shows that although various banks in different regions in a state may have differing cultural orientations, the general culture of a bank has a key influence on various staff hence needs to be put into consideration. Among the dimensions of bank culture that Hofstede expounded on includes; the power distance (PDI) that entails the extent to which the staff feel that power is unevenly distributed. Based on Hofstede's comparative study between states like US, UK verses Nigeria and Ghana, it's obvious that the level of PDI is quiet low in UK and US; 35% and 40% respectively compared to

Nigeria and Ghana at 80%. From these scores, it can be deduced that the higher the PDI the higher the feeling of inequality and disempowerment hence the lower levels of innovativeness and readiness to accept new developments. Kenya being an African country just like Nigeria and Ghana stands no differently from the two in terms of how the staff may feel in terms of unequal power distribution and discrimination.

Individualism and collectivism (IDV) is another key dimension brought out by Hofstede (1980) which involves the level to which individuals feel at liberty to do things as individuals or are attached to a group. It's clear according to Hofstede (1980) that where people are at liberty to make decisions as individuals the rate of new technology adoption will be high compared to situations where other aspects of a group will have to be considered before making decisions. This according to Hofstede introduces the aspect of subjective norm among the individuals as they have to weigh what others consider appropriate before making their decision either to adopt or not to adopt electronic e-banking.

Uncertainty avoidance which entails the extent to which staff are rendered uncomfortable during new situation leads to low levels of new system uptake and adoption by the staff. This can be attributed to security, privacy and knowledge of the new idea introduced (Rodgers 2003)

Long term and short term orientation is another dimensions of bank culture brought up by (Hofstede, 1980). In his literature, he clearly brought out the fact that banks with long term cultural orientation are likely to compel their staff to embark on future outcome of new systems introduced hence embracing changes and new technology adoption. Though Hofstede has made great contribution in understanding culture in determining the level of new technology and systems adoption, it's not clear whether staff themselves are aware of the bank culture and if it has a major contribution towards making decisions to adopt the new systems.

. The social structure and the communication structure determine staff perception of the new systems introduced. On the same note, the values and norms the characteristic of the social system will influence staff adoption of the electronic banking depending on their feeling of compatibility of the system with their norms (Hofstede 1980)

The modern orientation of the cultural system according to Rodgers (2003) is also crucial in determining the level of adoption of the new system because this will shape the attitude of the staff towards the new idea and also create rational relationships among the staff hence perceiving the new idea as progressive.

The role of opinion leadership also determines adoption of online banking in most banks. Rodgers (2003) attributes this to influencing attitude of the adopters in a certain desired way. Although Rodgers concern for the role of the social structure and culture in determining acceptance and adoption of the system is crucial, its seen that various banks in Kisii County have different structures, cultures and it might be difficult to determine which structure and culture is best suited to promote electronic banking adoption by commercial bank staff.

2.6 Ease of use influence on e-banking

This is the extent to which individuals consider the use of the system as time and cost saving Davis et al (1989). According to Rodgers 1962 ease of use is seen to be the degree to which an innovation is considered to be easy to use, understand, learn and operate. Rodgers also adds that it's the extent to which consumers regard a newly introduced product or service as better positioned to make use of compared to its substitutes. Ease of use is therefore based on the consumer perception that banking on internet will involve a minimal effort.

The drivers of growth in electronic banking are seen to be determined by perceived ease of use a combination of convenience provided to those with easy internet access, availability of security, high standard internet functionality and the necessity of banking service. Davis, 1989 has also noted that its of importance to ensure that systems that are easy to make use of are created as that will shape the attitude of the users.

Ramayah and Lo (2007) affirmed ease of use as the degree to which new system is perceived as easy to understand, learn or operate. Therefore the ease of using electronic banking has promoted increased adoption of the system by many clients although challenges exists as the highest percentage of the population both locally and internationally perceive electronic banking as complex in terms of technical skills involved. In number of situations complexity and design are seen to discourage clients from making use of internet banking as Pikkarainen et al (2004) argue that any novelty perceived to be easier to use than another is more likely to be accepted by users. This to a large extent has affected attitude formation towards adoption of electronic banking hence an area that needs close examination to establish what banks should embark on to make staff change their attitude based on ease of use.

The perception of the e-banking by users in terms of how easy to make use of is an aspect that banks needs to analyze in terms of frequency of e-banking usage and also the extent to which e-banking systems face network challenges and if banks makes a quick move to rectify such system challenges (Pikkarainen et al 2004). This according to Pikkarainen et al would call for banks analysis of staff frequency of e-banking usage in terms of transactions they are able to make with a month where information gathered would aid in making adjustments to future policy making process.

Study conducted by Auta, M.E., (2007) in Nigeria revealed that most banks have not been directly involved in analysis of customer feedback an issue that has made banks not to make improvements on e-banking uptake not only among the staff but also among external customers. However Auta M .E noted that most clients regarded e-banking as a system that could change their lives in terms of cutting on cost of doing transactions and reduced distance but were categorical on the fact that other alternative systems like ATMs and mobile banking has proved easy to make use of compared to e-banking hence are negatively attracted to e-banking.

2.7 Influence of social demographic factors on e-banking adoption

Various studies have directed efforts towards establishing impacts of consumer demographics on use and acceptance of use and acceptance of information technology. According to Padachi et al 2008 the effects of habit on information technology adoption and usage varies depending on age, gender and academic experience.

According to Sylvie, L and Xiaogan, L 2005 in their studies conducted in Jordan they revealed the contribution of demographics like age and experience in influencing consumer preparedness to take up and make use of e-banking.

Sylvie and Xiaogan revealed that effects on information technology use habit differs based on age whereby they indicated that old men with experience tend to be driven by habit while older women at their nascent stages of using newly introduced systems are influenced by external resources to dictate their continued usage.

According to Padachi K 2001 in his studies conducted in Mauritius, it was revealed that young people are influenced by hedonic benefits arising from making use of the system whereas aging women put into

consideration the cost of using the new system hence monetary considerations comes before attitude formation and the intentions to adopt the new technology.

A study conducted in Jordan by Sylvie and Xoaogan in 2005 revealed that among age gender education and income level, education had greatest influence in determining the extent to which consumers take up electronic banking whereby they regarded income levels as negatively influenced how customers make decisions not only to make use of mobile banking but also e-banking. According to a study conducted by Suganthi et al 2001 in Zimbabwe, it was revealed that the chances of one adopting internet banking decreases by age. Suganthi therefore confirmed difficulties in attracting the old age group in internet banking.

According to Mattila et al (2003) in a study conducted in South Africa it was revealed that 86.2% of internet users were graduates and undergraduates indicating that higher education levels influence e-banking adoption.

On gender, Waite and Harrison (2001) revealed that gender determine the extent to which individuals take up electronic banking in Malaysia. They revealed that in Malaysia, 51.9% of home users were males while 48.1% of users were females. The variation on usage of e-banking among various gender members is a factor under the influence of not only income but also education levels attained (Padachi et al, 2008). This is an indicator of the fact that gender as a factor alone was not adequate enough to influence whether an individual could take up e-banking as other aspects of level of education that determined exposure and readiness to take up new systems. According to Waite and Harrison (2001) the influence of gender in determining e-banking adoption is mainly a multi-faceted aspect as various aspect of income, education, occupation determine the individual perceptions within gender and its out of these aspects that individuals get compelled to make decisions on adoption of new systems.

Theoretical Framework of the study

This study will be based on the Technology Acceptance model (TAM). Technology acceptance model seeks to explain how new system use is a response that can be explained by user stimulus consisting of the crucial system features and capabilities (Davis, 1985). Davis based his study on the works of Fishbein and Ajzen(1975) who formulated the theory of Reasoned Action (TRA) that argues that

individual intention to adopt the new system is influenced by their attitude towards the behavior and subjective norm. As a result, person's behavior is determined by his intention to embrace the behavior. In this context, the attitude towards a specific behavior is determined by individual's positive or negative belief. Subjective norm is the belief of what others will think and feel about the perceived behavior that is, perceived influences of social pressure on an individual to perform or not to perform a behavior.

Based on the works of Fishbein and Ajzen(1975) on Theory of reasoned action, Davis further refined his conceptual model to form Technology Acceptance model as he considered behavior as the actual determinant for new technology adoption. However Davis is said to have made two major changes to theory of reasoned action that is, he did not take the subjective norm into account as he regarded it as the least understood aspect of TRA based on the work of Fishbein and Ajzen (1975) hence having uncertain theoretical status. Secondly instead of considering various aspects of individual salient beliefs in determining attitude towards behavior, Davis 1985 relied on other studies to come up with other beliefs that is, perceived usefulness and perceived ease of use to determine attitude towards system use.

In 1989, Davis, Bagozzi and Warshaw suggested cases where given systems perceived usefulness and perceived ease of use, one may develop behavior intentions to use the system without necessarily forming attitude. This makes TAM a three steps model; perceived aspects of ease and use formation, behavior intention and actual use.

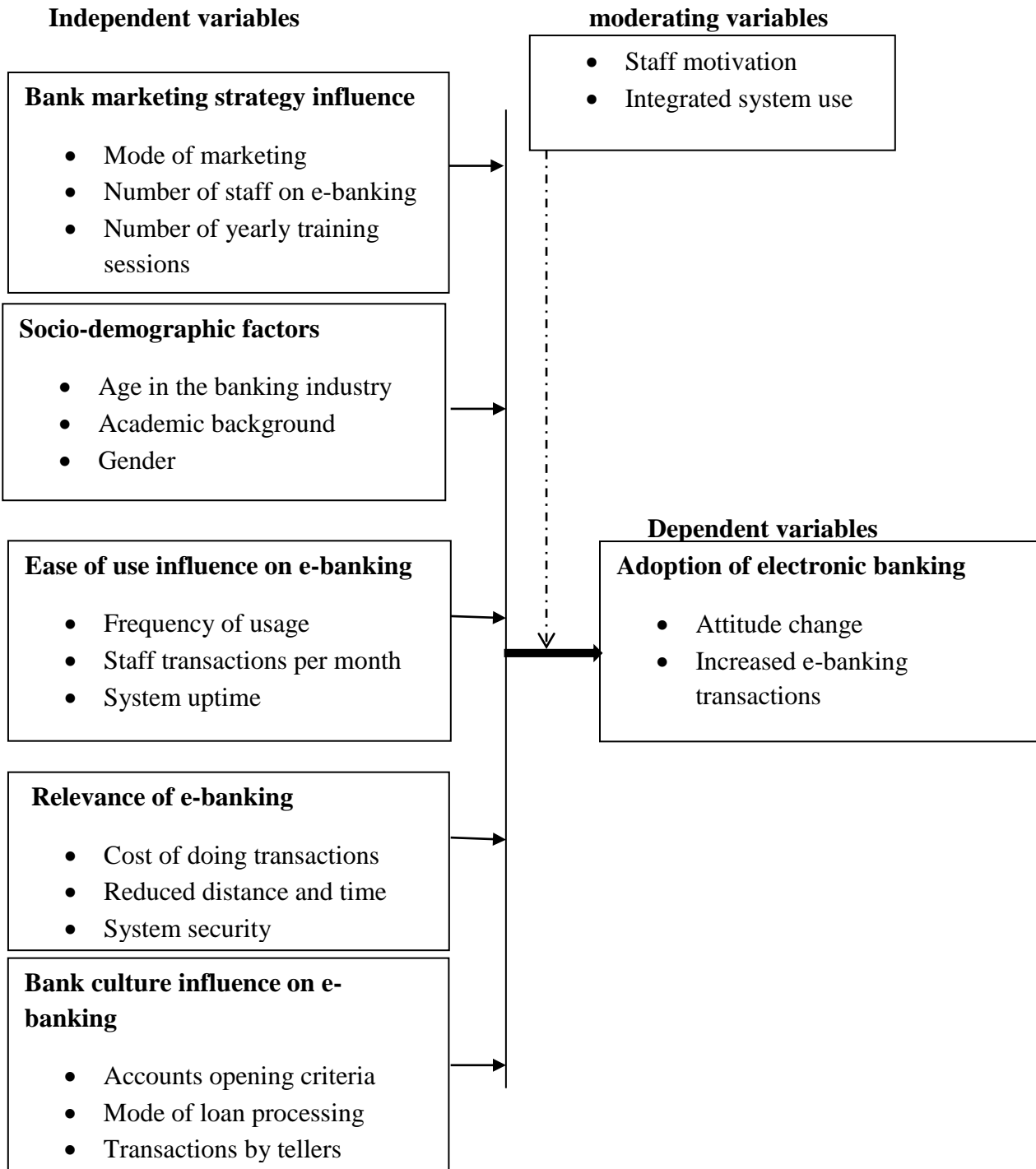
Davis' Technology Acceptance model has been selected because it provides a familiar framework that can be used to understand and advance the study of determinants for adoption of electronic banking. This will be possible through understanding how staff in commercial banks form attitude and behavior towards electronic banking adoption.

Despite of its usefulness, limitations of technology acceptance model is also serious. Critics of the model have suggested that the theoretical strength of intention- actual use link is flawed since behavior could not be termed as terminal goal (Bagozzi, 2007). Also, TAM is said to be a highly deterministic model that is individual behavior is assumed to be determined by intention to act. However individual intention could be evaluated and reflected upon hence reformulating the intention and even taking a different course of action.

Nonetheless, it provides a valuable foundation upon which research and practice may be built upon.

2.7 Conceptual Framework

This study was guided by the conceptual framework described in the figure below.



————> **Key: Shows the relationship between variables**

Figure 2.1 Interaction between variables under the conceptual framework

From the conceptual framework, the independent variables are meant to explain the variation on the dependent variables. They are therefore measured, manipulated by the researcher to establish their relationship with dependent variable. In the above conceptual framework, the independent variables includes relevance of e banking, influence of bank marketing strategies on e-banking adoption, influence of bank culture in e banking adoption, the influence of ease of use and also the role of socio-demographic factors in determining e-banking adoption.

Electronic banking adoption is determined by the ease of use and relevance of this system use by the various staff. Relevance in this case is based on how cost effective the system is, that is, cost in terms of travelling to the physical banks and also points of sale. Relevance could also be attributed to time and distance reduction that is, in travelling to the nearest bank branch to do banking and security in doing transactions. The ease of use could be attributed to the extent to which staff can make use of the system with minimal struggle, the trial ability of the system and compatibility of the system.

Commercial banks marketing strategy influence on electronic banking is also crucial in determining the extent to which staff are likely to adopt the technology. Banks have therefore intensified marketing strategies to ensure that more staff are aware of the system and also create awareness among its clientele on the system use and its usefulness. Through constant review of customers ever changing needs and innovative businesses, banks are at a position of providing customized products hence promoting not only the e banking adoption and use but also staff royalty to the system.

Bank culture also has a central role in determining the adoption of electronic banking as the peoples beliefs shape their attitude towards the intention to adopt the system. The bank culture is therefore central in determining how staff form attitude to adopt or not to adopt new ideas and innovation. The subjective norm based on peoples concern over what others perceive of their actions is also key in influencing staff decisions.

The ease of use influences adoption of electronic banking in that staff are at a position of considering how easy electronic banking can offer solutions to immediate need to make transactions without complexity in terms of procedures involved, system simplicity and network availability.

The socio-demographic factors determine adoption of e -banking through giving assurance to users that they have what it takes to provide the required levels of performance. These factors promotes self-efficacy that gives individuals the ability to recover easily from failure, provides positive attitude to the

users that they can learn more about the system and attain the required proficiency hence its significant in attitude formation.

2.8 Knowledge gaps

Increasing the level of adoption and usage of e-banking by banks is a task that has attracted the attention of many policy makers and stake holders in the world today. However despite the much resources that have been invested on e-banking in terms of trainings and sustaining the system in the World Wide Web, little has been realized in most developing countries (Bradley and Stewart, 2003). Though research has been conducted on the levels of e-banking adoption and usage in various developing states including Kenya, findings have found very little levels of utilization as such findings are regarded as based on study conducted on customers whether corporate or retail who have little or no knowledge on e-banking (Kariuki, G. 2013)

Before this study other studies in the field of e-banking have been conducted and documented not only in Kenya but also other developed and developing states. These studies have provided information on determinants for e-banking adoption where topics covered includes characteristics of e-banking, age and education as factors influencing e-banking adoption, role of attitude in e-banking usage, influence of perceived usefulness and also the role of privacy and security in influencing e-banking adoption and many more. This study provides a detailed study on the determinants of e-banking adoption not by the customer per se but by the individual staff in commercial banks who are in most cases regarded as knowledgeable in terms of banks product knowledge. The study also does not study age of the respondents from birth but how their age in the bank industry determine their readiness to adopt and use e-banking.

Level of education has also been put into consideration by researchers in the previous studies involving e-banking. According to (Rodgers, E.M, 2003) the level of education influences the customer readiness to adopt e-banking and make use of it in their day to day transactions. This study therefore aimed at establishing whether respondents felt that courses pursued by staff at tertiary level had an influence on the staff readiness to adopt new technologies introduced.

E-banking being not the only system that aids in funds transfer and making of payments it means that other systems might be equally important. According to Naimi Lawrence 2013 in his study of e-banking adoption in the rural South Africa, he noted that there existed other alternative systems to e-banking like

ATMs and M-banking where in his comparative analysis of the levels of adoption of e-banking and m-banking he noted that m-banking was more preferred by clients than e-banking. However his study failed to establish whether subjective norm that is based on social set up in such areas differentially influenced e-banking adoption compared to alternative systems available.

2.8 Summary of the Literature Review

This section has explored both the theoretical and empirical literature on the determinants for electronic banking adoption by commercial banks staff and its relationship with relevance of e-banking, influence of bank marketing strategies on e-banking adoption, influence of bank culture in e banking adoption, the influence of ease of use and also the role of socio-demographic factors in determining e-banking adoption.

The review has shown that although majority of people make use of internet in their day to day operations, the level of electronic banking among staff is still low. In this case, for electronic banking usage to increase, banks have to make a deliberate move to ensure that staff are informed of how relevant is electronic banking in terms of cost reduction and reduction of time and distance. Electronic banking has also helped banks in reducing the costs of operations hence profit maximization. All this will call for intensive marketing and understanding of customer needs in terms of products and dynamism in their businesses.

Promoting one stop economies is crucial in winning the confidence of staff as they are able to acquire all the products and services they deserve from a single system without moving from one point to another and from one system to the other.

Banks influence through marketing and designing of products that suits the demands of internal customer is also crucial in determining the extent to which staff will take up electronic banking. This could be possible through marketing and understanding the ever changing staff needs and their dynamic business.

Electronic banking adoption cannot be separated from bank culture aspects numerous practices that are put into consideration before making the decision to adopt or not to adopt the system. The subjective

norm has also been viewed as crucial in determining the attitude formation and the subsequent intentions to take up the system.

The role of electronic banking ease of use is also important in attracting the attention of users hence banks ought to come up with systems that are easily understood by the users at any level and this will promote positive attitude formation. This coupled with bank analysis of socio-demographic factors of its individual staff would aid in increased levels of e-banking usage.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter examines the methodology that was used in the study. They included the following; the research design, target population, sample size and sampling techniques, the research instruments, validity and reliability of instruments, data collection procedures, data analysis techniques and ethical consideration.

3.2 Research Design

This research was carried out through descriptive research design. Descriptive survey design is a method that can be used to obtain information from the respondents through interviews and questionnaire administration hence used to obtain information concerning the current status of phenomena and describe what exists with respect to variables in situation (Nataliya v. Ivankova, 2006). This design was used to establish the determinants for adoption of electronic banking among commercial bank staff in Kisii County, Kenya. The design was relevant due to its ability to identify the determinants for adoption of electronic banking. The descriptive design was used in this study because being based on investigation; it was to guide the researcher to develop a more focused study hence large amount of data for analysis. This research design also used multi-methods that are quantitative and qualitative to add to each other.

3.3 Target Population

Malhotra, N.K (2004) defined target population as a particular group of people that is identified as the intended recipient of an inquiry. The population of staff in commercial banks in Kisii County is approximately 700 (Kisii county commercial banks branches management records, 2014). The county is dominated by over 15 commercial banks which are well established and have a number of staff working in them. The target population was 700 in number and was comprising of staff who are working in these commercial banks both on permanent and contract based terms. The target population also comprised of both the junior staff and those in management positions in order to provide adequate data for analysis.

3.4 Sample Size and Sample selection

This section examines the sample size and the sample selection techniques that were used in the study.

3.4.1 Sample Size

According to Braund (2010), sample size refers to the number of respondents who are to take part in a research. According to Krejcie and Morgan (1970), the size of the population and the margin of error that is to be allowed by the researcher is what bring about the size of a sample. This study involved a sample size of 248 commercial bank staff working in various branches in Kisii county. The key informants were purposively sampled and involved those in management positions that is, branch managers, operations managers and credit managers.

3.4.2 Sample selection

This research involved purposive sampling to select the banks from which data will be collected. In order to come up with the right respondents for the interviews and questionnaire administration, the researcher involved both simple random and purposive sampling methods to come up with the informants who would provide the required information.

To select the sample a unit, a systematic technique was involved where lists of staff in each bank surveyed was used to establish the nth case from the provided lists. This nth, which was the interval involved in selecting the respondents was arrived at through dividing the total target population by the required sample size, that is 700 as the target population and 248 as the sample size to arrive at the interval of approximately 3. Therefore the list of the staff from all the banks combined was used to come up with the respondents by selecting them from the frame at the interval of 3. These are the respondents to whom the researcher and the assistants administered the questionnaires for data collection. According to Oson and Onen 2008 systematic sampling produces accurate results the same as simple random sampling in research and with little effort.

According to Oso and Onen (2008) purposive sampling entails researchers consciously deciding who to include in the sample. Based on this, the researcher was able to collect focused information through coming up with the right respondents that is, establishing key respondents from the management team that provided focused information based on the questionnaires and interviews administered. According to Joppe (2000), this type of sampling is used when involving very small samples and researchers

expects to select cases that are particularly essential for information provision. Additionally, this method was used as it helped in saving time and resources as it selected only the useful cases.

3.5 Data collection Instruments

The researcher administered questionnaires and interviews techniques to collect the data. The use of these techniques was guided by the nature of the data to be collected, time available and the objectives intended to be achieved. This section also discussed the pilot testing, instruments validity and reliability. Therefore the aim of this study was to establish the determinants for electronic banking adoption among commercial banks staff in Kisii County through the use of ease of use, relevance of electronic banking, and influence of banks marketing strategy on e-banking adoption, bank culture influence on e-banking adoption and influence of socio-demographic factors on e-banking adoption.

The primary data was collected from the respondents using questionnaires. According to Malhotra,N.K (2004) a questionnaire is a formalized set of questions meant to obtain information from the respondents. Questionnaires were used in order to extract information that could not be directly observed such as views, opinions and feelings of the respondents.

Questionnaires therefore aided in collecting primary data from the respondents. These questionnaires were directed towards junior and middle level staff who were able to give their feelings and opinions on electronic banking adoption in terms ease of use, relevance of electronic banking, and influence of banks marketing strategy on e-banking adoption, bank culture influence on e-banking adoption and influence of socio-demographic factors on e-banking adoption.

The questionnaires contained eight sections that allowed collection of data from the respondents, that is, the consent section, background information, ease of use influence, influence of relevance, banks marketing strategy, bank culture influence, socio-demographic factors influence and key informants schedule section. In this, the consent section sought to ask the respondents to provide the data as per the questionnaire, the back ground section sought to gather the bio data of the respondent in terms of gender, age, and the position held in the bank industry. Ease of use and relevance sought to establish the level to which the staff felt the system is easy to make use of in terms of frequency of usage, number of transactions by staff, security, technical knowledge, cost involved, accessibility and efficiency. Banks marketing strategy examined the extent of bank influence through marketing, mode of marketing and the frequency of training sessions, the bank culture influence examined the account opening criteria, loan

processing and number of transactions by tellers, while socio-demographic factors that examined the attitude of the staff in terms of how they feel about their capabilities with regard to performing well with e-banking as a system based on age, academic back ground and gender.

Interviews schedules were also used where in this case they entail a technique of gathering information that is not easy to collect through direct observation, or is hard to write down and to extract meaning beyond statements (Joppe, m. 2000). Interviews therefore aided in extracting information from the respondents using a guide that elicited views from the respondents

Interviews aimed at gathering valuable information from the respondents who in this study were the branch managers, operations managers, and credit managers, who provided data on e- banking adoption and usage with reference to how they make payments for supplies both in the banks and also at personal levels, how they do funds transfer outside the banks etc. This focused in addition to ease of use and relevance, on the influence of bank marketing strategy on e-banking adoption, socio-demographic factors and the influence of bank cultural factors. The interview schedules thus comprised of questions where the respondents were required to show their levels of agreement with the contextual statements.

3.5.1 Pilot Testing

Pilot testing refers to a study made before the actual study begins to ensure that the instruments of research are meeting the required objectives and are providing the needed information. In order to prove the reliability of the data collection documents, an intensive item analysis was carried out to ascertain that the instruments collected with consistency what they were meant to collect hence a pilot study was conducted.

According to Mugenda and Mugenda (1999), a sample of 1 to 10% of the sample size is adequate for the pilot testing. The pilot study was conducted at equity bank Kisii branch on 24 staff who were not to be part of the sample to be used in the actual study.

The issues identified helped the researcher to redesign the questionnaires in such a way that they are clear to the respondents and also be in a position of providing most crucial data. Upon correction the instruments were re-tested at equity bank Kisii by the researcher to ascertain their consistency.

3.5.2 Validity of the data collection Instruments

Validity is the extent to which the research truly measures what it was intended to measure (Patton, m.1987). Mugenda and Mugenda (1999) identified validity as the accuracy and meaningfulness of the inferences that are founded on the research results.

The validity of the study was measured using the results of the pilot study. During the study the researcher ensured that the questions are framed and addressed in a simple manner that is, in simple language and with side notes accompanying question in the questionnaire. Validity was also observed by ensuring that during the pilot study the researcher was focused on the objectives of the study and was keen in determining any particular parameter which could be included in the real administration of the questionnaire. Additionally, the researcher had data collection instruments approved by the university supervisor.

3.5.3 Reliability of the data collection Instruments.

According to Joppe,m. (2000) reliability refers to the extent to which results are consistent overtime and an accurate representation of the total population under study and if similar results can be reproduced under similar methodology. To ensure reliability, the research instruments were subjected to a rigorous test processes whereby this began with discussion with the supervisor to check all the questions in the tools to establish their worthiness in examining critical aspects of the study. This was followed by a pre-test among a few respondents by carrying out pilot study among 24 staff in equity bank Kisii . This entailed issuing of same questionnaires to a group of informants twice but within an interval of two weeks. There was a deliberate move to ensure that there was no sensitization of the respondents which might influence the outcome. Therefore, the results from both tests were recorded and correlated to determine the level of consistency where Pearson's product moment formula for test-retest was involved to establish the level to which the questionnaires were consistent in eliciting similar responses whenever they were administered. The researcher obtained similar results from the two tests with a correlation coefficient of 1.0 which was tested with Pearson's product moment correlation coefficient. After the pilot study, the questions were reviewed whereby some were be reworded, introduced and others removed from the questionnaires and interview schedules before final tools were reproduced. This aided in ensuring that the researcher elaborates and clarifies questions where they were not clearly understood hence enabling informants to give reliable data.

3.6 Data Collection Procedures

This section describes how the entire research process was organized that is, from recruiting the research assistants, training research assistants, administering of questionnaires and follow up to retrieve the issued questionnaires.

The research came up with a proposal that was approved by the University of Nairobi panel. The researcher requested for research permit from the National council for Science and Technology through School of Distance and Continuing education of University of Nairobi which allowed conducting of research in Kisii County Kenya. This was followed by the researcher making arrangements to meet the key informants and discuss how to reach the respondents.

The research also involved five research assistants who helped in data collection and processing. Following this, was the agreement between the principal investigator and the research assistants on the training to be undertaken on interview skills and completeness of the tools. The researcher visited the banks in person in order to do introduction, for familiarization, administration, distribution and collection of data. Research assistants then made appointments with the relevant informants where arrangements on how data was to be gathered were made where interview dates were scheduled. Summary of each day's activities was done before proceeding to the next day schedule. To ensure smooth research process, a review on the success and failures of each day was done where existing gaps were closed in order to ensure continued improvement on the succeeding days of research. Questionnaires were administered during morning hours and collected by two in the afternoon that is after the respondents are through with them and to avoid inconveniences that may arise from afternoon rains in the area.

3.7 Data Analysis Techniques

According to Patton (1987) data analysis involves organizing, reducing data through summarization and categorization, identifying, linking patterns and themes. Data from the closed questions in the self-administered questionnaire were categorized into themes that met the objectives of the study and coded for ease of analysis using the Statistical Package for Social Sciences (SPSS). This also entailed identifying key words or themes from the questions, coding and annotation of each interview transcript

or questionnaire. These data reduction eventually led to organized pools of information that could be stored in excel spreadsheet. The data that was coded was fed into the SPSS for processing hence frequencies and percentages. The analyzed data was eventually presented in form of tables and graphs while the bulk of qualitative data was presented in form of descriptions and explanations.

3.8 Operational Definition of Variables

Table 3.1 Operational Definition of Variables

Objectives	Variable Indicators	Measures	Measurment scale	Tools of Analysis	Type of analysis
To establish the extent to which the relevance influence adoption of electronic banking among the commercial banks staff	Cost of doing transaction, Reduced time and distance, Security.	Reduced cost, Reduced time and distance, Transactional security.	Nominal	Frequencies, and percentages	Descriptive and inferential
To examine how bank marketing strategies influence adoption of electronic banking among the commercial bank staff	Marketingmode, No. of staff on e-banking, Frequency of training sessions.	No. of staff on e-banking, No. of yearly training sessions	Nominal	Frequencies, and percentages	Descriptive and inferential
To assess how bank culture influence adoption of electronic banking among the Commercial banks staff	Criteria of account opening, loan processing method, transactions by tellers	Virtual accounts held, Virtual loan accounts held, No. of daily teller transactions	Nominal	Frequencies, and percentages	Descriptive and inferential
Examining how ease of use influence adoption of electronic banking among the commercial bank staff	System uptime,, staff Monthly transactions	Level of system uptime, Monthly teller transactions	Nominal	Frequencies, and percentages	Descriptive
The extent to which socio-demographic factors influence e-banking adoption among the commercial bank staff	Age, Academic experience, Gender.	Age groups, Courses pursued,	Ordinal	Frequencies, and percentages	Descriptive

3.8 Ethical Considerations

Ethical consideration refers to standards that ensure that rights of respondents are taken care of. Ethical considerations are therefore meant to ensure that the respondents are protected from intimidation and unethical treatment Rodgers, E.M., (2003). In this study, ethical considerations that were of concern are approval from the relevant authority, consent, researcher responsibility, anonymity, privacy and confidentiality.

The researcher made sure that all the literature reviewed has been cited accordingly. Priority of the researcher also went to confidentiality of the information from the respondents hence no information was be leaked with or without the consent of the respondent.

Putting into consideration the culture of the banks of target groups of people, the researcher and the research assistants respected and upheld the culture of the target population, put into consideration the ethics of the target group during preparations for the study hence creating respect between the informants and research assistants.

Before issuance of questionnaires and conducting of interviews, researcher sought permission from the respective commercial banks branch management. The outcome of the study is expected to be made available to Kisii county commercial banks management.

CHAPTER FOUR

4.0 DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSION

4.1 Introduction

This section presents the study in form of findings, which have been examined under five sub sections in line with the study objectives. This section is preceded by general section on socio-demographic attributes of the sample population studied. The thematic sub-sections includes influence of relevance on e-banking adoption ; influence of bank marketing strategies on e-banking adoption; influence of bank culture on e-banking adoption; the influence of ease of use; and also the role of socio-demographic factors in determining e-banking adoption.

4.2 Response Rate

The study sought to establish the response rate in order to ascertain that results obtained were accurate. The data collection instruments that were used in the study that is, questionnaires and interview schedule were issued to the respondents within a duration of four weeks and as a result a total of 226 questionnaires were issued. The response rate of 100% was realized from the questionnaires administered as all the staff were willing to take part in the study especially due to the fact that the management team in most bank branches were willing to issue questionnaires to the staff working in those sections with restricted entries. It's presumed that higher response rate is a confirmation of better research results and indication of staff readiness to give their views on what they felt as the strengths and weaknesses of e-banking. Data that involved interview schedules recorded a response rate of 81.8% (18 informants) indicating that 18.2% of the key informants who were purposively sampled to take part in the study were not available due to tight work schedules that they had.

4.3 Socio-Demographic Attributes of the Sample Surveyed

This section examines the social and demographic characteristics of the surveyed sample of the e banking users. These include gender of the respondents, age in the banking industry and education level.

4.3.1 Gender of the respondents

The respondents who took part in the study were asked to state their gender. Out of the 248 respondents interviewed, 93 (38.31%) were women and 151 (61.69%) were men. This is illustrated in the table 4.1

Table 4.1: Distribution of Respondents by Bank and gender

Bank	Male	%tage	Female	%tage
Equity Bank	24	70.58	10	29.41
K-rep Bank	12	66.67	6	33.33
Cooperative Bank	15	60	10	40
KCB Bank	18	52.94	16	47.06
Family Bank	8	61.54	5	38.46
Credit Bank	8	66.67	4	33.33
Barclays Bank	12	63.16	7	36.84
National Bank	12	60	8	40
Chase Bank	8	66.67	4	33.33
Standard Chartered Bank	6	54.55	5	45.45
I&M Bank	6	50	6	50
CIC Bank	7	70	3	30
Eco-Bank	8	61.54	5	38.46
DTB Bank	8	57.14	6	42.86
TOTAL	149	61.69%	95	38.31%

Table 4.1 shows that males were more readily available for interviews compared to females. This is because of the ratio of males to females working in commercial banks as there are more males than females and also the fact that most females were occupying jobs at teller positions and could not be

available for interview compared to males who were in credit sections hence were readily available. The views presented were therefore skewed against women.

4.3.2 Age distribution of respondents

The respondents were also asked to state ages in the banking industry. The ages of the respondents were categorized into three age sets, that is those aged between one month to three years in the banking industry, those aged between three years, and a month to five years and those who have more than five years in the banking industry. Out of the 244 respondents who were interviewed, 122 (50%) aged between one month and three years in the bank, 71 (29.09%) were aged between three years and five years while those above five years in the banking industry were 51 (20.91%). Results were as shown on the table 4.2

Table 4.2: Age distribution of the respondents

Age bracket	Frequency	Percentages
1 month- 3years	122	50%
3years, 1 month-5years	71	29.09%
Above 5 years	51	20.91%
Total	244	100%

The study took age into consideration because respondents perceived the e-banking system in a distinctive way depending on the age in the bank. Those aged between one month and three years in the bank were interviewed in order to establish how the courses pursued at tertiary level influenced their understanding and perception of new systems as well as determining their entry behavior into the bank in terms of their perception of new systems encountered. Those between three and five years were seen to have started venturing into businesses which influenced their desire to make use of e-banking in making transactions. This was the case with those aged five years and above in the bank although this group had additional responsibility of ensuring that junior staff embraces the use of e-banking. The

study therefore reviewed that those aged five years and above in the banking industry were frequent users of e-banking.

4.3.3 Education level of respondents by gender

The study sought to establish the level of education of the respondents to determine whether this can determine the ability of the commercial banks staff to make use of the e-banking as a system. The participants were asked to state their level of education as illustrated in the Table 4.3.

Table 4.3 Respondents level of education by gender

Level of education	Males	per%	Females	per%
Certificate	11	4.50%	5	2.05%
Diploma	27	11.06%	23	9.43%
Degree	98	40.16%	60	24.6%
Masters	15	6.14%	5	2.05%
PhD	0	0%	0	0%
Total	151	61.87	93	38.13

In the county as indicated in Figure 4.2, respondents who were degree holders formed the largest chunk of respondents, 158 (64.76%) where 60 were females. Out of the 50 respondent who were diploma holders, 27 were males and 23 were females, while masters and certificate holders formed 8.19% and 6.55% respectively of the respondents, that is 20 respondents were masters holder where 5 were female and 15 were males while 16 respondents had certificates where 11 were males and the rest were females.

4.4 Relevance of electronic banking

The study sought to determine the extent to which commercial banks staff regard e-banking as relevant to their day to day making of transactions. The study sought to establish whether e-banking was there to cut on cost of doing transactions in terms of cost involved in travelling to the physical banks, through reducing cost involved during over the counter withdrawal and in making payments to the suppliers. The results obtain are show in table 4.4

Table 4.4 Respondents perception of e-banking cutting on cost

Variable	Frequency	Percentage %
Strongly disagree	20	8.85%
Disagree	26	11.50%
Undecided	15	6.64%
Agree	130	57.52%
Strongly agree	35	15.49%
Total	226	100%

The results reviewed that out of 226 respondents 130 (57.52%) of the respondents agreed with the fact that e-banking could cut on cost of doing transactions, 35 (15.49%) strongly agreed that e-banking could cut on cost, 20 (8.85%) strongly disagreed with e-banking cutting on cost, 26 (11.50%) disagreed with the fact that e-banking could cut on cost while 15 (6.64%) of the respondents did not have idea of whether e-banking could cut on cost or not.

Similar findings arrived at as per the Tanzanian annual report of the quarter ending June 2011 noted that e-banking impacted greatly in cutting of cost as evident in reduced cost (by 33%) of entire cost involved in cargo clearance and reduced time in across its sea ports, air ports and land border stations. According to this report this move has not only reduced cost but also increased revenue to the state.

4.4.1 Cost one-banking against alternative systems

The study aimed at establishing whether the staff believed that there are alternative systems that could be used instead of e-banking and if such systems were easier to make use of compared to e-banking in terms of complexity and cost. The results were as shown on table 4.5

Table 4.5 Cost on e-banking against alternative systems

Variable	Frequency	Percentage %
Strongly disagree	0	0%
Disagree	13	72.22%
Undecided	3	16.67%
Agree	2	11.11%
Strongly agree	0	0%
Total	18	100%

The results reviewed that 13 (72.22%) of the key informants agreed that banks had systems that are alternative to e-banking and that such systems were important in making use of bank accounts and that such systems were cheaper compared to e-banking. However 16.67% of the respondents giving their views on alternative systems did not have the idea whether e-banking was cheaper compared to other systems or not.

A study with similar findings was conducted by Joshua Abor in Ghana on technological innovations and banking which revealed that over 70% of the respondents preferred alternative systems such as ATMs and M-banking citing challenges on system networks and cost involved. Similarly, Karjaluoto 2002 noted in his study conducted in Finnish market that 50% of the respondents felt that other means of doing transactions existed and that their decision to make use of either of the systems in making

transactions was highly influenced by satisfaction or dissatisfaction with current banking services in terms of speed, cost and time.

4.4.2 E-banking in reducing distance and time in doing transactions

The study aimed at establishing whether e-banking was able to reduce distance and time involved in doing transactions by the staff. The key informants were asked to state whether electronic banking was there to reduce time and distance in doing transactions. The study established that electronic banking if well utilized could aid in reducing both time and distance involved in doing transactions as 12 (68.2%) out of the 18 key informants interviewed strongly agreed to the idea. The results were as shown in table 4.6

Table 4.6 E-banking in reducing distance and time

Variable	Frequency	Percentage %
Strongly disagree	0	0%
Disagree	4	22.22%
Undecided	0	0%
Agree	2	11.11%
Strongly agree	12	66.67%
Total	18	100%

However the 22.22% of the key informants argued that the system could not reduce time and distance involved in doing transactions because most supermarkets are yet to have their systems integrated with e-banking and as a results clients still have to make physical visits to purchase goods and services. It was also revealed that customer loyalty could be maintained only by transacting via e-banking. Those who felt that e-banking could not help reduce time and distance were optimistic that this could be possible if the banks boost the system uptime, having simplified procedures and ensuring robust

handling of customer complains as this would guarantee them security of funds. Howcroft 2002 in his study in United Kingdom revealed that customers embraced convenience and time saving aspect of e-banking and as such banks should work towards improving on this aspect.

The findings of this study also agree with those of a study carried out by Daniel,E. 1999 in the republic of Ireland that revealed that convenience, ease of use and compatibility with the consumer lifestyles influenced to a large extent the users intention to make use the e-banking. On the same aspect, Chiemeké et al 2006 in Nigeria noted that the ease of use of e-banking in terms of speed, time and distance reduction, shorted processing periods, increased flexibility of business transactions was highly considered by consumers. Davis, 1993 in his study revealed that a prospective users overall feeling or attitude towards using a given technology based system represents a major factor as to whether e-banking will be embraced or not.

4.4.3 Staff ability to make use of e-banking

The study aimed at establishing whether the staff were able to make use of e-banking especially on their personal computers. They were therefore required to express their level of agreement with the fact that they were able to make use of e-banking on their own pcs. The results were as shown on table 4.7.

Table 4.7 Staff ability to make use of e-banking

Variable	Frequency	Percentage %
Strongly disagree	38	17%
Disagree	38	17%
Undecided	75	33%
Agree	50	22%
Strongly agree	25	11%
Total	226	100%

The results reviewed that out of 226 respondents 38 (17%) strongly disagreed with the fact that they were able to make use of e-banking on their own machines. Those who disagreed with this statement were also occupying 17% of the respondents. However the largest portion of the respondents in this case 33% were not able to express their ground on the issue of their ability to make use of e-banking which was a clear indicator of the fact that most of them were not able to make use of the system. Results also indicated that 50 (22%) of the respondents agreed that they could make use of e-banking on their own machines while 25 (11%) of the respondents strongly agreed that they were able to make use of e-banking on their own machines which indicates that only 33% of the respondents were able to make use of e-banking on their own a percentage that is still low.

4.4.4 Staff feeling of security in doing transactions via e-banking

The study aimed at establishing whether staff felt secure in doing transactions via e-banking whether in the bank, in cyber or on their personal computers. They were therefore required to express their level of agreement with the fact that they felt secure in doing transactions through the e-banking. The results obtained from this study are as shown on table 4.8 below.

Table 4.8 Staff feeling of security in doing transactions via e-banking

Variable	Frequency	Percentage %
Strongly disagree	12	5%
Disagree	38	17%
Undecided	25	11%
Agree	113	50%
Strongly agree	38	17%
Total	226	100

The results that out of 226 respondents, 60 (22%) of the respondents felt that e-banking was not secure in doing transaction be it online or on their personal computers. A percentage of 11% could not express their feeling on whether it was secure to make transactions via e-banking which could be attributed to the fact that most of them were not able to make use of e-banking hence unable to make use of e-banking. It was also revealed that 113 (50%) of the respondents agreed that it was secure to make use of e-banking in making transactions while 17% of the respondents strongly believed that e-banking is much secure in making transactions.

4.4.5 Commercial banks role in promoting e-banking security

The study aimed at establishing the role that commercial banks play in ensuring security of transactions that are done via e-banking and if banks have done enough to promote security. The key informants were therefore required to express their level of agreement where the results were as shown on table 4.9.

Table 4.9 Commercial banks role in promoting e-banking security

Variable	Frequency	Percentage %
Strongly disagree	0	0%
Disagree	2	11%
Undecided	3	17%
Agree	9	50%
Strongly agree	4	22%
Total	18	100%

The results obtained, revealed that over 70% of the respondents were in agreement with the fact that commercial banks were doing enough to promote security of e-banking. This is after 50% of the

respondents agreeing with banks role in promoting e-banking, while 22% of the respondents expressing strong agreement with bank role in promoting e-banking securing. Out of 18 key informants interviewed 2 (11%) did not regard bank has taking up active role to promote security of each and every transaction, while 17% of the respondents did not have idea of whether banks were or were not playing its role actively in promoting e-banking security.

4.5 Bank marketing strategy influence on e-banking adoption

The study sought to establish the role that bank marketing strategy had on influencing e-banking adoption by the commercial banks staff by examining how staff came to know e-banking. The staff were therefore required to express their level of the feeling on the fact that bank staff learn of e-banking through banks training sessions. The results of the study are as shown on table 4.10

Table 4.10 Bank marketing strategy influence on e-banking adoption

Variable	Frequency	Percentage %
Strongly disagree	6	2.7%
Disagree	20	8.8%
Undecided	72	31.9%
Agree	110	48.6%
Strongly agree	18	8%
Total	226	100%

The results revealed that out of the 226 respondents involved in the study 26 (11.5%) of the respondents expressed their level of disagreement with the fact that they learnt of e-banking through bank training

sessions. It was also revealed that 31.9% of the respondents were not able to give their views on how they came to learn of e-banking, a portion of respondents comprising of those who were not aware of e-banking role in doing transactions and those who had learnt of e-banking through other means like mass media and internet. However 128 (56.6%), of the respondents had certain levels of agreement that they had learnt of e-banking through bank initiative.

4.5.1 Effectiveness of training sessions

The study aimed at establishing the extent to which trainings by commercial banks on e-banking were effective to promote staff levels of knowledge and ensure attitude change towards e-banking usage. The staff were therefore required to state the extent to which they believe that bank training sessions on e-banking are effective. The results were as shown on the table 4.11

Table 4.11 Adequacy of training sessions

Variable	Frequency	Percentage %
Strongly disagree	25	11.06%
Disagree	75	33.19%
Undecided	38	16.81%
Agree	63	27.88%
Strongly agree	25	11.06%
Total	226	100%

The results analysis and interpretation revealed that out of 226 respondents 100 (44.25%) expressed their levels of disagreement with the fact that training sessions held by the bank were effective enough to equip staff with enough knowledge and also lead to attitude change towards e-banking. Study also

revealed that 16.81% of the respondents could not at the time of interview express their levels of agreement with bank training sessions being effective. The study also revealed that only 27.88% of the respondents agree that bank training sessions were effective to enable staff form positive attitude towards e-banking, while those who could strongly agree formed 11.06% of the respondents. It was therefore revealed that cumulatively, 38.94% of the respondents felt that training sessions by the bank were effective though this was far below average indicating that these sessions were inadequate to lead to attitude formation.

These findings agree with Cecilia R.,,Mwangi W, Mwangi,Wi,Kamau,P,& Tobias,O,. (2012) study in Nairobi that revealed that although 60% of commercial banks in Nairobi county embarked on staff training on new systems introduced, such trainings sessions were directed on staff whose role in the bank was to directly manage the system as technical team and not all the staff. This has therefore created a gap as far as knowledge of e-banking to all the staff is concerned.

4.5.2 Bank training sessions and continued e-banking usage

The study sought to find out whether bank training sessions lead to adoption and continued usage of e-banking. The key informants interviewed were required to state whether e-banking training sessions by the commercial banks could lead to adoption and subsequent usage of e-banking by the staff. The results obtained were as shown on the table 4.12

Table 4.12 Bank training sessions and continued e-banking usage

Variable	Frequency	Percentage %
Strongly disagree	3	16.67%
Disagree	6	33.33%
Undecided	2	11.11%
Agree	6	33.33%
Strongly agree	1	5.56%
Total	18	100%

The analysis and interpretation revealed that 16.67% and 33.33% of the respondents strongly disagreed and disagreed respectively with the fact that banks training sessions ensured continued usage of e-banking by the staff. This formed 50% of the key informants which is an indicator of the fact that information gained through banks training sessions could not be relied upon entirely as a means of winning the confidence and forming attitude and intention to make use of e-banking. The results also revealed that a much lower percentage of 38.89% of the respondents agreed and strongly agreed that e-banking training sessions could lead to continued usage of e-banking by the staff.

4.5.3 Commercial banks frequency of e-banking training sessions

The aim of this was to establish the frequency with which commercial banks hold e-banking training sessions. The frequency of e-banking training sessions was regarded as important as determines the depth of knowledge possession by the staff as well as attitude formation towards e-banking adoption. Frequency of e-banking training session is also an indicator of commercial banks commitment towards realization of the success of e-banking in terms of uptake and reduction of congestion in banking halls. The respondents were therefore required to express their feeling on whether commercial banks frequently hold training sessions on e-banking where the results were as shown on table 4.13.

Table 4.13 Commercial banks frequency of e-banking training sessions

Variable	Frequency	Percentage %
Strongly disagree	4	22.22%
Disagree	8	44.44 %
Undecided	0	0%
Agree	5	27.78 %
Strongly agree	1	5.56%
Total	18	100%

Analysis and interpretation revealed that 4 (22.22%) of the key informants strongly disagreed with the fact that commercial banks frequently holds training sessions on e-banking among the staff. Also,8 (44.44%) out of 18 key informants disagreed with banks holding training sessions frequently. Analysis also revealed that 5 (27.78%) of the respondents agreed with banks frequently holding training sessions, while 5.56% strongly agreed with banks frequency of trainings. Analysis and interpretation revealed that the respondents did not regard banks as doing enough in terms of training sessions to ensure that staffs are well equipped with knowledge on e-banking as 66.66% of the respondents disagreed with the fact that banks hold training sessions frequently while only 33.34% of the respondents felt that training sessions were frequently held.

4.5.4 Commercial banks evaluation of staff knowledge on e-banking

This study aimed at establishing the frequency with which commercial banks evaluate staff knowledge on e-banking. This study was important in that it was meant to reveal how banks evaluate staff awareness of e-banking in terms of frequency as this would put banks at a positions on understanding individual staff in terms of knowledge. The staff were therefore required to express their level of agreement with the fact that banks frequently evaluate the staff understanding of e-banking. The results of this study were as shown on table 4.14.

Table 4.14 Commercial banks frequency of evaluation of staff knowledge on e-banking

Variable	Frequency	Percentage %
Strongly disagree	75	33%
Disagree	88	39 %
Undecided	25	11%
Agree	38	17 %
Strongly agree	0	0%
Total	18	100%

Results analysis and interpretation revealed that 75(33%) of the respondents strongly disagreed that banks frequently evaluates staff understanding of e-banking. Further analysis revealed that 39% of the respondents disagreed with the fact that banks frequently evaluate staff awareness and understanding f e-banking. It was also established from the study that 11% of the respondents were not able to either or disagree with banks frequency of evaluation of staff understanding of e-banking. However 38 (17%) the respondents agreed that banks frequently undertook the staff e-banking understanding evaluation exercise. The results of analysis and interpretation of this study indicated that commercial banks are not doing enough to evaluate staff knowledge on e-banking an issue that might have led to low usage of e-banking by the staff. It's also an indicator of commercial banks low commitment to ensuring that e-banking usage is high among the staff.

4.6 How commercial banks culture influence adoption of electronic banking by staff.

This study aimed at establishing how banks culture influence staff adoption and continued usage of e-banking. The staff were required to express their feeling on the influence of bank culture on e-banking adoption based on mode of account opening, loan processing, teller average transaction, and bank strategies to reduce paper work. This study was important because the culture within which staff works is seen to not only influence behavior but also their attitude. In this study, the key informants were

required to state the level of their respective banks culture influence on e-banking adoption. The results of this study are as shown on table 4.15.

Table 4.15 How commercial banks culture influence adoption of electronic banking by staff

Variable	Paper work at Account opening	Loan processing criteria	Average teller transactions	Bank strategies
Strongly agree	7	5	8	3
Agree	4	6	5	5
Undecided	1	2	1	3
Disagree	4	4	3	4
Strongly disagree	2	4	1	3
Total	18	18	18	18

Results revealed that 7 out of 18 respondents strongly agreed with the fact that commercial banks over emphasis on paper work at account opening has discouraged e-banking adoption and usage by staff. Out of the 18 key informants only 2 strongly disagreed with the fact that overemphasis on paper work at account opening discourages e-banking. On loan processing criteria, 5 out of 18 respondents strongly agreed that the method of loan processing adopted by banks is to a large extent discouraging e banking usage on loan processing. The respondents strongly agreed that banks emphasis on average teller transactions is discouraging e-banking usage not only on the part of staff but also external customers as 8 out of 18 key informants strongly agreed such transactions by tellers discouraged e-banking usage.

4.6.1 Commercial banks involvement of paper work at account opening

The study aimed at establishing how banks emphasis on paper work at account opening discourages e-banking usage among the commercial banks. The respondents were therefore required to express their feeling on paper work at account opening and e-banking usage. The results obtained were as shown on table 4.16.

Table 4.16 Commercial banks involvement of paper work at account opening

Variable	Frequency	Percentage %
Strongly disagree	1	5.6%
Disagree	3	16.7 %
Undecided	0	0%
Agree	8	44.4 %
Strongly agree	6	33.3%
Total	18	100%

Results analysis and interpretation revealed that 8 (44.4%) of the key informants agreed with fact that banks put more emphasis on paper work at account opening more than e-technology which to some extent discourages e-banking transactions. Results also revealed that 33.3% of the respondents strongly agreed that paper work was given priority at account opening stage. However 22.3% of the respondents disagreed and strongly disagreed combined that banks were not putting more emphasis on paper work during account opening. This is a clear indicator of the fact that commercial banks are not encouraging e-transactions right at the account opening stage a factor that discourages e-banking use not only by staff but also by external customers.

4.6.2 Loan processing

The study sought to find out how loan processing methods adopted by banks influence e-banking adoption by the staff. The study was important in that the loan processing criteria adoption by the bank directly influenced staff attitude towards e-banking. The staff were therefore required to express their views on what they felt would be the influence of banks loan processing criteria on e-banking adoption by staff. The results of this study are as shown on table 4.17.

Table 4.17 Loan processing

Variable	Frequency	Percentage %
Strongly disagree	13	5.7%
Disagree	37	16.5 %
Undecided	13	5.7%
Agree	100	44.2 %
Strongly agree	63	27.9%
Total	226	100%

Results analysis and interpretation revealed that out of 226 staff who took part in the study 163 agreed with the fact that loan processing criteria adopted by banks is not e-banking friendly. This was based on the fact that most commercial banks embrace paper work in loan processing. However a small portion of respondents (50) viewed commercial banks as doing enough to promote loan processing through e-banking. This study revealed that banks involvement of usual methods of loan processing through filling of loan forms in brick and mortar banks has undermined staff active use of e-banking not only in loan processing but also in making transactions.

4.6.3 Teller average transactions

The study sought to establish how commercial banks emphasis on average teller transactions affect the adoption and usage of e-banking among the staff. This was important in that such practices puts staff in a position where they view serving client physically as the only way of demonstrating performance in a bank hence viewing e-banking as a system to create their way out of the bank. The staff were thus required to express their feeling on how emphasis on teller transactions affect staff determination to see e-banking usage increased. The results of this study are as shown on table 4.18

Table 4.18 Teller average transactions

Variable	Frequency	Percentage %
Strongly disagree	20	8.8%
Disagree	37	16.4 %
Undecided	8	3.5%
Agree	91	40.3 %
Strongly agree	70	31 %
Total	226	100%

The results analysis and interpretation revealed that 91(40.3%) out of 226 respondents agreed that commercial banks emphasis on teller productivity has lowered the levels of e-banking uptake not only among the staff but also among external customers as staff are determined to increase their daily transactions a move that is counter e-banking orientation. Results also revealed that 31% of the respondents strongly agreed that over emphasis on teller transactions is hindering e-banking uptake which is an indicator of the fact that staff are much determined to interact with clients physically as this adds up to their performance. However 8.8% of the respondents strongly disagreed with the fact that emphasis on teller transactions was anti-e-banking indicating that more e-banking uptake could go hand in hand with e-banking usage. Results obtained have therefore shown that if commercial banks are to promote e-banking, they have to shift their interest from daily teller transactions to e-banking oriented transactions.

4.7 Ease of use influence on e-banking adoption

This study sought to find out how staff view ebanking with regard to how easy is e-banking to make use of in terms of the frequency with which the staff make use of e-banking, the system uptime,staff ability to comfortably make use of e-banking and banks response to e-banking system challenges. Ease of

use of e-banking is important in this study as it helps in understanding how staff adopt and make use of e-banking and how they form attitude towards it. Results of the study are as shown on the table 4.19

Table 4.19 Ease of use influence on e-banking adoption

Variable	Frequency of e-banking Usage	E-banking system uptime	Bank response to system downtime
Strongly agree	2	3	5
Agree	2	5	4
Undecided	1	2	3
Disagree	7	4	4
Strongly disagree	6	4	2
Total	18	18	18

Results analysis and interpretation revealed that the frequency of e-banking usage was low as among the staff as 4 out of 18 key informants felt that staff did not frequent in using e-banking in their daily transactions. However 13 (72%) of the informants had some levels of disagreement with staff frequency in e-banking usage which is a clear indicator that though staff work in these banks, they embrace transactions either over the counter or through other methods of transacting like ATMs and swiping at the merchant locations. Its therefore upon the banks to evaluate these modes of transacting against e-banking to find out what advantages do they have over e-banking. On system uptime, the staff averagely agreed that e-banking systems are well and that one could transact at their own convenient time. However the same percentage disagreed that with the fact that systems are always in good condition to support any transaction. These observations clearly indicate that banks have to work on system uptime to have more staff transact at their convenient time. On banks response to systems challenge the respondent at a percentage of 50% agreed that banks responded promptly whenever there was system challenge.

4.7.1 Frequency of e-banking usage

The study sought to establish the frequency with which staff makes use of e-banking in their day to day transactions. The key informants were therefore required to state their level of agreement with the fact that staff frequently makes use of e-banking. The results of this study are as shown on table 4.20

Table 4.20Frequency of e-banking usage

Variable	Frequency	Percentage
Disagree	11	61.1%
Strongly disagree	7	38.9%
Total	18	100%

Results analysis revealed that the level of disagreement with the fact staff frequently use e-banking was high and that most staff were not able to make use of e-banking in their transactions as 61.1% of the respondents disagreed with staff frequent use of e-banking while 38.9% strongly disagreed. This shows that banks have to work towards improving staff frequency of e-banking.

4.7.2 E-banking system uptime

The study sought to find out whether e-banking as a system was stable enough in terms of uptime to promote transactions whenever staff needed the service. This was important because staff attitude towards e-banking is highly determined by how efficient the system is in terms of network. The staff were therefore required to express their level of agreement with fact that e-banking network was always stable. The results of this study are shown on table 4.21.

Table 4.21 E-banking system uptime

Variable	Frequency	Percentage
Disagree	9	50%
Strongly disagree	9	50%
Total	18	100%

The results revealed that on system uptime, the staff averagely agreed that e-banking systems are well and that one could transact at their own convenient time. However the same percentage (50%) disagreed with the fact that systems are always in good condition to support any transactions. This being average system performance, commercial banks needs to take drastic measures to ensure that staff trust on network uptime is far beyond average.

4.7.3 Bank response to system down time

This study sought to establish the response of the bank towards system challenge in terms of how prompt the bank is to such challenges. This was important because staff consider how efficient the system is and in case of the challenge, how prompt is the bank in reacting towards challenges with the system. The informants were therefore required to express their level of agreement with banks response to challenges in the system. The results of this study are as shown on table 4.22.

Table 4.22 Bank response to system down time

Variable	Frequency	Percentage
Agree	8	44.4%
Strongly agree	10	55.6%
Total	18	100%

Results analysis revealed that 8 (44.4%) of the respondents agreed that commercial banks response to network challenges was prompt while 10 (55.6%) of the respondents strongly agreed that banks response to network challenges was immediate. This was an indicator of the bank's commitment to ensuring that users are served with efficient systems that guarantee them security in doing transactions.

4.8 Social demographic factors influence on e-banking adoption

This study sought to establish the extent to which social demographic factors of age, education, academic orientation and gender influence e-banking adoption among the staff. This study was important in that it was meant to revealed how aspects of age in the banking industry, academic back level and orientation in term of courses pursued by staff and gender of the staff influence adoption of e-banking. The results of the study are as shown on table 4.23

Table 4.23 Social demographic factors influence on e-banking adoption

Variable	Age and e-banking Adoption	Academic level and e-banking adoption	Academic orientation and e-banking adoption	Gender and e-banking adoption
Strongly agree	6	4	5	2
Agree	5	5	4	2
Undecided	0	2	3	2
Disagree	3	3	4	9
Strongly disagree	4	4	2	3
Total	18	18	18	18

Results analysis and interpretation revealed that age in the banking industry directly influence e-banking adoption by the staff. This was as a result of 11 out of 18 informants agreeing at different level that age in the banking industry influences staff readiness to take up e-banking. Analysis also revealed that academic level influence adoption of e-banking in bank where 50% of the respondents agreed and strongly agreed with the fact that academic level influences e-banking adoption. However 38.8% of the respondents disagreed and strongly disagreed that academic level could influence staff readiness to take up e-banking.

The study further tried to establish how courses pursued by at the tertiary levels influenced their readiness to take up e-banking by staff whereby 9 out of 18 respondents were for the agreement that courses that staff had taken at the college levels influence how they perceive new systems introduced. However 6 respondents disagreed with the fact that courses taken by staff at tertiary levels could influence their readiness to take up new systems. On gender and e-banking adoption the results analysis revealed that gender could not necessarily influence whether one could be ready to take up e-banking or not. This was after 9 out of 18 key informants disagreeing and 3 strongly disagreeing with this fact.

4.8.1 Age in the banking industry and e-banking adoption

The study sought to establish whether staff age in the banking industry influences e-banking adoption. This was important because as staff continue gaining experience in making use of bank systems, they are expected to get used to systems and also the fact that this study could establish the entry behavior of staff into the banking industry in terms of their readiness to embrace new technology. The results of this study were as shown on figure 4.24.

Table 4.24Age in the banking industry and e-banking adoption

Variable	Frequency	Percentage
Agree	5	27.7%
Strongly agree	6	33.3%
Disagree	4	22.3%
Strongly disagree	3	16.7%
Total	18	100%

Results analysis revealed that those who agreed and strongly agreed that formed 27.7% and 33.3% respectively. Those who disagreed and strongly disagreed formed 22.3% and 16.7% respectively. Therefore a combined percentage of 61% agreed that age in the banking industry is key in influencing e-banking adoption among the staff. It was also revealed that 39% of the respondents disagreed that age could influence staff intentions to take up e-banking.

4.8.2 Academic level and e-banking adoption

This study sought to establish whether academic levels could influence staff adoption and usage of e-banking. This study was important because staff with different levels of education could be influenced differently to take up and make use of e-banking. The results of this study were as shown on table 4.25

Table 4.25 Academic level and e-banking adoption

Variable	Frequency	Percentage
Agree	3	16.7%
Strongly agree	4	22.2%
Disagree	6	33.3%
Strongly disagree	5	27.8%
Total	18	100%

Results analysis and interpretation revealed that 6 (33.3%) of the respondents were of disagreement with the fact that academic level could not influence staff to take up electronic banking. 5 (27.8%) of the key informants interviewed revealed with strong disagreement that academic level could not influence e-banking adoption. However 38.9% of the respondents agreed with education influence on e-banking adoption not only among the staff but also among the external customers. The results obtained therefore revealed that education level cannot be relied upon as a determinant of how staff are to adopt and make use of e-banking.

4.8.3 Academic orientation and e-banking adoption

The study sought to establish how courses taken by staff at the tertiary level influence their readiness to take up new technology in their various departments of work. This study was important because it was necessary to establish whether there were specific courses that produced graduates who are well equipped and prepared to readily adopt new technology. The study was also important because banks need to identify which are these specific courses that produce individuals who are well prepared for the jobs based on technology at hand. The results of this study are shown on table 4.26.

Table 4.26 Academic orientation and e-banking adoption

Variable	Frequency	Percentage
Agree	63	27.9%
Strongly agree	75	33.2%
Disagree	50	22.1%
Strongly disagree	38	16.8%
Total	226	100%

Results of the study revealed that a higher percentage of 61.1% were of the agreement that courses pursued by staff at the college level influences their readiness to take up new technology and systems adopted by the banks. This study also indicated that banks should put effort to establish which courses are these that produce individuals well prepared to adopt new systems and possibly develop policies guiding recruitment. However 32.9% of the respondents felt that courses taken by staff at the tertiary level does not necessarily influence staff readiness to take up new system.

The findings of this study agree with the findings of a study conducted by Cecilia R., Mwangi W, ,Kamau,P,& Tobias,O, (2012) in Nairobi county who pointed out the role of academic background and experience in technology as having a central role in influencing e-banking adoption. They noted that 60% of commercial banks in Nairobi county embarked on staff training to not only enforce their academic backgrounds but also to boost their hand on skills in system use.

4.8.4 Gender and e-banking adoption

The study sought to find out whether gender as a socio-demographic factor influences adoption of e-banking by the staff. The study was important in that the banks need to establish who among the staff in terms of gender are able to adopt and make use of e-banking. The staff were therefore required to

express their feeling on gender influence on e-banking adoption. The results of this study are as shown on the table 4.27

Table 4.27 Gender and e-banking adoption

Variable	Frequency	Percentage
Agree	50	22.2%
Strongly agree	55	24.3%
Disagree	60	26.5%
Strongly disagree	61	27%
Total	18	100%

Results analysis revealed that 53.5% of respondents were for the disagreement with the fact that gender of an individual could influence how they make decisions to adopt and make use of e-banking. However 46.5% of the respondents felt that gender could influence staff desire to make or not make use of e-banking.

CHAPTER FIVE

SUMMARY OF THE FINDINGS, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This section presents a summary of study findings which are systematically arranged in line with the objectives of the study. It also presents conclusions and recommendations.

5.2 Summary of Findings

The first objective of this study was to establish the extent to which the relevance influences adoption of electronic banking among the commercial banks staff. This objective aimed at establishing the relevance of e-banking in terms of how it led to cutting of cost in doing transactions, where the respondents were required to express their feeling on the fact that e-banking was there to cut on cost. Results revealed that 73.01% of the respondents were for the agreement that e-banking could cut on cost of doing transactions. However results also indicated that 20.355 of the respondents felt that e-banking could not cut on cost of doing transactions citing other systems like ATMs. The study also sought to find out whether e-banking was cheaper compared to other systems like ATMs and mobile banking where the results revealed that 72.22% of the respondents felt that e-banking could not cut on cost of doing transactions. The study also aimed at establishing whether e-banking could reduce distance in doing transactions where by the results indicated that 77.78% of the respondents agreed with the fact that e-banking could assist in reducing time and distance in doing transactions as staff are able to transact at the comfort of their personal computers. The study also aimed at establishing the influence of e-banking relevance from the point of view of security where the respondents were required to express their feeling on e-banking and security of doing transactions where resultsrevealed that out of 226 respondents, 60 (22%) of the respondents felt that e-banking was not secure in doing transaction be it online or on their personal computers. A percentage of 11% could not express their feeling on whether it was secure to make transactions via e-banking which could be attributed to the fact that most of them were not able to make use of e-banking hence unable to make use of e-banking. It was also revealed that 113 (50%) of the respondents agreed that it was secure to make use of e-banking in making transactions while 17% of the respondents strongly believed that e-banking is much secure in making transactions.

The second objective of this study was to establish the influence that banks marketing strategy had on staff adoption of e-banking. The study examined how banks marketing strategy influenced e-banking adoption through establishing how staff came to know e-banking where results revealed that out of the 226 respondents involved in the study 26 (11.5%) of the respondents expressed their level of disagreement with the fact that they learnt of e-banking through bank training sessions. It was also revealed that 31.9% of the respondents were not able to give their views on how they came to learn of e-banking, a portion of respondents comprising of those who were not aware of e-banking role in doing transactions and those who had learnt of e-banking through other means like mass media and internet. However 128 (56.6%), of the respondents had certain levels of agreement that they had learnt of e-banking through bank initiative. This objective also sought to establish the extent to which trainings by commercial banks on e-banking were effective to promote staff levels of knowledge and ensure attitude change towards e-banking usage where the results revealed that out of 226 respondents 100 (44.25%) expressed their levels of disagreement with the fact that training sessions held by the bank were effective enough to equip staff with enough knowledge and also lead to attitude change towards e-banking. The study also revealed that only 27.88% of the respondents agree that bank training sessions were effective to enable staff form positive attitude towards e-banking, while those who could strongly agree formed 11.06% of the respondents. It was therefore revealed that cumulatively, 38.94% of the respondents felt that training sessions by the bank were effective though this was far below average indicating that these sessions were inadequate to lead to attitude formation. This objective also sought to find out the frequency of banks training sessions on staff where the results revealed that 4 (22.22%) of the key informants strongly disagreed with the fact that commercial banks frequently holds training sessions on e-banking among the staff. Also 8(44.44%) out of 18 key informants disagreed with banks holding training sessions frequently. Analysis also revealed that 5 (27.78%) of the respondents agreed with banks frequently holding training sessions, while 5.56% strongly agreed with banks frequency of trainings. Analysis and interpretation revealed that the respondents did not regard banks as doing enough in terms of training sessions to ensure that staffs are well equipped with knowledge on e-banking as 66.66% of the respondents disagreed with the fact that banks hold training sessions frequently while only 33.34% of the respondents felt that training sessions were frequently held. Commercial banks evaluation of staff understanding and awareness of e-banking was also examined in this objective where the results revealed that 75(33%) of the respondents strongly disagreed that banks frequently evaluates

staff understanding of e-banking. Further analysis revealed that 39% of the respondents disagreed with the fact that banks frequently evaluate staff awareness and understanding of e-banking.

The third objective sought to establish the influence of bank culture on e-banking adoption by the staff. The study therefore examined aspects of bank emphasis on paper work at account opening and how this influenced e-banking adoption by staff. Results obtained revealed that 8 (44.4%) of the key informants agreed with fact that banks put more emphasis on paper work at account opening more than e-technology which to some extent discourages e-banking transactions. Results also revealed that 33.3% of the respondents strongly agreed that paper work was given priority at account opening stage. However 22.3% of the respondents disagreed and strongly disagreed combined that banks were not putting more emphasis on paper work during account opening. This objective also examined loan processing criteria by banks and if such criteria was e-banking friendly whereby the results revealed that out of 226 staff who took part in the study 163 agreed with the fact that loan processing criteria adopted by banks is not e-banking friendly. This was based on the fact that most commercial banks embrace paper work in loan processing. However a small portion of respondents (50) viewed commercial banks as doing enough to promote loan processing through e-banking. Teller average transactions was another aspect of bank culture that was examined whereby banks emphasis on teller transactions was examined in terms of how it influenced staff ability to make use of e-banking where it was found that 91(40.3%) out of 226 respondents agreed that commercial banks emphasis on teller productivity has lowered the levels of e-banking uptake not only among the staff but also among external customers as staff are determined to increase their daily transactions a move that is counter e-banking orientation. Results also revealed that 31% of the respondents strongly agreed that over emphasis on teller transactions is hindering e-banking uptake which is an indicator of the fact that staff are much determined to interact with clients physically as this adds up to their performance.

The fourth objective sought to establish the influence of ease of use on e-banking adoption. This was through examining staff frequency of e-banking usage. Results indicated the level of disagreement with the fact staff frequently use e-banking was high and that most staff were not able to make use of e-banking in their transactions as 61.1% of the respondents disagreed with staff frequent use of e-banking while 38.9% strongly disagreed. This shows that banks have to work towards improving staff frequency of using e-banking. E-banking system uptime and banks response to system challenge were also studied whereby results revealed that the level of disagreement with the fact that staff frequently use e-banking

was high and that most staff were not able to make use of e-banking in their transactions as 61.1% of the respondents disagreed with staff frequent use of e-banking while 38.9% strongly disagreed. This shows that banks have to work towards improving staff frequency of e-banking. On banks response to system challenges the study revealed that 8 (44.4%) of the respondents agreed that commercial banks response to network challenges was prompt while 10 (55.6%) of the respondents strongly agreed that banks response to network challenges was immediate. This was an indicator of the bank's commitment to ensuring that users are served with efficient systems that guarantee them security in doing transactions.

The fifth objective studied influence of socio-demographic factors such as age in the banking industry, education level, course pursued at the tertiary level and gender on e-banking adoption. On age, the study revealed, that those who agreed and strongly agreed that formed 27.7% and 33.3% respectively. Those who disagreed and strongly disagreed formed 22.3% and 16.7% respectively. Therefore a combined percentage of 61% agreed that age in the banking industry is key in influencing e-banking adoption among the staff. It was also revealed that 39% of the respondents disagreed that age could influence staff intentions to take up e-banking. On the level of education the study revealed that revealed that 6 (33.3%) of the respondents were of disagreement with the fact that academic level could not influence staff to take up electronic banking. 5 (27.8%) of the key informants interviewed revealed with strong disagreement that academic level could not influence e-banking adoption. However 38.9% of the respondents agreed with education influence on e-banking adoption not only among the staff but also among the external customers. The results obtained therefore revealed that education level cannot be relied upon as a determinant of how staff are to adopt and make use of e-banking.

As far as courses taken by staff at the tertiary level is concerned the study revealed that a higher percentage of 61.1% were of the agreement that courses pursued by staff at the college level influences their readiness to take up new technology and systems adopted by the banks. This study also indicated that banks should put establish which courses are these that produce individuals well prepared to adopt new systems and possibly develop policies guiding recruitment. However 32.9% of the respondents felt that courses taken by staff at the tertiary level does not necessarily influence staff readiness to take up new system.

On gender and its influence on e-banking adoption, the study revealed that 53.5% of respondents were for the disagreement with the fact that gender of an individual could influence how they make decisions

to adopt and make use of e-banking. However 46.5% of the respondents felt that gender could influence staff desire to make or not make use of e-banking.

5.3 Discussion of the research findings

This section discusses research findings that resulted from each objective.

5.3.1 The extent to which relevance influence adoption of electronic banking among the commercial banks staff.

This objective sought to establish the extent to which the relevance influences adoption of electronic banking among the commercial banks staff. This objective aimed at establishing the relevance of e-banking in terms of how it led to cutting of cost in doing transactions, where the respondents were required to express their feeling on the fact that e-banking was there to cut on cost. Results revealed that 73.01% of the respondents were for the agreement that e-banking could cut on cost of doing transactions. However results also indicated that 20.35% of the respondents felt that e-banking could not cut on cost of doing transactions citing other systems like ATMs. The study also sought to find out whether e-banking was cheaper compared to other systems like ATMs and mobile banking where the results revealed that 72.22% of the respondents felt that e-banking did not cut on cost of doing transactions compared to other available options. On e-banking reducing time and distance, results indicated that 77.78% of the respondents agreed with the fact that e-banking could assist in reducing time and distance in doing transactions as staff are able to transact at the comfort of their personal computers. On e-banking and promotion of security results revealed that out of 226 respondents, 60 (22%) of the respondents felt that e-banking was not secure in doing transaction be it online or on their personal computers. A percentage of 11% could not express their feeling on whether it was secure to make transactions via e-banking which could be attributed to the fact that most of them were not able to make use of e-banking hence unable to make use of e-banking. It was also revealed that 113 (50%) of the respondents agreed that it was secure to make use of e-banking in making transactions while 17% of the respondents strongly believed that e-banking is much secure in making transactions.

Findings arrived at as per the Tanzanian annual report of the quarter ending June 2011 noted that e-banking impacted greatly in cutting of cost as evident in reduced cost (by 33%) of entire cost involved in

cargo clearance and reduced time in across its sea ports, air ports and land border stations. According to this report this move has not only reduced cost but also increased revenue to the state.

The findings of this study are similar to the study by Chiemekwe et al 2006 in Nigeria who noted that the ease of use of e-banking in terms of speed, time and distance reduction, shorter processing periods, increased flexibility of business transactions was highly considered by consumers. Davis, 1993 in his study revealed that a prospective users overall feeling or attitude towards using a given technology based system represents a major factor as to whether e-banking will be embraced or not.

5.3.2 Bank marketing strategy influence on e-banking adoption

This objective sought to establish the influence that banks marketing strategy had on staff adoption of e-banking. The study examined how banks marketing strategy influenced e-banking adoption through establishing how staff came to know e-banking where results revealed that out of the 226 respondents involved in the study 26 (11.5%) of the respondents expressed their level of disagreement with the fact that they learnt of e-banking through bank training sessions. It was also revealed that 31.9% of the respondents were not able to give their views on how they came to learn of e-banking, a portion of respondents comprising of those who were not aware of e-banking role in doing transactions and those who had learnt of e-banking through other means like mass media and internet. However 128 (56.6%), of the respondents had certain levels of agreement that they had learnt of e-banking through bank initiative. On effectiveness of trainings by commercial banks on e-banking in terms of effectiveness and promotion of staff levels of knowledge and ensure attitude change towards e-banking usage the results revealed that out of 226 respondents 100 (44.25%) expressed their levels of disagreement with the fact that training sessions held by the bank were effective enough to equip staff with enough knowledge and also lead to attitude change towards e-banking. The study also revealed that only 27.88% of the respondents agree that bank training sessions were effective to enable staff form positive attitude towards e-banking, while those who could strongly agree formed 11.06% of the respondents. It was therefore revealed that cumulatively, 38.94% of the respondents felt that training sessions by the bank were effective though this was far below average indicating that these sessions were inadequate to lead to attitude formation. On the frequency of banks training sessions on staff the results revealed that 4 (22.22%) of the key informants strongly disagreed with the fact that commercial banks frequently holds

training sessions on e-banking among the staff. Also 8 (44.44%) the key informants disagreed with banks holding training sessions frequently. Analysis also revealed that 5 (27.78%) of the respondents agreed with banks frequently holding training sessions, while 5.56% strongly agreed with banks frequency of trainings. Analysis and interpretation revealed that the respondents did not regard banks as doing enough in terms of training sessions to ensure that staffs are well equipped with knowledge on e-banking as 66.66% of the respondents disagreed with the fact that banks hold training sessions frequently while only 33.34% of the respondents felt that training sessions were frequently held. Commercial banks evaluation of staff understanding and awareness of e-banking was also examined in this objective where the results revealed that 75(33%) of the respondents strongly disagreed that banks frequently evaluates staff understanding of e-banking. Further analysis revealed that 39% of the respondents disagreed with the fact that banks frequently evaluate staff awareness and understanding of e-banking.

These findings agree with Cecilia R.,,Mwangi W, Mwangi,Wi,Kamau,P,& Tobias,O,. (2012) study in Nairobi that revealed that although 60% of commercial banks in Nairobi county embarked on staff training on new systems introduced, such trainings sessions inadequate as they were directed on staff whose role in the bank was to directly manage the system as technical team and not all the staff. This has therefore created a gap as far as knowledge of e-banking to all the staff is concerned.

5.3.3 How commercial banks culture influence adoption of electronic banking by staff.

This objective sought to establish the influence of bank culture on e-banking adoption by the staff. The study therefore examined aspects of bank emphasis on paper work at account opening and how this influenced e-banking adoption by staff. Results obtained revealed that 8 (44.4%) of the key informants agreed with the fact that banks put more emphasis on paper work at account opening more than e-technology which to some extent discourages e-banking transactions. Results also revealed that 33.3% of the respondents strongly agreed that paper work was given priority at account opening stage. However 22.3% of the respondents disagreed and strongly disagreed combined that banks were not putting more emphasis on paper work during account opening. This objective also examined loan processing criteria by banks and if such criteria was e-banking friendly whereby the results revealed that out of 226 staff who took part in the study 163 agreed with the fact that loan processing criteria adopted

by banks is not e-banking friendly. This was based on the fact that most commercial banks embrace paper work in loan processing. However a small portion of respondents (50) viewed commercial banks as doing enough to promote loan processing through e-banking. Teller average transactions was another aspect of bank culture that was examined whereby banks emphasis on teller transactions was examined in terms of how it influenced staff ability to make use of e-banking where it was found that 91(40.3%) out of 226 respondents agreed that commercial banks emphasis on teller productivity has lowered the levels of e-banking uptake not only among the staff but also among external customers as staff are determined to increase their daily transactions a move that is counter e-banking orientation. Results also revealed that 31% of the respondents strongly agreed that over emphasis on teller transactions is hindering e-banking uptake which is an indicator of the fact that staff are much determined to interact with clients physically as this adds up to their performance. This shows that bank should re-evaluate some aspects of their culture in order to design their operations in a manner that is e-banking oriented.

Findings from this study are similar to those of a study conducted by Naimi Lawrence (2013) in the South Africa that revealed that culture in its great diversity has great influence on individual's intention to adopt new technology. Naimi further established that over 50% of the respondents felt that cultural values norms and beliefs played a key role in influencing how individuals make decisions regarding new technology introduced. He also acknowledged that the emergence of technology is exposing the society to new trends that are making the new generation not aware of which culture to embrace at what time an issue that may compromise the smooth transition from the traditional ways of managing finances into the modern systems.

5.3.4 Ease of use influence on e-banking adoption

This objective sought to establish the influence of ease of use on e-banking adoption. This was through examining staff frequency of e-banking usage. Results indicated the level of disagreement with the fact staff frequently use e-banking was high and that most staff were not able to make use of e-banking in their transactions as 61.1% of the respondents disagreed with staff frequent use of e-banking while 38.9% strongly disagreed. This shows that banks have to work towards improving staff frequency of using e-banking. E-banking system uptime and banks response to system challenge were also studied whereby results revealed that the level of disagreement with the fact that staff frequently use e-banking

was high and that most staff were not able to make use of e-banking in their transactions as 61.1% of the respondents disagreed with staff frequent use of e-banking while 38.9% strongly disagreed. This shows that banks have to work towards improving staff frequency of e-banking. On banks response to system challenges the study revealed that 8 (44.4%) of the respondents agreed that commercial banks response to network challenges was prompt while 10 (55.6%) of the respondents strongly agreed that banks response to network challenges was immediate. This was an indicator of the bank's commitment to ensuring that users are served with efficient systems that guarantee them security in doing transactions.

The findings of this study agree with those of a study carried out by Daniel,E. 1999 in the republic of Ireland that revealed that convenience, ease of use and compatibility with the consumer lifestyles influenced to a large extent the users intention to make use the e-banking. On the same aspect, Chiemeké et al 2006 in Nigeria noted that the ease of use of e-banking in terms of speed, time and distance reduction, shorted processing periods, increased flexibility of business transactions was highly considered by consumers. Davis, 1993 in his study revealed that a prospective users overall feeling or attitude towards using a given technology based system represents a major factor as to whether e-banking will be embraced or not.

5.3.5 Socio-demographic factors influence on e-banking adoption

This objective studied influence of socio-demographic factors such as age in the banking industry, education level, course pursued at the tertiary level and gender on e-banking adoption. On age, the study revealed, that those who agreed and strongly agreed that formed 27.7% and 33.3% respectively. Those who disagreed and strongly disagreed formed 22.3% and 16.7% respectively. Therefore a combined percentage of 61% agreed that age in the banking industry is key in influencing e-banking adoption among the staff. It was also revealed that 39% of the respondents disagreed that age could influence staff intentions to take up e-banking. On the level of education the study revealed that revealed that 6 (33.3%) of the respondents were of disagreement with the fact that academic level could not influence staff to take up electronic banking. 5 (27.8%) of the key informants interviewed revealed with strong disagreement that academic level could not influence e-banking adoption. However 38.9% of the respondents agreed with education influence on e-banking adoption not only among the staff but also among the external customers. The results obtained therefore revealed that education level cannot be relied upon as a determinant of how staff are to adopt and make use of e-banking.

As far as courses taken by staff at the tertiary level is concerned the study revealed that a higher percentage of 61.1% were of the agreement that courses pursued by staff at the college level influences their readiness to take up new technology and systems adopted by the banks. This study also indicated that banks should establish which courses are these that produce individuals well prepared to adopt new systems and possibly develop policies guiding recruitment. However 32.9% of the respondents felt that courses taken by staff at the tertiary level does not necessarily influence staff readiness to take up new system as more training by banks should be done on new systems encountered.

The findings of this study agree with findings of a study conducted by Cecilia R., Mwangi W, ,Kamau,P,& Tobias,O, (2012) in Nairobi county who pointed out the role of academic background and experience in technology as having a central role in influencing e-banking adoption. They noted that 60% of commercial banks in Nairobi county embarked on staff training to not only enforce their academic backgrounds but also to boost their hand on skills in system use.

On gender and its influence on e-banking adoption, the study revealed that 53.5% of respondents were for the disagreement with the fact that gender of an individual could influence how they make decisions to adopt and make use of e-banking. However 46.5% of the respondents felt that gender could influence staff desire to make or not make use of e-banking.

5.4 Conclusions

The study investigated the determinants of adoption of e-banking among commercial banks staff, a case of commercial banks, Kisii County, Kenya.

It can be drawn from the study findings that contextual determinants influence adoption of e-banking among commercial banks staff in Kisii County. The challenges emanating from the banks preparedness in promoting e-banking adoption and usage need to be addressed if banks have to realize increased staff involvement in e-banking usage. Banks move to promote e-banking usage needs to start from staff recruitment stage that will influence staff career entry behavior.

Banks should embark on consistent training sessions for staff in order to create awareness on e-banking especially for the new staff most of whom are not aware of e-banking. This would provide staff with knowledge on how to tackle challenges during usage of e-banking and also assist staff in forming positive attitude towards e-banking.

Banks should encourage staff to make use of e-banking immediately they are recruited as the trend shows that the older the staff is in the bank, the higher the levels of using e-banking.

Banks should beef up the training content as the staff viewed information gained through bank training and other ways of accessing information regarding e-banking as inadequate hence not worth influencing attitude change towards e-banking. In addition to this, banks should frequently evaluate staff understanding and awareness of e-banking usage and close the knowledge gaps whenever noted.

There are also institutional bottlenecks that are culture based and hinder staff adoption of e-banking. Banks should come up with culture that is e-banking friendly as some aspects of bank culture like over emphasis in paper work at account opening, targets set for cashiers on number of transactions made per day over the counter is limiting the success of e-banking usage

Attitude formation is important in creating the required intentions and willingness to adopt e-banking. This is an area that banks should pay more attention to through trainings and addressing network challenges that is seen to discourage most staff in using e-banking.

At the recruitment stage, banks should consider which courses at tertiary level produce staff who are ready to adopt new systems without struggle.

A number of crucial lessons were realized from the findings of the study that ought to serve as guidelines to the banking industry and commercial banks in Kisii county in particular. Before these issues are addressed, banks attempts to promote e-banking usage not only among the staff but also among its customers would be difficult.

This study has some limitations that needs to be mentioned. Firstly, since the study was limited to commercial banks within Kisii County, the findings may have limited generalizability to other staffs working in other commercial banks outside the county and within the country. Additionally, the methodology of study presents a small sample especially for purposively sampled data referring to the level to which the conclusions made can be generalized.

5.5 Recommendations

1. Commercial banks should ensure consistent trainings of staffs on e-banking in order to create awareness and attitude change. Additionally, banks should revise the content of training materials to ensure that adequate information is provided to staff.
2. Commercial banks should go slow on paper work in processes like account opening and loan processing in order to promote e-banking.
3. Commercial banks should work on staff attitude change towards e-banking through trainings and prompt addressing of network challenges as this is discouraging its usage.
4. Commercial banks management should put serious consideration to courses undertaken by candidates at the recruitment stage as this is influencing their readiness to accept and adopt new systems in the bank in this case e-banking.
5. Commercial banks should work on e-banking to ensure that charges per transaction are competitive compared to other alternative systems that are believed to be cheaper.
6. Commercial banks should hold frequent training sessions for staff on e-banking.

5.6 Suggested areas for further research

1. Further studied involving quantitative methods are required to ensure that the findings are generalized, and make the study more replicable.
2. Further research should be conducted to find out which courses offered at college level are likely to produce candidate best fitted to easily accept, adopt and make use of the new systems.
3. Further research should be conducted on gender basis to establish between male and females, who are likely to adopt and make use of e-banking more easily.
- 4 A comparative study should be carried out between individual customers and staff in terms of determinants influencing their adoption or usage of e-banking.
5. Future research should be conducted in banks on departmental basis to establish whether there are differences on the levels of e-banking adoption between staff recruited into operations and those recruited to join credit department.

5.7 Contribution to the body of knowledge

Table 5.1 Provide a summary on the contribution to the body of knowledge from the study

Table 5.7 Contribution to the body of knowledge

Objective	Contribution to knowledge
To establish the extent to which relevance influence adoption of electronic banking among the commercial banks staff	Banks should intensify training of staff on e-banking to promote awareness on its relevance hence increased usage.
To examine the extent to which banks marketing strategies influence adoption of electronic banking among the commercial bank staff.	Banks should not ignore marketing e-banking to its staff. Banks should beef up training contents for e-banking to equip staff with necessary knowhow.
To assess how bank culture influence adoption of electronic banking among the Commercial banks staff	Banks should come up with cultures that are e-banking friendly as aspects like emphasis on paper work in account opening and loan processing is limiting e-banking adoption and usage.
To examine the extent to which the ease of use influence adoption of electronic banking among the commercial bank staff	Banks should work to promote attitude change on the part of staff to promote increased adoption through setting targets for them on e-banking usage, rewards and addressing network challenges promptly
To establish the extent to which	At the recruitment stage, banks should consider

Socio-demographic factors influence candidates who have pursued specific courses that
adoption of e-banking among the give them capabilities that enable them adopt new
commercial banks staff system without struggle.

APPENDICES

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APPENDICES

APPENDEX A

QUESTIONNAIRE FOR COMMERCIAL BANK STAFF

SECTION A

Consent section

This survey is a study that is being conducted by Mr Mainchia Fladimilio Mwathi, a master of arts Degree student in Project Planning and Management at the University of Nairobi. The study is aimed at **establishing the determinants for adoption of electronic banking among the commercial banks staff**. Information gathered will be important in assisting banking sector come up with measures to help in increased adoption and usage of e- banking among the staff and external customers.

There is no right or wrong answers and that any information you provide will be kept strictly confidential and all the data provided will be used for the purposes of this study only and as such, your name will not appear on the questionnaire.

The participation in the study is voluntary and participants have the right to accept or not accept to take part in this inquiry and to withdraw voluntarily.

SECTION B

1.0 Back ground information

SEX Male Female	Age (In the banking Industry)	Position held in the bank (managerial, sector/departmental champion, junior staff)	Bank

1.1 Level of education (highest level attained)

- 1. Certificate ()
- 2. Diploma ()
- 3. Degree (Graduate) ()
- 4. Masters ()
- 5. Phd ()

Instructions: Strongly agree=5; Agree=4; Undecided= 3; Disagree= 2; Strongly Disagree= 1

1. To what extent does relevance influence adoption of electronic banking among the commercial banks staff in Kisii County?

	Question	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	E-banking has reduced cost of doing transactions					
2	Use of e-banking is cheaper compared to alternative systems					
3	E-banking has reduced distance in doing transactions					
4	I am able to do transactions at the comfort of my Pc					
5	I feel secure in doing transactions via e-banking					
6	The commercial banks have done enough to promote e-banking security					

Instructions: Strongly agree=5; Agree=4; Undecided= 3; Disagree= 2; Strongly Disagree= 1

2. To what extent does the bank marketing strategies influence adoption of electronic banking among the commercial banks staff in Kisii county?

	Question	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	I came to know e-banking through banks training sessions					
2	Information gained through banks training sessions is adequate to promote attitude change					
3	Other alternative modes of learning e-banking like mass media and internet are more influential than bank training sessions					
4	Through bank marketing, I have adopted and continued using e-banking					
5	Though am aware of e-banking, I have never made use of it					
6	The bank frequently holds training sessions for the staff on e-banking					
7	The bank through marketing frequently evaluates staff understanding of e-banking					

Instructions: Strongly agree=5; Agree=4; Undecided= 3; Disagree= 2; Strongly Disagree= 1

3. To what extent does the bank culture influence adoption of electronic banking among the Commercial bank staff in Kisii County?

	Question	Strongly Disagree	Disagree	Undecided	Agree	Strongly agree
1	The bank over emphasizes on paperwork at account opening					
2	Loan processing in my bank is not e-banking friendly					
3	Bank emphasizes on average teller transactions which discourages e-banking use.					
4	My bank has laid down strategies that are meant to promote e-banking and reduce paperwork					

Instructions: Strongly agree=5; Agree=4; Undecided= 3; Disagree= 2; Strongly Disagree= 1

4. To what extent does the ease of use influence adoption of electronic banking among commercial bank staff in Kisii County

	Question	Strongly Disagree	Disagree	Undecided	Agree	Agree
1	I frequently make use of e-banking					
2	E-banking is easy to make use of that it has supported my business					
3	I am able to make use of e-banking at least seven times a month					
4	I can comfortably follow the procedures involved while transacting with e-banking					
5	E-banking system uptime is always at its best					
6	The bank is able to tackle e-banking system challenges and with speed					

Instructions: Strongly agree=5; Agree=4; Undecided= 3; Disagree= 2; Strongly Disagree= 1

5. To what extent does socio-demographic factors influence adoption of electronic banking among the commercial bank staff in Kisii County

	Question	Strongly Disagree	Disagree	Undecided	Agree	Strongly agree
1	Age in the bank industry influences e-banking adoption					
2	The younger the staff the lower the involvement of e-banking in the day to day transactions					
3	The staff with higher academic levels easily get adopted to e-banking					
4	Courses pursued by the staff at the tertiary level directly determines staff readiness to take up new systems					
5	Gender influences individual staff ability to take up e-banking					
6	Female staff makes use of e-banking in their day to day transactions more than the males					

Appendix B – Key informant Interview Schedule for Bank managers

The questionnaire is to be completed by commercial banks managers only

My name is Fladimilio Mainchia Mwathi a student of the University of Nairobi conducting a survey on determinants of adoption of e-banking among staff in commercial banks in Kisii County, Kenya. The data gathered will be treated with utmost confidentiality; will be accessible to researcher and research assistants only. Information gathered will be used only for this study. As per the questions asked, tick to express your level of agreement or disagreement with the respective question, your feeling whether high or low.

Instructions: Strongly agree=5; Agree=4; Undecided= 3; Disagree= 2; Strongly Disagree= 1

1. To what extent does relevance influence commercial banks staff adoption and usage of e-banking.

	Question	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	Among commercial banks all staff are aware of e-banking					
2	Staff in commercial banks consistently make use e-banking					
3	E-banking is there to cut on cost of making transactions					
4	E-banking reduces distance and saves on time in making transactions					
5	The commercial banks have done enough to promote e-banking security					
6	Use of e-banking is cheaper compared to alternative systems					

Instructions: Strongly agree=5; Agree=4; Undecided= 3; Disagree= 2; Strongly Disagree= 1

2. To what extent do banks marketing strategy influence staff adoption and usage of e-banking

	Question	Strongly disagree	disagree	Undecided	Agree	Strongly agree
1	Highest number of commercial banks staff learned of e-banking through banks training sessions					
2	Information obtained by staff through training session is adequate to allow them make decision to adopt e-banking usage.					
3	Through bank marketing, I have adopted and continued using e-banking					
4	Though am aware of e-banking, I have never made use of it					
5	The bank frequently holds training sessions for the staff on e-banking					
6	The bank through marketing frequently evaluates staff understanding of e-banking					

Instructions: Strongly agree=5; Agree=4; Undecided= 3; Disagree= 2; Strongly Disagree= 1

3. Influence of bank culture on commercial banks staff adoption of e-banking

	Question	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	How do you rate the level of staff knowledge of their bank culture					
2	How do you rate the level of bank cultures hindrance to e-banking adoption and usage by bank staff					
4	The bank over emphasizes on paperwork at account opening					
5	Loan processing in my bank is not e-banking friendly					
6	Bank emphasizes on average teller transactions which discourages e-banking use.					

Instructions: Strongly agree=5; Agree=4; Undecided= 3; Disagree= 2; Strongly Disagree= 1

4. Ease of use influence on e-banking adoption

	Question	Strongly agree	Agree	Disagree	Strongly disagree	Undecided
1	E-banking is perceived as easy to make use of by commercial banks staff					
2	Individual staff attitude is key in influencing decision to make use of e-banking.					
3	I can comfortably follow the procedures involved while transacting with e-banking					
4	E-banking system uptime is always at its best					
5	The bank is able to tackle e-banking system challenges and with speed					

Instructions: Strongly agree=5; Agree=4; Undecided= 3; Disagree= 2; Strongly Disagree= 1

5. Socio-demographic factors influence on e-banking adoption by commercial banks staff

	Question	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
1	How do you rate bank staff feeling of their capabilities in achieving high performance in e-banking usage					
2	To what level do you feel that courses pursued by bank staff at the tertiary level influence their readiness to adopt new systems introduced					
3	Courses pursued by the staff at the tertiary level directly determines staff readiness to take up new systems					
4	Gender influences individual staff ability to take up e-banking					
5	Female staff makes use of e-banking in their day to day transactions more than the males					
6	Age in the bank industry influences e-banking adoption					

Appendix C: Krejcie And Morgan Sampling Table For Determining Sample Size.

Krejcie and Morgan sampling table for determining sample size from a given population

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	373
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	225	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Note: N – is population size

S – is sample size. Krejcie, Robert V., Morgan, Daryle W., *Determining Sample Size for Research Activities, Education and Psychological Measurement*, 1970.

