# INFLUENCE OF DIGITAL BANKING ON CUSTOMER SATISFACTION: A CASE OF NATIONAL BANK OF KENYA BUNGOMA COUNTY.

BY

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A RESEARCH PROJECT REPORT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF ARTS DEGREE IN PROJECT PLANNING AND MANAGEMENT OF THE UNIVERSITY OF NAIROBI

## **DECLARATION**

I declare that this Research Project Report is my original work and has not been submitted to any other University or institution of higher learning for examination Purpose.

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## **DEDICATION**

I dedicate this work to my dear parents. My father Mr. George Muluka and my mother Mrs. Muluka for their tireless effort in my upbringing, support and blessings during the time of writing this research project.



#### **ACKNOWLEDGEMENTS**

I acknowledge the support, advise and tireless effort of my supervisors Professor Harriet Kidombo for the mark that she has imprinted in my academic life.

I would also like to acknowledge the administration of the University of Nairobi for providing me with the chance to pursue my Masters of Arts in Project Planning and Management in this institution. In a special way, I thank Mr. Vincent Marani, Issa and Marcus at Bungoma Sub-Centre. I also appreciate the conducive environment the institution provided me with to enable me pursue my studies.

Much acknowledgement goes to all my lecturers for this course for their tireless efforts to impart the necessary knowledge in me that has been of much importance in this study. They have really been a source of inspiration to me.

Finally to my fellow colleagues and group members who gave me the technical support and guidance thus ensuring successful completion of my research project; and all the contributions from my friends who gave much support in my studies and finances.

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#### ABBREVIATIONS AND ACRONYMS

**ATMs** Automated Teller Machines

**CBK** Central Bank of Kenya

**CS** Customer Satisfaction

**DRC** Democratic Republic of Congo

**E-Banking** Electronic banking also referred to as Online Banking

**EFT** Electronic Funds Transfer

**EFTPOS** Electronic Funds Transfer at Point of Sale

**FDIC** Federal Deposit Insurance Corporation

**IPO** Initial Public Offering

M-Banking Mobile Banking

M-PESA Mobile-based cash transfer service by Safaricom Ltd

**POS** Point Of Sale

**RTGS** Real Time Gross Settlement

SMEs Small and Medium Enterprises

UK United Kingdom

**USA** United States of America

#### **ABSTRACT**

Banks have been forced to deleverage and identify alternative sources of value as a result of increased regulations and competitive challenges. This has led to the introduction of digital banking where technology is mostly embraced while carrying transactions. However, customers are still waiting for this new banking experience, touted as a revolutionary transformation that will bring many new features, including anytime and anywhere banking, ultra-fast response times, and omnipresent advisors. This study purposed to investigate the influence of digital banking on customer satisfaction case of National Bank of Kenya Bungoma County. Four objectives that guided the study: To determine the influences of speed of transactions, to assess influences of accessibility, to determine influences of adaptability of digital banking and to establish how affordability of digital banking influences Customer Satisfaction case of National Bank of Kenya, Bungoma County. The target population for the study was bank customers and banking staff from National Bank in Bungoma County. The study utilized a sample size of 417 with 42 respondents being part of the pilot study undertaken. Descriptive survey design was undertaken. Data was collected using a triangulation of methods including questionnaires, interview schedules and document reviews. Analysis was undertaken with the aid of Statistical Package for Social Sciences where both descriptive and correlation analysis were performed. The findings of the study established that there was a strong positive correlation between speed of transactions and customer satisfaction(r=0.749, p<0.01), Accessibility of digital banking was positively correlated with customer satisfaction (r=0.865, p<0.01), adaptability of digital banking and customer satisfaction was also correlated (r=0.789, p<0.01) and lastly there was a negative significant relationship between affordability and customer satisfaction (r= -.216, p<0.01). the study recommends that there is need by banks to invest more on robust reliable systems to reduce incidents of failed transactions and transactional errors in ATMs, Mobile banking and POS terminals, need to come up with an application that can be used to enhance digital banking, facilitation of ICT skills so that technology can be embraced and lastly there is need to carry out customer satisfaction surveys to establish how customers are adapting to technology.

#### **CHAPTER ONE**

#### INTRODUCTION

### 1.1 Background of the Study

Before the global economic crisis of 2008-2009, the banking industry created shareholder value through financial leveraging. Today's increased regulations and competitive challenges are forcing banks to deleverage and identify alternative sources of value. Enter digital banking. New digital models steer banks in the direction of customer relationships that present new sources of value. The focus is on engaging customers and building trust in the key activities of digital banking: marketing and sales; customer on boarding; and account opening and servicing.

Ogden (2014) says that the state of digital banking influx is like never before. It's been about five years since Bank of America launched the first mobile banking application on the iPhone, and users are now demanding new functionality faster than financial institutions can typically provide it. He notes that today users want a powerful digital experience, and they are willing to switch banks to get it. He mentions that in one of the surveys conducted that 27 percent of users would consider branchless digital experience. Ogden (2014) In a survey conducted by Ernst and young's 2014 global banking data gathered from 32000 retail banking customers in 43 countries, they found out that customers pointed out five areas where banks and credit unions could improve namely: simplicity of offers and transparency of fees, provision of Omni channel experience, better advice, leveraging greater use of data and digital channels to empower customers and enhancing problem resolution experiences.

According to Vasya and Patrick (2006) recent development of information technology has led to major changes in the way services are delivered to the customers. Nowadays, customers are using more and more self-service options, which are more convenient and fast. Kumar (2014) suggests that customers' growing use of digital channels for banking and their demand for an individualized experience have forced many banks to revisit their customer service efforts. In the face of increasing competition from emerging digital banks, which are redefining customer satisfaction and luring younger customers, traditional banks must leverage digital channels to create a more rewarding customer satisfaction. The study also points out that for a successful transition to digital banking, banks must formulate a strategy focused on six key areas: customer,

mobile and online capabilities, use of customer data, social media, modernized branches/ATMs and provision for a seamless experience across all channels (Schlich, 2014). Some banks that have adopted the digital channels like internet banking are being faced with various obstacles like teething problems ranging from security concerns by the users, lack of adequate legal framework, poor marketing strategies and issues regarding the connectivity of internet banking site all these provide for low customer satisfaction. Digital modernization, is giving traditional banks a second chance to deepen customer satisfaction and loyalty, driving long-term relationships and profitability with the approach also embracing the potential to meet consumers' expectations and bring banking back to the bank.

Moreno (2014) highlights that banks are facing a growing challenge from non-bank entities that are aggressively using digital innovations to take on functions traditionally part of banking. He gives an example Amazon, which now offers loans to its merchants and the giant Alibaba (Chinese E-Commerce Company with the Largest IPO in US Stock History), now the world's largest payment provider. However, he points out that banks have a huge competitive advantage in this digital world. With their vast digital data, payment know-how and deep understanding of compliance, security and financing, they are positioned to become an Everyday Bank, providing an unparalleled personalized customer satisfaction that cannot be replicated by non-banks. Digital and mobile technology allows access new pools on under banked or unbaked population across the globe and customer behaviors' changing extensively.

Holley (2013) notes that Banks in the UK and Ireland need, to adjust to changing consumer behavior as customers cut back on the amount of time they spend banking online and visiting bank branches, according to new research by Accenture. He also points out that several new banks are currently hoping to capitalize on dissatisfaction with existing offerings to enter the market in coming months. Finnish bank Holvi is an online-only bank that aims to rollout across Europe, offering a combination of personal financial management features, social and business networking and reworked core products. Meanwhile, Moven (formerly Movenbank), another online bank, is based around the mobile wallet concept, in which the customer downloads a mobile app and then uses their mobile phone to make payments, transfer funds and withdraw cash. Kumbhar (2009) and Shrotriya (2007) point out that today's customers are now looking for multiple delivery channels and flexible as well as convenient working hours neither the clock nor

the geographical locations are constraints. Therefore, almost all Indian commercial banks are providing services through the various alternative e-channels; it is called as 'Alternative Banking. There are various means of alternative banking i.e. Core banking Solution (CBS), ATM, POS Terminals, Mobile Banking, Internet Banking, Credit Cards, Debit Cards, EFT, RTGS, MICR clearing etc.

Ondiege (2010) noted that in Africa, the majority of the population has no access to banking services, with only 20% of African families having bank accounts. There is limited access to financial services in Africa stemming particularly from deficient infrastructure, physical-geographical isolation or inaccessibility, financial illiteracy. Even Africans with bank accounts often face high charges for moving their cash around, due to high transactions costs. It is this gap in the financial services market that is creating a unique niche for mobile phone banking to develop on the continent, enabling a growing number of people to access financial services for the first time. In this context, new technology-based financial services, such as mobile phone banking and the use of smartcards, have the potential to substantially increase people's access to finance.

South Africa is by far the country where mobile banking is most widely used on the continent. By end of March 2009, the total mobile customer base in South Africa increased by 3.8% from 2008 to over 51.9million with the mobile penetration rate rising to 107%. Ondiege (2010) further gives an example of Vodacom - Nedbank M-PESA – South Africa's largest mobile phone operator Vodacom which teamed up with Nedbank to unveil an M-PESA mobile-based cash transfer service, similar to the successful one operating in Kenya. Nyangosi et al. (2009) highlight in their findings that ATM banking is one of the earliest and widely adopted retail e-banking services in Kenya. However according to an annual report by Central Bank of Kenya its adoption and usage has been surpassed by mobile banking in the last few years (CBK, 2008). Commercial banks branch network has grown from 530 in 1999 to 1,102 branches by end of June 2011, ATMs increased from 262 to 2,021, number of deposit accounts from approximately 1million with 16,673 staff to 12.8million with 28,846 staff over the same period (CBK, 2011). Only 19% of the adult population in Kenya has access to a formal bank account and banking services in Kenya are largely restricted to urban populations. Cellular operators are providing

banking services in the country with M-PESA and MKESHO by Safaricom and ZAP by Zain (Ondiege, 2010)

Stefan, Deighton, Eistert, Gordon, and Ulrich (2013) give an example of Vodafone and Safaricom whose joint effort created M-PESA to serve the largely unbanked Kenyan population. Users pay cash into their account at an agent, such as a gas station or supermarket, and then use their mobile phone to pay retailers or other individuals. M-PESA serves as an alternative to bank accounts and credit cards, which is especially appealing to the rural population. The article further states that in 2012, about a third of the Kenyan population used M-PESA. Despite the fact that internet banking make the transaction faster and more convenient, several commercial banks in Kenya were yet to adopt this new banking product.

Bungoma County has 8 commercial banks, some with multiple branches and various agency banking points and offsite ATMs points providing similar services in terms of digital banking channels and all of them competing for the same customers within the county, providing similar services in terms of digital banking channels with various brand names associated to them. The banks are; Kenya Commercial Bank, Co-operative Bank, National bank of Kenya, Barclays Bank, Standard Chartered Bank, Equity bank, Bank of Africa and Family banks. These lists excludes like K-rep bank and Faulu Bank which are classified as Micro Finance institutions.

By keeping the importance of customer satisfaction in mind there is a need of banks to maintain close and stable relationship with their customers by providing the high quality of products and services. So there was a need to judge the level of customer satisfaction as far as digital banking is concerned in bringing in a seamless customer experience. As the banking industry is the high involvement industry. Banks are being aware of the importance of this fact that the provision of high quality service to customers is necessary for their survival and the success in today's global and competitive environment (Wang, Han, & Wen, 2003

#### 1.2 Statement of the Problem

Customer satisfaction is the most important factor for the long term success of any organization. The primacy of the bank's relationship with its customers is under threat as never before. Demands and expectations continue to evolve, often fueled by experiences outside financial services, and consumers are increasingly developing relationships with multiple providers. And

to add insult to injury, customers' attitudes have fundamentally changed. Customers are still waiting for this new banking experience, touted as a revolutionary transformation that will bring many new features, including anytime and anywhere banking, ultra-fast response times, and omnipresent advisors. The industry has been in a comfortable position for decades with low customer turnover, almost no regional competition, good personal relationships and trust as selling points, and not much intervention from regulators. Staying ahead of the curve was easy, and there was no pressure to change. Competitors from adjacent industries and financial technology startups are now flooding the market with innovative, technology-driven deviations from the traditional banking mode, MPESA a good example in Kenya. Customers now are making decisions much faster and have access to a plethora of offers, leaving financial institutions struggling for customer loyalty. Bungoma County already with eight commercial banks and micro finance institutions the competition is cut throat and new entrants are also coming in.

Digital modernization, is giving traditional banks a second chance to deepen customer satisfaction and loyalty, driving long-term relationships and profitability with the approach also embracing the potential to meet consumers' expectations and bring banking back to the bank. How customers perceive their banks, the services they get from their banks and whether their banks deliver on this promises is a matter worth looking at. Digital banking channels improve customers' access, facilitate the offerings of more services, increase customer loyalty, attract new customers, provide services offered by competitors and reduce customer attrition. According to the previous researchers in the different areas as mentioned above, it shows that customer satisfaction in commercial banks is still a challenge in most parts of the world and Bungoma County is no exception. It is against this backdrop that this study examined the influence of digital banking on customer satisfaction; a case of National Bank of Kenya, Bungoma County.

#### 1.3 Purpose of the Study

The purpose of the study was to investigate the influence of digital banking on customer satisfaction; case of National Bank of Kenya, Bungoma County.

## 1.4 Research Objectives

The research objectives of the study were:-

- 1. To determine how speed of transactions of digital banking influence Customer Satisfaction: case of National Bank of Kenya Bungoma County.
- 2. To assess how accessibility to digital banking influence Customer Satisfaction: case of National Bank of Kenya Bungoma County.
- 3. To determine how adaptability of digital banking influences Customer Satisfaction: case of National Bank of Kenya Bungoma County.
- 4. To establish how affordability of digital banking influences Customer Satisfaction: case of National Bank of Kenya Bungoma County.

#### 1.5 Research Questions

- 1. How does speed of transactions of digital banking influence Customer Satisfaction: case of National Bank of Kenya Bungoma County?
- 2. How does accessibility of digital banking influence Customer Satisfaction: case of National Bank of Kenya Bungoma County?
- 3. How does adaptability of digital banking influence Customer Satisfaction: case of National Bank of Kenya Bungoma County.?
- 4. To what extent does affordability of digital banking influence Customer Satisfaction: case of National Bank of Kenya Bungoma County.?

### 1.6 Significance of the Study

The study could be important to bank executives and policy makers who could find the recommendations and results from the study useful in determining how best to embrace digital banking, to enhance customer satisfaction, the gaps need to be addressed. The study could also give an insight on how customer satisfaction is critical to the success of banking sector in terms of increasing market share and increasing profitability in the face of stiff competition. The study could be crucial to emerging financial institutions in terms of the challenges ahead of them, since

profitably and customer satisfaction is paramount. The study enhanced the researchers knowledge in Banking as he was involved in the study hence he gained first-hand information.

#### 1.7 Basic Assumption of the Study

The study assumed that customers had embraced technology and employed it in their day to day transactions with their Commercial Banks in Bungoma County and that they had similar characteristics as it pertained to use of digital banking channels.

### 1.8 Limitations of the Study

A limitation is an aspect of study that the researcher knows may adversely affect the results but has no direct control over (Orodho, 2003). Some customers were not willing to divulge information or were skeptical about the information being sought. Customers did not have time to fill in the questionnaires. Due to the busy work schedule within the banking industry, it was difficult for the researcher to meet the banking staff.

The researcher mitigated the above limitations by educating customers on the use of the information being sought and re-assured them the information sought was only for academic purposes. Banking staff were persuaded to meet outside official working hours and responses were encouraged via the email, and by talking to managers in order to convince them about the objectives of this study.

## 1.9 Delimitation of the Study

This particular research was only delimited to Commercial Banks in Bungoma County and the results would be used cautiously in other Commercial banks as well as other financial institutions within and outside Bungoma County.

#### 1.10 Definition of Significant Terms

**Digital banking**: technology driven banking. (That is E-banking, Digital wallets like PayPal, Mobile banking, ATMs, RTGS and POS terminals.

**Customer Satisfaction:** a measure of how a customer responds having used digital banking platforms that makes them remain loyal to the bank, or lead to increase in the numbers of customers using the various digital channels platforms to do their banking.

**Commercial Bank:** is a bank that works with businesses handling banking needs for large and small businesses including lending money for real and capital purchases, foreign exchange etc.

**Speed of Transactions**: A measure of the quickness of a transaction using digital banking, to deliver desired result in a timely manner.

**Accessibility:** Extent to which a consumer or user can obtain a good or service at the time it is needed and at the convenient location and contact the organization which is in charge of that particular good or service.

**Adaptability**: Ability of a bank customer to alter their responses to the changed circumstances or environment brought about by digital banking. Adaptability shows the ability to learn from experience.

**Affordability:** A price or cost that is believed by bank customers to be within their financial means.

#### 1.11 Organization of the Study

The study is organized in five chapters. Chapter One is the introductory part; it discusses the background of the study briefly touching on adoption of digital channels by banks in the face of stiff competition from other banks and non-bank entities and the influence of digital banking in terms of customer satisfaction expected, in various parts of the world, Africa and Kenya. The chapter also states, the statement of the research problem, purpose of the study, the objectives of the study, research questions, and the significance of the study, basic assumptions, limitations and delimitations of the study. Chapter Two, deals with the literature that relates to the topic. Chapter Three covers the research methodology which encompasses Research design, target population, sample size, sampling technique, reliability and validity of the research instruments and procedures for data collection and analysis techniques. Chapter Four, deals with data analysis, presentation, interpretation and discussions. Chapter Five provides a summary of findings, conclusions and recommendation.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.1 Introduction

This chapter discusses the term "Customer satisfaction" and "Digital banking" and various digital banking channels and how it influences customer satisfaction. The chapter covers the influence of speed of transactions, accessibility, adaptability and affordability on customer satisfaction. The concepts, models and theories which are relevant in the field of customer satisfaction have been discussed in order to facilitate analysis and understanding of the research questions.

### 2.2 An overview of Digital Banking and Customer Satisfaction

Kennedy and Jacky (2013) note that the digital banking technology has greatly advanced there by playing a major role in improving the standards of service delivery in the financial institution sector. They say that days are long gone when customers would queue in the banking halls waiting to pay their utility bills, school fees or any other financial transactions. They can now do this at their convenience by using their ATM cards or over the internet from the comfort of their homes. Additionally due to the tremendous growth of the mobile phone industry most financial institutions have ventured into the untapped opportunity and have partnered with mobile phone network providers to offer banking services to their clients.

Cross (2014) cites several opinions of what digital banking means. He says, what digital essentially does is that it uses technology to design experiences, both seen and unseen. Digital is all about making what can be seen unseen – making services so smooth and seamless that it becomes invisible to the customer. It involves planning for digital initiatives which requires more than just the automation of services, but to also taking into account the emotional aspect of banking – how do customers feel about money and what do they do with it? Emotional needs must be at the centre of the entire customer experience."Customer satisfaction is a measure of how happy customers feel when they do business with a company in this context a bank.

Kotler (2012) in defining Customer satisfaction he says it involves customer creation, customer maintenance and retention. According to Meuter, Ostrom, Roundtree and Bitner (2000) Customer satisfaction is a highly personal assessment that is greatly influenced by individual expectations. Some definitions are based on the observation that customer satisfaction or dissatisfaction results from either the confirmation or disconfirmation of individual expectations regarding a service or product. Schlich (2014) notes that customers are satisfied with convenience of traditional banking but expectations are constantly rising as new technologies and consumer behaviors develop. Increasingly, customer behavior is changing to involve web, mobile, social media and in-person interactions for a single purchase. To stay competitive, financial institutions need to continue building capabilities to provide 24/7 real time access to banking seamlessly, across channels.

Digital communication should feel natural for digital customers, and banks have a crucial opportunity here to present themselves in a new light and to a new audience accustomed to a completely different way of interacting with friends and for whom purchasing online is second nature. Deepening the customer relationship, in a seamless fashion and in step with the user's lifestyle, precludes any thoughts of being too present – this is the key of knowing customer preferences and thinking, how much presence, when and in what ways. Getting it right reaps rich rewards over the long-term; getting it wrong portends a potential lost generation of customers. The digital banking offering should be based on a solid understanding of digital consumer behavior as well as consideration of how to build and extend bank brand value for digital consumers. Fundamentally, good customer service is crucial to the value of long-term customer loyalty. The digital tipping point is a crucial opportunity and one that offers substantial benefits to those who exploit it well. In addition to properly addressing the relevant technological and security aspects, digital banking strategy for private banks should be developed with a clear focus on current and future customer behavior and needs Villers (2012).

The transition of the banking industry over the past two decades has been historical, following the path from online enabled capabilities, to multichannel integration, to more seamless full-function solutions that leverage mobile devices and big data analytics. According to the Cisco research, the next stage of banking evolution will make transactions so convenient and automated that they will appear virtually invisible to the consumer, but will deliver value added

benefits beyond the transaction (Marous, 2014). Another view is that of Shaw & Ivens (2002) who define customer experience as an interaction between an organization and a customer as perceived through a customer's conscious and subconscious mind. It is a blend of an organization's rational performance, the senses stimulated and the emotions evoked and intuitively measured against customer expectations across all moments of contact. A good customer experience leads to a satisfied customer. Boonlertvanich (2011) asserts that satisfaction can be reflected as a feeling of pleasure when a person attains his or her wants, goals or motivation. Banks are providing new innovative techniques of satisfying customers, such as online system and internet banking, telephone and call center. The two important elements of banks which effect the overall satisfaction of customers are competitiveness and ease. So in order to increase the efficiency of the organization it is necessary to measuring the customer satisfaction (Parasuraman, Zeithmal & Berry, 1988).

#### 2.2.1 Digital Banking Channels

DeLaCastro, Krishnan, Kulkarni and Pande (2014) emphasize the fact that customers expect to experience banking without boundaries, just as they do in retail and other industries. What matters most to them is how they experience the bank's brand. There are various channels as far as digital banking is concerned. The channels to be discussed are: Internet Banking, ATMs, Tele-Banking, Digital wallets, Mobile banking and POS terminals.

### **Internet Banking**

Internet Banking lets you handle many banking transactions via your personal computer. For instance, you may use your computer to view your account balance, request transfers between accounts, and pay bills electronically. Internet banking system and method in which a personal computer is connected by a network service provider directly to a host computer system of a bank such that customer service requests can be processed automatically without need for intervention by customer service representatives. Price- In the long run a bank can save on money by not paying for tellers or for managing branches. Plus, it's cheaper to make transactions over the Internet. Customer Base- the Internet allows banks to reach a whole new market- and a well off one too, because there are no geographic boundaries with the Internet. The Internet also provides a level playing field for small banks who want to add to their customer base.

Efficiency- Banks can become more efficient than they already are by providing Internet access for their customers. The Internet provides the bank with an almost paper less system. Customer Service and Satisfaction- Banking on the Internet not only allow the customer to have a full range of services available to them but it also allows them some services not offered at any of the branches. The person does not have to go to a branch where that service may or may not be offer. A person can print of information, forms, and applications via the Internet and be able to search for information efficiently instead of waiting in line and asking a teller. With more better and faster options a bank will surely be able to create better customer relations and satisfaction. Image- A bank seems more state of the art to a customer if they offer Internet access. A person may not want to use Internet banking but having the service available gives a person the feeling that their bank is on the cutting image.

#### **ATMs**

An automated teller machine or automatic teller machine (ATM) is an electronic computerized telecommunications device that allows a financial institution's customers to directly use a secure method of communication to access their bank accounts, order or make cash withdrawals (or cash advances using a credit card) and check their account balances without the need for a human bank teller (or cashier in the UK). Many ATMs also allow people to deposit cash or cheques, transfer money between their bank accounts, top up their mobile phones' pre-paid accounts or even buy postage stamps.

#### **Tele-Banking**

Undertaking a host of banking related services including financial transactions from the convenience of customers chosen place anywhere across the GLOBE and any time of date and night has now been made possible by introducing on-line Tele-banking services. By dialing the given Tele-banking number through a landline or a mobile from anywhere, the customer can access his account and by following the user-friendly menu, entire banking can be done through Interactive Voice Response (IVR) system.

#### **Digital Wallets**

These are electronic devices that allow for making financial transactions. An individual's account can be linked to the digital wallet. Digital wallet systems enable the wide spread use of digital wallet transaction among various retail vendors in the form of mobile payment systems and digital wallet applications. MPESA mobile payment system is good example in Kenya and the MasterCard Pay pass in the US and worldwide.

#### **Mobile Banking**

Okiro and Ndungu (2013) define Mobile banking (m-banking) as, provision and availing of banking and financial services through the help of mobile telecommunication devices. The scope of offered services may include facilities to conduct bank and stock market transactions, administer accounts and to access customized information. Mobile networks in Kenya offer mmoney services in the name of M-pesa by Safaricom, Orange money by Orange, Yu-cash by Essar, and Airtel money by Airtel. Currently the mobile money market size is about 15million users transferring Kshs. 2 billion daily, of these over 14 million are Mpesa customers-money providers have partnered with commercial banks such as Equity Bank, I&M Bank, and Kenya Commercial Bank, Barclays and Co-operative to offer mobile based financial products that aim to reach the unbanked. Co-operative bank pioneered mobile banking way back in 2004 by enabling customers to access their accounts and transact using their mobile phones. It offers services such as balance enquiries, mini-statements, SMS alerts on credit and debit transactions to an account, pay utility bills and funds transfer.

#### Point of Sale (POS) Terminals

Rouse (2011) define POS terminal as a computerized replacement for a cash register but with the ability to record and track customer orders, process credit and debit cards, connect to other systems in a network and manage inventory. The POS terminal allows real time online access to funds and information by a debit or credit card holder. It has many features given that it is fast, reliable and secure. It is a cheaper means of transacting and encourages spontaneous buying or spending. Many banks in Kenya have established POS terminals in various retail outlets in order to create accessibility of the banking system to their customers. The POS terminals are also placed at various outlets to improve the accessibility and usage of debit and credit cards. POS

terminals are part of the wider enterprise resource planning modules for banks and they are mainly aimed at increase the bank cash service distribution channels among various customer shopping outlets.

### 2.3 Accessibility and Customer Satisfaction

Accessibility of digital banking has to do with the ease with which customers have access to financial tools, their accounts, ease of making payments from their accounts and access to money available in the accounts using various digital channels namely, online banking facilities, ATMs, POS terminals, mobile banking to mention but a few. Accessibility defines how these channels make a meaningful experience to the customers in terms of access to their funds, access to banking facilities and services and feedback. It determines whether customers find the products to be serving their needs when they want it, in a way that makes their banking convenient (Villers, 2012). Access to information and the ease with which consumers can share views with those they know – or even 'the world' – is dramatic. Good experiences can be easily shared online... as can negative ones. They also eliminate the need for buildings and office equipment.

In South Africa, the DRC, Zambia and Kenya for instance, mobile phone banking is taking services to remote areas where conventional banks have been physically absent. Subscribers can now open accounts, check their balances, pay their bills, transfer money, and cater for their daily basic needs. In the past 30 years, three (3) products that are seen to have had the most impact on the world are in the ICT sector: the internet, PCs and mobile phones. Of these, the mobile phone has the highest penetration in developing countries (Ondeige, 2010)

Many banks in Kenya have partnered with other technological players such as telecommunication players to enhance access to customers. There has been an increase in use of POS terminals by agency banking providers. According to the latest data from CBK, agency banking launched in 2011, is handling millions of dollars every month. Agency banking model has allowed banks to liaise with commercial outlets like cybercafé, shops, petrol stations and supermarkets to offer financial services that include depositing and withdrawing cash. This partnership has seen commercial banks in Kenya take financial services closer to the people, in particular, to areas that lack them. It is estimated that a third of the country's' 40 million people lack access to banking services. Flood (2014) a business reporter with BBC business news

quoting Equity banks CEO James Mwangi who sees mobile banking offering as key to breaking down barriers of access and distance that hamper banking in Africa. Mwangi asserts that the biggest problem with accessing a bank is not bank charges, it is the cost of access.

Stauble (2011) notes that one of the most important benefits to online banking is that consumers have a greater handle on their money since they only need a mobile connection to access their accounts. This perhaps true to mobile banking in every sense since customers can check their balances and transactions anytime, customers can get alerted about various situations, such as if their account is low. Online banking can make this easier by offering convenient access to your account information and the ability to pay bills and move your money. According to Ondiege (2010) mobile banking is staging a true "revolution" in access to finance. A mobile phone can serve as a virtual bank card; a point of sale terminal; an ATM; and or as internet banking terminal. One of the biggest attractions of internet banks is the level of online accessibility. Many traditional banks underestimated the demand for online services before, but now almost every bank has some form of online banking. Internet banks, by their nature, have above average online services. You can check your balance daily, hourly, or every minute should you choose. You can set up online bill payments, apply for loans, buy fixed-term investments and handle transfers between accounts. Simply put, you can do everything you'd normally do at a branch bank from the comfort of your own home. Beattie, A. (2015).

According to SunTrust bank (2015) in a study conducted by research firm Frost & Sullivan, nearly 40 percent of mobile users—upwards of 100 million people—are likely to use mobile banking by 2020. The appeal is clear: "With online and mobile banking, you have the convenience of being able to log in [to your accounts] anytime, anywhere," says financial writer Kimberly Palmer, author of *The Economy of You: Discover Your Inner Entrepreneur and Recession-Proof Your Life.* "You can also more easily keep track of your spending, since you can review your accounts often. Yancy (2013) notes that banking mobile apps are designed in such a way as will enable even a non-technical customer to conduct financial operations anytime and from anywhere. Thus, one does not have to pay extra for conducting banking transactions while shopping, traveling, or even while out on a holiday, the mobile applications are easy to use and access. Rayhan, Sohel, Islam, and Mahjabin (2012) point out that mobile phone makes access to banking and advanced payment transactions at affordable cost. A positive aspect of

mobile phones is that mobile networks can reach remote areas at low cost both to the consumer and the bank and this meaning customer is more satisfied.

Njiru (2014) talking about access to banks with reference CBK report says 76.7% customers in the country have access to a financial institution within five-kilometer radius, compared to Uganda and Tanzania which recorded 42.7% and 31 % respectively. There has been rapid increase in access points to technological innovations, financial system and regulatory reforms, and increased competition in the market. The use of ATMs, POS terminals, Internet and mobile phone platforms have accelerated and moved closer to branchless banking. He states that in Kenya there are 65,353 access points which include bank agents, money transfer services, saccos, forex bureaus, and insurers.

#### 2.4 Speed of Transactions and Customer Satisfaction

Banking has improved due to the adaptation of modern banking elements. Electronic banking also an important element of modern banking that was introduce in the mid of 1990. After that it was become the more important. So, modern banking is the only cause of customer motivation and satisfaction due to quick response, security, reliability and speedy transactions of modern banking services (Premalatha & Sundaram, 2012). Patri´cio, Fisk, & Cunha (2003) defines that the speed of operations, ease of use and accessibility are the strong predator of customer satisfaction while the low level of security and technical failures of the banking services also the strong dimensions of dissatisfaction (Khan, 2010). Speed of transactions has much to do with reliability (the ability of the system to deliver on its expectation in a timely and secure manner with no errors).

Recently Banks have radically converted from the traditional use of banking to branchless positions of banking. The latest adoption of using technology has helped banks to extend their customer base, while electronic banking has proved to be the main advancement. Mobile banking categorized as the latest development in electronic bank services, while the bank customers can review: Balance inquiry, credit transfer, check account, SMS, payment transaction and other businesses according to banks instruction that send to them through mobile phones (Saleem & Rashid, 2011). Mobile banking service helps customers to perform many transactions for example: check account, credit transfer, payment transaction and SMS.

There are fewer surprises, as customers can check their balances and transactions anytime. Mobile Banking is a fast, easy, and secure way to access your accounts from the palm of your hand. You can manage your accounts the same way you do with Online Banking. With the ability to check your account balances and transaction history instantly, Transfer funds between accounts instantly, Pay bills and view pending payments and make mobile check deposits, mobile banking remains one of the fastest ways to manage your accounts—anytime, anywhere.

Mobile Banking provides full access to your account information, right from the palm of your hand. Securely view your account balances and transaction history, transfer funds, pay bills, receive alerts and instant messages with account information, and so much more on your smart phone or cell phone. Mobile Banking is a fast, easy, and secure way to access your accounts from the palm of your hand. You can manage your accounts the same way you do with Online Banking. With the ability to check your account balances and transaction history instantly, Transfer funds between accounts instantly, Pay bills and view pending payments and make mobile check deposits, mobile banking remains one of the fastest ways to manage your accounts—anytime, anywhere.

At least in urban areas, ATMs are already fast becoming the most popular mode of banking, while phone banking and mobile banking are also on the upswing as the user base grows. Internet banking now seems to be the perfect model to complement the whole system. Customers have real-time access in all wherein any action in any of the above mentioned channels would be immediately reflected in the account of the account holder. With online banking actions, your banking is at the convenience of your home, office etc. Transactions such as trading on local or global capital markets, making money transfers between banks, including third parties, deposits and receiving current information on the money market etc'. This saves time and costs and the transaction normally are at the click of the button.

We live in the age of the 'entitled consumer'. These consumers expect more, trust their peers, are informed, have choices and have a voice. Consumers feel entitled to real time 24/7 banking services, access to their financial information when and where they need it, secure and convenient transactions and a seamless experience (Vuong, 2015). According Ondiege (2010) mobile banking is a powerful way to deliver savings services to the billion people worldwide who have a cell phone but no bank account offering advantages such as immediacy, security and

efficiency while breaking down geographical constraints. Khidhir (2014) highlights the fact that, "with the adoption of mobile wallet applications - which are payment services enabling consumers to use mobile phones instead of cash to pay for services and goods - is dramatically increasing. Mobile wallet is a great tool for banks to engage new customers segments, as a mobile wallet does not require users to hold an account or credit card of the providing bank. Being an early adaptor of this type of service can put banks in a market leading position." On the basis of this argument it is clear that mobile or digital wallets act as a faster way of conducting business transactions hence critical as far as customer and seamless experience goes hence satisfaction. Most banks now make scanned copies of cleared checks available online, which helps to avoid and identify check fraud. It enables verification that all checks are signed by you and that dollar amounts have not been changed. The timely discovery of discrepancies can be reported and investigated immediately.

Villers (2012) states that it is clear that for digital banking to be a rewarding experience for the customer and a profitable growth area for the banks, technology partners, payment processing service providers and mobile phone operators – there ought to be a comprehensive agreement on shared technology standards and processes. Private Banks have been slow to introduce digital technology applications for their customers arguing that the private banking industry is a personal and pre-dominantly face to face business with little need for such applications to enhance the relationship. Security and privacy issues are two of the reasons cited for not embracing these new developments. However, there are a number of arguments for private banks to seriously evaluate their digital strategy and make it one of the cornerstones of their service offering and brand building activities.

As the next generation of private banking clients starts to dominate, private banks will need to avoid the image of an old out-of-date bank that has lost touch with its clients. Private banking is about being a trusted advisor as well as being connected and recommended. Since the digital revolution, which started in the 1990's, people are increasingly turning to the Internet not only to inform themselves regarding financial products but also the reviews of other customers using the products and services. Customers are already using social media to share their views on financial products and services. While the customers trust the new methods of digital banking to be convenient, fast and reliable, the channels must be secure and real time. There has been

Scenarios where digital channels do not deliver in terms of responsiveness in Kenyan banks (those in Bungoma County inclusive) leading to dissatisfaction among customers. There has been a rise in numbers of customers reporting failed transactions, and some even ending their relationship with their banks for financial embarrassment. Instances where customers have shopped in stalls and supermarkets and opted to pay digitally either via debit cards, mobile money transfers and even online payments have been reported some times with customers really disappointed to the extent of the customers suing their banks.

### 2.5 Affordability and Customer Satisfaction

Where customers perceive that the incentive of digital banking is attractive then they would be more willing to use them. The two items found relevant are that, digital channels provides preferential rates, charge lower fees and transaction fee for the digital banking is reasonable with respect to one visiting the branch to conduct the transactional in the traditional manner. Yancy (2013) observes that a customer can also see when his or her payment will arrive online. You can pay your utilities or even a family member online. You can save time and the money that you would spend on stamps .Mobile banking reduces total cost incurred by customer - The financial firms offer mobile banking services at prices lower than what the customer would have to incur if he/she had to be involved in normal banking transactions where visiting the financial firm would be necessary."It is really the issue of affordability," Mr Mwangi says. "If we really want the masses and the low-income people to join banking, then we should make financial products very affordable, and that is the value proposition that we are making to the market (Flood, 2014).

According to Beattie (2015) internet banks offer some of the lowest fees in banking. This can be done because the online banks don't have the same level of costs as traditional banks. If you bank with a nationwide brick and mortar bank, your fees are paying for the cost of staffing across the nation, advertising and handling fees. With an internet bank, most of that overhead is non-existent or paid for with different revenues, allowing for the reduction of fees. Accounts can be automatically funded from a traditional bank account via electronic transfer. Most direct banks offer unlimited transfers at no cost, including those destined for outside financial institutions. They will also accept direct deposits and withdrawals that you authorize, such as payroll deposits and automatic bill payment (Michael, 2015).

Comninos, Esselaar, Ndiwalana and Stork (2008) highlighted the fact that in Africa, people usually only get a bank account once an employer requires it. Another main obstacle is the distance to banking facilities or ATMs. Particularly in rural areas, it is not only transaction costs and service fees, but also the cost of transport to reach banking facilities that made people not want a bank account. Conversely, in Africa banks charge high transaction fees often even for depositing money. High deposit and transaction fees ensure that banking remains the preserve of the relatively wealthy (i.e. the existing customer base) and high profit margins for banks. The digital platform addresses these concerns especially with the growing adoption of mobile banking hence an enhanced customer satisfaction. Some can even open account on mobile phones, can deposit or make withdrawals via applications like M-PESA. Equity's chief executive, James Mwangi underlined the value of Equity's new mobile banking service, saying: "The biggest problem with accessing a bank is not bank charges, it is the cost of access. I will have to go 70km to where the bank is; I will have to pay public transport; I will have to spend the whole day to get to the bank. "If we really want the masses and low-income people to join banking, then we should make financial products very affordable, and that is the value proposition that we are making to the market."

Ondiege (2010) highlights that the cost of formal banking in Africa is high; in some countries the minimum deposit can be as high as 50% of per capita GDP. In addition, internet and broadband subscription are still low, making internet banking out of reach for most of the population. In this regard, mobile banking can be used to provide financial services to the unbanked. Chang and Dutta (2012) found that online or internet banking has become quite common and banks have figured out the potential of internet banking and thereby integrating the customers' new lifestyle and web based activity preferences with their business models. Adoption of internet banking leads to cost reduction and hence likely to increase banks' profitability.

Today in the Kenyan market there are 43 licensed commercial banks of these, 31 are locally owned and 12 are foreign owned. Citibank, Habib Bank, Standard chartered and Barclays Bank are among the foreign-owned financial institutions in Kenya. The government of Kenya has a substantial stake in three of Kenya's commercial banks. The remaining local commercial banks are largely family owned (Kennedy & Jacky, 2013). All these banks are increasingly adopting

new technologies to drive the costs of banking downwards. The various brands of mobile and internet banking channels are good examples with a bank like National Bank of Kenya providing brands like Nat-Mobile (for mobile banking), Nat-Connect (for internet banking) and Cooperative bank with brands like MCo-op Cash for mobile banking, just to mention but a few.

## 2.6 Adaptability and Customer Satisfaction

Banks are more vulnerable than ever to the crosscurrents of economic, demographic, regulatory and technological change. To survive, banks need to be more agile, adaptable to change, embrace the new meaning of trust and operate as flexible, technology enabled information businesses that are using digital to reinvent their relationship (Moreno, 2014). The development of innovative technology in the banking provides superior services to the customers. ATM, online and mobile banking are the modes of modern banking and these are helpful to maintain the customer loyalty. Some studies stated that only the improvement in the banking services is the only cause of user's satisfaction (Khan, 2010). More than 40% of banking happens on mobile phones and tablets and customers increasingly want to do most tasks themselves. Hence, banks must increase self-service capabilities with virtual assistance to guide customers and these calls for adaptability to the changing needs of the customers.

Adaptability refers to the ability to adjust to different conditions. It therefore follows that banks must focus on delivering what customers want rather than pushing what is convenient for banks. Banks must make every effort to meet their customer needs, resolve their problems, value their relationship and invest in it. Digitization has the power to boost the capabilities needed at every step of this journey. It can improve marketing reach; accurately identify customer needs; improve conversion rates through tools such as virtual advisors, co-browsing, and social networking; and promote customer lock-in and loyalty through personalization and customization.

The recent financial crisis has left consumers with a bitter taste in their mouths, and the loss of trust in their banking institutions is likely to linger for some time. If banks are to restore that faith —and restart their growth engines — they will have to find strategies that promise customers a renewed sense of support, community, adaptability, and convenience. Banks have responded to this pressing need in a variety of ways, including large-scale distribution, product innovation,

and community banking. We believe, however, that only by embracing the coming digitization of the financial services sector can banks win back their customers and begin growing again. Digitization is changing everything. The Internet, high-speed broadband, and mobile connectivity let banks provide their customers with a much more engaging, highly personalized financial experience, and platforms such as social networking are adding a renewed sense of community as well. The result will be a new era in banking in which banks and their customers will work together to co-create value through innovative new products and services and more efficient operations. Recent research has shown that consumers' top priority in their online dealings with companies is to have a great customer experience. On one level, their needs are relatively simple: fast and simple navigation through company websites; the ability to chat and browse along with customer service representatives; consistent, clearly priced products; and a straightforward process for completing transactions. These needs suggest the importance of a simple, cleanly designed website that is very easy to use but also has the ability to generate marketing campaigns and product and service offerings that are personalized for each customer. The benefits in terms of greater trust on the part of customers will be significant.

In building the digitized bank of the future, it will be critical to devise a new strategy for satisfying customers — providing them with customized personal, financial, and social experiences — and to implement a different operating model that can continuously seek out new customer needs. All types of digital banking must have user friendly appearance, so this quality makes it more easy to use for customer, that's why customer has positive feeling towards them (Khare, 2011). The indicators or items included in this dimension are: I can complete online transactions easily, I can log in this portal easily, it is easy to understand which button to be clicked for the next step, and this internet portal enables me to complete a transaction quickly. Michael (2015) adds that, online accounts must be easy to set up and require no more information than a traditional bank account. Many offer the option of inputting your data online or downloading the forms and mailing them in. If you run into a problem, you have the option of calling or emailing the bank directly. One advantage of using online checks is that the payee's information is retained, which eliminates having to reenter information on subsequent checks to the same payee. Online banking is also environmentally friendly. Electronic transmissions require no paper, reduce vehicle traffic and are virtually pollution-free.

While internet banking is a relatively new service much has been written on the factor affecting the usage of this new product. According to a research conducted by Williamson and Lichtenstein (2006) to assess understanding of consumer adoption of internet banking in Australian banking context findings reveal that convenience is the most important factor that influence consumer to use internet banking. However convenience means much more for consumer than simply 24/7 hours access. Convenience was mainly described as personal safety, not having to travel, not having to wait and saved time. Relative time saving dominates banking channel convenience perception. Sustaining this finding, a recent survey found that many Australian internet users neglect risk in favor of convenience of internet banking ACNielsen (2005).

Khidhir (2014) notes that following the rapid expansion of smart phones and tablet devices, bank customers today are highly informed, relying on reviews and information published across social media channels, and do banking online 24/7. Customers can be reluctant to visit branches, and it is more likely than ever that these customers will switch their main banking relationship. To cope with this change, banks today are striving to provide a strong digital channels offering. DeLaCastro et al (2014), note that many customers choose and switch banks based on convenience and quality of service rather than on product and service features. In some countries, government regulations are encouraging additional churn. In the UK, where banking rules made it difficult for customers to switch providers, the enactment of new rules now makes it easy for customers to change banks and even take their account numbers with them. Customers are now looking for multiple delivery channels and flexible as well as convenient working hours neither the clock nor the geographical locations are constraints (Shrotriya, 2007 and Kumbhar, 2009).

Marous (2014) notes that with Mobile Payments, consumers are becoming accustomed to using mobility to place orders in advance, avoid lines, and pay — all with a few swipes on their mobile device. This capability is expected from banking relationships as well. While there are many reasons why many people in Africa could still be unbanked as noted by Comninos et, al (2008), potential and existing customers do not like bureaucracy and prefer simple procedures that are easy to follow and use. PwC's research found that customers are willing to pay for digital banking when they believe it offers convenience and value. For example, social media

notifications, an e-wallet for loyalty cards and financial tools provided by banks, are seen as added value and could be charged to customers (Villers, 2012).

Disend (2013) highlights the fact that people are going online to buy products and services, conduct pre-purchase research, interact through social media, watch videos and listen to music, and yes, do their banking. Recent and still-to-come innovations in mobile communications and commerce are further transforming how people live, work, play and shop, as anyone who's fallen under the spell of a smart phone or tablet will testify. Banks of nearly every size now offer customers online and mobile services, including balance viewing, statement downloading, funds transfers, investment transactions and bill payment. Online-only banks, while still only a small slice of the industry, have seen deposits rise 32 percent since 20101. And banking via mobile devices has experienced explosive growth, with an estimated 530 million users globally in 2013; up from 300 million in 2011. Kenya for instance, mobile phone banking is taking services to remote areas where conventional banks have been physically absent. Subscribers can now open accounts, check their balances, pay their bills, transfer money, and cater for their daily basic needs. This basically means the digital banking applications must be easy to use. (Ondiege, 2010)

The emergence of M-PESA service, a Text messaging (SMS) provided the solution to small businesses" banking needs for the majority of the Kenyan population, because the majority don't hold bank accounts but they do have the services of a mobile phone, hence they could settle bills by building up credit on the mobile phones and then sending a text (SMS) to make a payment. The leading 23 mobile service providers in Kenya have introduced some money transfer services whose objective is to enable Kenyans to make 'micro payments' using their mobile phones. These services are supposed to provide an e-commerce platform of choice in a country where credit cards have struggled to reach most the population without the bank accounts (Hughes & Lonie 2007, Chogi 2005)

Ngumi (2013); Gaitungu (2010) notes that in the world of banking, the development in information technology has enormous effect on development of more flexible payments method, more user friendly banking services resulting to a more efficient banking system hence a satisfied customer Bungoma county potential remains high as far as the rural unbanked is

concerned as well as the dissatisfied bank customers. With several commercial banks and Micro finance firms, adaptability to the needs of the potential remains critical, in order to attract the unbanked and even retain the banking population. This is where digitization comes in to fill the gaps resulting from customer dissatisfaction.

#### 2.7 Theoretical Frame Work

Two theories have been used for the study in trying to explain influence of digital banking on customer's satisfaction. These are Diffusion Innovation Theory developed by E.M Rogers in 1962 and Assimilation theory.

#### 2.7.1 Diffusion Innovation Theory

Diffusion of innovation theory attempts to explain and describe the mechanisms of how new inventions in this case internet banking, ATMs, POS terminals, mobile banking and digital wallets, is adopted and becomes successful (Clarke, 1995). Sevcik (2004) stated that not all innovations are adopted even if they are good it may take a long time for an innovation to be adopted. He further stated that resistance to change may be a hindrance to diffusion of innovation although it might not stop the innovation it will slow it down. Rogers (1995) identified five critical attributes that greatly influence the rate of adoption. These include relative advantage, compatibility, complexity, triability and observability. According to Rogers, the rate of adoption of new innovations will depend on how an organization perceives its relative advantage, compatibility, triability, observability and complexity. If a bank in Kenya and for that matter in Bungoma County observes the benefits of digital banking they will adopt these innovations given other factors such as the availability of the required resources. These banks will do their best to ensure that their presence is felt in the industry and meet the gap that technology would easily address. Adoption of such innovations will be faster in organizations that have internet access and information technology departments than in organizations without. Diffusion Innovation theory cause a pro-innovation bias in that it promotes innovations. That is to say "the rate of adoption of successful innovation can be researched."While it promotes successful diffusions which can easily be identified and investigated it does not sufficient account for unsuccessful diffusion which normally does not leave visible traces that can easily be studied.

## 2.7.2 Assimilation Theory

Assimilation theory is based on Festinger's (1962) dissonance theory. Dissonance theory asserts that customers make some kind of cognitive comparison between expectations about the product and the perceived product performance. This view of the customer post-usage evaluation was introduced into the satisfaction literature in the form of assimilation theory. According to Anderson (1973) customers seek to avoid dissonance by adjusting perceptions about a given product to bring it more in line with expectations. Customers can also reduce the tension resulting from a discrepancy between expectations and product performance either by distorting expectations so that they coincide with perceived product performance or by raising the level of satisfaction by minimizing the relative importance of the disconfirmation experienced. Payton et al (2003) argues that Assimilation theory has a number of shortcomings. First, the approach assumes that there is a relationship between expectation and satisfaction but does not specify how disconfirmation of an expectation leads to either satisfaction or dissatisfaction. Secondly, the theory also assumes that customers are motivated enough to adjust either their expectations or their perceptions about the performance of the product. A number of researchers have found that controlling for actual product performance can lead to a positive relationship between expectation and satisfaction. Therefore, it would appear that dissatisfaction could never occur unless the evaluative processes were to begin with negative customer expectations

## 2. 8 Conceptual Framework

The study was guided by the following conceptual framework whose variables are as illustrated as follows.

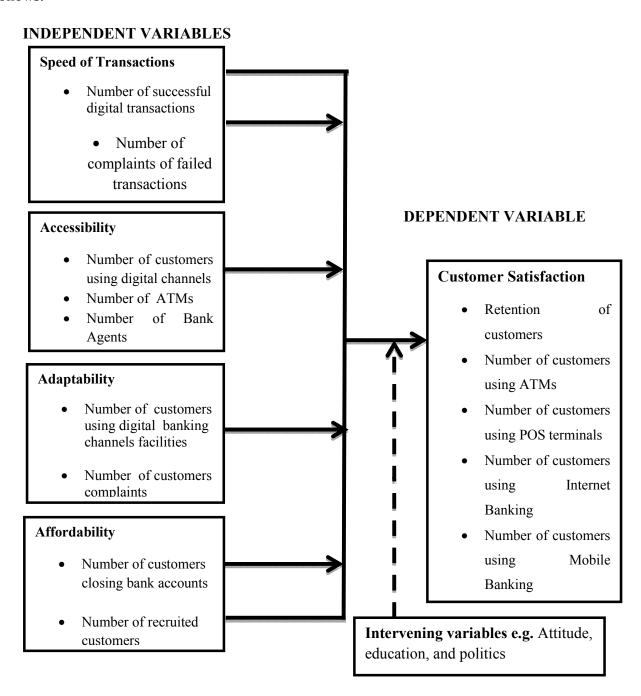


Figure 2.1 Conceptual Framework

Figure 2.1 shows the conceptual model, encompassing the major variables and their possible patterns with respect to influence on each other and how as a whole they in turn influence customer satisfaction in banks as it pertains to digital banking. The conceptual framework in figure 2.1 identifies the independent variables namely: speed of transactions, accessibility, adaptability and affordability of digital banking influence customer satisfaction. Figure 2.1 also identifies other intervening variables such as education which can impact on whether the customers embrace digital banking, culture which can impact on how a particular aspect say mobile banking is acceptable within a particular cultural setting. Government policies may also be in favor or against adoption of some aspects of technology being implemented. If legislation is unfavorable people may be skeptical about embracing the technology in question thereby impacting on customer satisfaction. In some cases attitude plays a major role when one makes a decision. If the attitude is unfavorable then it may work against the expected experience or satisfaction that could have been derived from the use of a particular digital banking channel.

#### 2.9 Summary of Literature Review

This chapter focused on definitions of digital banking and customer satisfaction, how various variables influence customer satisfaction as pertains to digital banking, theoretical framework focusing on customer satisfactions and theory of relativity. It clearly brings out the relationship between digital banking and the role it plays to bring about and enhanced customer satisfaction. It explains the customers' expectations in terms of how technology should be used to improve on delivery of service the banking sector, to ensure banking is adaptable, accessible, fast and affordable. It also pointed out that banks have a challenge given that non-bank entities having embraced digital channels and are competing for the same customers. The chapter also highlights that customers' expectations are dynamic and it is important for banks to keep improving as far as technological advancements are concerned in an effort to always create a great experience. The study also looks at the conceptual framework indicating how various variables both measurable and non-measurable relate to customer satisfaction.

#### **CHAPTER THREE**

#### RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter covers research methodology discussing the following themes; research design, target population, sample size and sample procedure, research instruments, piloting of study instruments, validity and reliability of the study instruments, data collection and techniques, and ethical consideration to be considered during the study.

#### 3.2 Research Design

The study used descriptive survey design Kinnear and Gray (1992) describes the survey design as a method that involves collecting information from members of a target population by considering the current status of that population with respect to one or more variables. The researcher used a descriptive survey design because it is concerned with describing the characteristics of a particular group and can't manipulate the independent variables with the view to determine their effect on dependent variables thus their relationship is determined retrospectively. It involved collection of information by interviewing bank staff and administering survey questionnaires to customers considering respondents' current status without any manipulation.

## 3.3 Target Population

The target population of this study was 12,040. This consisted 12023 customers and 17 bank staff. Cooper and Emory (1995) assert that a target population is the total collection of all elements about which the researcher wishes to make some inferences. The researcher settled on National Bank because the information regarding the target population could easily be accessed as banks do not want this kind of information in public domain.

#### 3.4 Sample Size and Sampling Procedures

According to Mugenda and Mugenda (1999) a sample is a group of persons or items selected from the population that will be subjected to the study and is usually a representative of the entire population.

## 3.4.1 Sample size

The sample size for the study was 400 customers and 17 banks staff. Using Yamane's formula, a sample size of 400 was selected from the population. This sample size is supported by Amin (2005) who states that population size beyond a certain point about N=5,000, the population is almost irrelevant and the sample size of 400 is adequate. Hence based on Yamane and Amin's recommendation, a sample of 400 customers was selected. Census method was also applied because of the small population of the bank staff. This is supported by Mugenda and Mugenda (2003) who asserts that primary data collected from such a census is more reliable and up to date.

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

Where N=Population

e =expected error and" n" =Sample size

Sample size "n" = 
$$\frac{12040}{1+12040(0.05)^2}$$
 = 387.14  $\simeq$  400

Sample size to be used in the study by the researcher will therefore be 400 customers and 17 bank staff.

## 3.4.2 Sampling Procedure

The researcher employed Yamane formulae and Amin (2005) recommendation who states that population size beyond a certain point about N=5,000, the population is almost irrelevant and the sample size of 400 is adequate. A sample of 400 customers was selected using convenience sampling technique to reach the 400 customers who were representative of the entire population. Convenience sampling was used by the researcher because; customers come in to the bank or ATM lobby in any order and it was to the interest of the researcher to ensure he got as many a

customer as possible. Census method was also applied on the 17 bank staff. The researcher used census method because the bank staff personnel were few and researcher wanted to get all of them if possible. According to Mugenda and Mugenda (2003) sampling is a procedure, process or technique of choosing a sub-group from a population to participate in the study. It is the process of selecting a number of individuals for a study in such a way that the individuals selected represent the large group from which they were selected. A sample is a smaller group or sub-group obtained from the accessible population.

#### 3.5 Research Instruments

A triangulation of research instruments was used in collection of data. These include questionnaire, interview schedule and use of bank document. According to Mugenda and Mugenda (2003) questionnaires give a detailed answer to complex problems. Additionally, questionnaires are also a popular method for data collection in deduction because of the relative ease and cost-effectiveness with which they are constructed and administered. Questionnaires give a relatively objective data and therefore, are most effective. In this study, Questionnaire was used as the main instrument of data collection from the Customers.

The researcher also used an Interview schedule. Kombo and Tromp (2006) asserts that Interview schedules generally yields highest cooperation and lowest refusal rates, offers high response quality and takes advantage of interviewer presence and it is multi-method data collection (it combines questioning, cross-examination, probing techniques). In this study interview guides were used to solicit information from the bank staff with the aim of make the respondents open up and provide more information through in-depth probing in regard to the research questions.

Last but not least the researcher also used documents to gather secondary data. According to Sixsmith and Murray (2001) Documentary Analysis is the detailed examination of documents produced across a wide range of social practices, taking a variety of forms from the written word to the visual image. Documentary analysis was used to gather relevant data pertaining to the use of digital banking channels. These included records or registers for various digital banking channels.

## 3.5.1 Piloting of the Study Instruments

According to Mugenda & Mugenda (2003), a sample size of between 10 and 30 % is a good representation of the target population and hence the 10% is adequate for a pilot study; therefore 10% of the 400 customers and 10% of the 17 bank staff. This implied that 40 customers and 2 bank staff were involved in the pilot study in order to standardize the data collection instruments. Questionnaires were administered to the 40 Customers and 2 bank staff interviewed. The respondents involved in the piloting exercise were not involved in the final study.

## 3.5.2 Validity of the Instruments

According to Best and Kahn (2003) an instrument is valid when it measures what it claims to measure. That is, validity refers to the extent to which an instrument measures what it purports to measure. From the data collected from piloting of the study instruments the researcher was able to evaluate and rate on the validity of instruments with the help of supervisors and experts. The feedback from the supervisors and the experts helped in modifying the instruments.

## 3.5.3 Reliability of the Instruments

According to Donald (2006); Mugenda and Mugenda (2003) research instruments are expected to yield the same results with repeated trials under similar conditions. Test retest technique was used by employing Pearson's product moment formula for the test- retest to compute reliability coefficient. A coefficient of 0.80 is taken to be reliable (Mugenda & mugenda, 2003). Table 3.1 show the results obtained after computing the test retests reliability statistics.

**Table 3.1 Test Retest Reliability** 

		Test 1	Test 2
Test 1	Pearson	1	.831**
	Correlation	1	.031
	Sig. (2-tailed)		.000
	N	350	350
	Pearson	.831**	1
Tag4 2	Correlation	.831	1
Test 2	Sig. (2-tailed)	.000	
	N	350	350
** Correlation	is significant at the 0.01 level (	(2-tailed)	

#### 3.6 Data Collection Procedures

Viswanathan (2005) says that data collection procedure is the plan for the activities that are involved in a given study. For this study, after approval of the proposal the researcher sought authority from the University and Bank management to conduct the study. The researcher then used survey questionnaire, interview schedule and documents as data collection instruments to collect relevant data. A cover letter accompanied the survey questionnaire before it was administered as well as the interview to be conducted upon approval by management of the bank. This was to help the respondents familiarize with the exercise. Questionnaires were administered with the help of research assistants. The survey questionnaire was divided in three sections. Section A gathered demographic data regarding respondents such as gender, age, and academic qualification. Section B, C, D, E and F subsequently gathered information basing on the five variables of the study. The interview was facilitated by the researcher personally to ensure clarity of the questions to be answered by the respondents and where necessary sought in depth information as it pertains to the questions to be asked.

Documentary Analysis was conducted by the researcher upon approval by Bank management with the guidance of heads of the relevant departments.

## 3.7 Data Analysis Techniques

Cross checking of the survey questionnaires and responses from the interview to ensure that the questions were answered well was conducted. Quantitative data collected was coded and fed into a computer statistical software SPSS (Statistical Package for Social sciences) to run the analyses. Descriptive data analysis entailed counts, percentages, cross tabulations and measures of central tendencies. Correlation analysis was used to check on the relationship between dependent and independent variables. Qualitative data from the interview schedule entailed use of thematic analysis techniques. The results were interpreted and data presented in a tables for uniformity and ease of interpretation. Conclusions and recommendations were made basing on the interpreted data.

#### 3.8 Ethical Consideration

By Ethical consideration the researcher refers to moral standing that should be held and practiced during the research process. When conducting the research, the researcher was fully aware that the banking environment is very competitive and therefore some respondents withheld some crucial information. The respondents were assured that strict confidentiality would be maintained in dealing with their identities by not writing their names. The researcher sought permission to carry out research from the National Council of Science and Technology (NACOSTI), an introductory letter from University of Nairobi was obtained and presented to the Management of National Bank before collection of data. The researcher also obtained consent from the prospective respondents and further sought their co-operation. Confidentiality was observed and further the researcher respected the culture and practices of the various respondents and only engaged on the activities that are relevant to the study.

## 3.9 Operational Definition of Variables

Table 3.2 shows the relationship between the objectives and the variables in the study, for each objective there's an independent variable and a dependent variable. The indicators to be used for each objective are illustrated and the type of scale of measurement to be used for each case.

**Table 3.2 Operational Definition of Variables** 

Variable	Type of Variables	Indicators	Measurement Scale	Data Collection Tool	Statistical Analysis
Customers Satisfaction	Dependent	Number of customers frequenting the bank.	Scale	Questionnaire	Pearson Correlation
Speed of Transactions	Independent	Number of successful digital transactions.	Ordinal Scale Nominal	Questionnaire Interview Schedule Document schedule	Descriptive Pearson Correlation.
		Number of complaints recorded	rvoniniai	Bocument senedule	Thematic Analysis
Accessibility to Digital Banking	Independent	Number of customers using digital channels	Ordinal	Questionnaire Interview Schedule	Descriptive
		Number of ATM points	Nominal	Document schedule	Pearson Correlation.
		Number of Agents			Thematic Analysis
Adaptability of Digital Banking	Independent	Number of customers using digital banking channels	Ordinal	Questionnaire Interview Schedule	Descriptive
		facilities	Nominal	Document schedule	Pearson Correlation.
		Number of customer complaints			
					Thematic Analysis
Affordability of Digital banking	Independent	Number of customers closing bank accounts	Ordinal Nominal	Questionnaire Interview Schedule	Descriptive Pearson
· ·		Number of recruited customers	Scale	Document schedule	Correlation.
					Thematic Analysis

#### **CHAPTER FOUR**

#### DATA ANALYSIS, PRESENTATION AND INTERPRETATION

#### 4.1 1ntroduction

The results of the data analysis on influence of digital banking on customer satisfaction in commercial banks in Bungoma are presented in this chapter. Qualitative and quantitative analysis was performed. The results utilized descriptive and Pearson correlation statistics. Where descriptive analysis entailed using measures of central tendencies, frequencies and counts while correlation statistics employed checking on the level of association between the variables. Qualitative data has been summarized in themes. In addition a document analysis has been conducted where accounts closure file register, card records and registration of agent banks have been keenly scrutinized. The findings have been presented in tables followed by interpretation and discussion of the same. The findings answered the following research questions

- 1. How does speed of transactions of digital banking influence Customer Satisfaction: case of National Bank of Kenya Bungoma County?
- 2. How does accessibility of digital banking influence Customer Satisfaction: case of National Bank of Kenya Bungoma County?
- 3. How does adaptability of digital banking influence Customer Satisfaction: case of National Bank of Kenya Bungoma County?
- 4. To what extend does affordability of digital banking influence Customer Satisfaction: case of National Bank of Kenya Bungoma County?

## 4.2 Response Return Rate

The sample size for the study was 400, out of this 40 questionnaires were piloted and those involved in the pilot study did not form part of the final study. This reduced the number of questionnaires issued to 360 thus out of the 360 questionnaires issued, 350 were filled and returned back bringing the response rate to 97% which was considered as adequate enough. The findings are presented in Table 4.1.

**Table 4.1 Questionnaire Return Rate** 

Number of questionnaires Distributed	Number of questionnaires returned	Return Rate
360	350	97%

#### 4.3 Back Ground Information

The background information of was useful in contextualization of the study thus a better understanding and clarity was made from the information obtained. Table 4.2 shows the ages and the number of banking years that the customers had.

Table 4.2 Age and Banking Years of Respondents

Age and Banking Years		Minimum	Maximum	Mean	Std.
					Deviation
Age of Respondents	350	18	70	34.72	11.431
Banking Years	350	1	20	6.06	4.656
Valid N (listwise)	350				

As presented in Table 4.2, the mean and standard deviations of the age and banking years were sought. The data was measured in a scale thus with a minimum age of 18 and a maximum of 70, the mean age of the respondents was 34. The standard deviation was 11.431 which implied the responses were sparsely distributed. On the number of banking years, the study established that there was a minimum of one year and a maximum of 20 years. The standard deviation was 4.656 which implied the differences in years were not as dispersed as compared to the standard deviation of the ages. The mean number of baking years was 6 which implied majority of the respondents had a banking experience of 6 years. Further this could be deduced that with an increase in number of banking years, customers would be able to determine the levels of services that make them satisfied.

On gender, highest level of academic qualification and Information technology skills, Table 4.3 presents the findings of the study.

Table 4.3 Gender, Level of Education and Possession of Information Technology Skills

Gender	Frequency	Percentage
Male	213	60.9
Female	137	39.1
Total	350	100
Level of Education		
secondary and below	35	10.0
Certificate	101	28.9
Diploma	122	34.9
Undergraduate	54	15.4
Post graduate	38	10.9
Total	350	100.0

The findings as presented in Table 4.3 indicate there were more male (60.9%) than female (39.1%). This implied that more male use banking facilities than female.

On levels of education, majority of the respondents as presented by 34.9% were diploma holders, 28.9% were certificate holders while 15.4% had university degrees. Only 10% had a secondary education and below. Being educated imply that one is able to carry transaction in banks, use banking facilities and further is able to utilize the digital forms of banking channels provided by the banks.

There was need to check the relationship between knowledge of information technology skills and economic activity. A cross tabulation was then undertaken and the results were presented in Table 4.4

**Table 4.4 Cross Tabulation between Knowledge of Information Technology Skills and Economic Activity** 

		Do you have Information Technology Skills		Total
		Yes	No	
	<b>Employed Permanent</b>	24.3%		24.3%
	Self Employed	34.6%	12.3%	46.9%
Economic	Contractual	3.3%	3.3 %	6.6%
Activity	Student	4.9%	2.5%	7.4%
	Not working		4.0%	4.0%
	Hustling	4.6%	6.3%	10.9%
Total		63.4%	36.6%	100.0%

The results indicate that 63.4% had Information Technology (IT) skills while 36.6% did not have. 24.3% were employed and had computer skills, of the 46.9% who were self employed 34.6% had computer skills while 12.3% did not have any computer skills. All those who were not working did not have computer skills. 10.9% indicated they were hustling implying they were surviving, neither employed nor having any tangible economic activity. Only 4.6% had computer skills from this category while 6.3% did not have. The findings of the study indicate that majority had IT skills, economic activities determined whether the respondents had IT skills or not.

The study sought to establish whether the respondents understood what digital banking was. Table 4.5 indicates that majority of the respondents as presented by 41.4% thought digital banking entailed use of mobile money while 33.4% were of the view it entail use of technology to bank. Only 11.1% were of the view that digital banking entailed payment of utilities. From these findings, it could be deduced that there was an understanding of digital banking hence the respondents were suited in providing the needed information on the influence of digital banking on customer satisfaction in commercial banks in Bungoma County.

**Table 4.5 Understanding of Digital Banking** 

<b>Understanding of Digital Banking</b>	Frequency	Percent
Use of mobile money	145	41.4
Use of technology to bank	117	33.4
Payment for utilities	39	11.1
Cashless payment systems	49	14.0
Total	350	100.0

## 4.4 Speed of Transactions and Customer Satisfaction

The study sought to determine how the speed of transactions of digital banking, influence Customer Satisfaction in Bungoma County. To this effect a cross tabulation was undertaken between the types of digital banking technology used and the reasons as to why they use the digital banks. Table 4.6 presents the findings.

Table 4.6 Cross Tabulation between Type of digital Banking Technology and Reasons for Use

		Why do you	Why do you use digital banking?		
		Accessibility	Affordability	Speed	
	ATM cards	4.9%	11.1%	9.1%	25.1%
Which of the following do you mostly use?	Pay bill numbers	3.1%		1.1%	4.3%
	Mobile Money	21.1%	10.6%	33.1%	64.9%
	Online payment options e.g visa cards, pay pall			5.7%	5.7%
Total		29.1%	21.7%	49.1%	100.0%

The findings as presented in Table 4.6 indicate that mobile money was the most commonly used as presented by 64.9%, this was followed by ATM cards which had 25.1%. Majority of the respondents used digital banking because they are deemed to be fast as indicated by 49.1%. Others were of the opinion that they were accessible (29.1%) while those who were of the view that digital banking was affordable had 21.7%. On the use of mobile money it could be deduced that majority mostly used channel as it is reliable and easily accessible.

There a need to establish to what extent the customers was satisfied with the speed offered by the digital banks. The results are presented in Table 4.7 as follows.

Table 4.7 Extent of Satisfaction with Speed of Digital Banking

Extent of Satisfaction with Speed of Digital Banking	Frequency	Percent
Small extent	28	8.0
Moderate extent	62	17.7
Large extent	260	74.3
Total	350	100.0

It is indicated in Table 4.7 that to a large extent (74.3%) the customers were satisfied with the speed of digital banking. Only 8.0% were of the view that the speed was not sufficient. This finding implies that the speed of digital banking is satisfactory.

Of the 8.0% who were of the view that the speed for digital banking technology was to a small extent satisfactory were required to give areas the need to be addressed. Table 4.8 revels that the point of sale terminals were considered not to be speedy thus was the major area that needed to be addressed. 2.0% thought that use of ATM was slow thus needs to be addressed.

Table 4.8 Areas to be addressed

Areas to be Addressed	Frequency	Percent	
N/A	323	92.3	
E-Banking	5	1.4	
ATM	7	2.0	
Point of Sale Terminals	15	4.3	
Total	350	100.0	

To understand the view of customers on speed, there was a need to establish their histories with use of technology. Table 4.9 indicates the responses on use of internet to carry transactions and presence of internet enabled phones by bank customers.

Table 4.9 Use of Internet to Carry Transactions and Possession of Internet Enabled Phones

Use Internet to Carry Out a Transaction	Frequency	Percent	
Yes	112	32.0	
No	238	68.0	
Total	350	100.0	
Internet Enabled Phones			
Yes	267	76.3	
No	83	23.7	
Total	350	100	

It was revealed as presented in Table 4.9 majorities of customers did not use internet to carry out transactions as presented by 68%. Only 32% used internet. 76.3% had internet enabled phones while 23.7% did not have such phones.

A cross Tabulation as presented in Table 4.10 was undertaken to establish whether the customers had digital technology applications on their mobile phones, and the reasons as to not having the application.

Table 4.10 Cross Tabulation between Digital Application and Reasons for Not Having the Application

			no, what are the reasons that restrain you from using the digital Technology application?							
		N/A	Security fears	Privacy issues	Expense involved	I don't know how to use the application				
Do you have a digital technology	Yes							26.0%		
application?	No	19.7%	41.1%	20.3%	2.9%	8.3%	7.7%	74.0%		
Total		19.7%	41.1%	20.3%	2.9%	8.3%	7.7%	100.0%		

The study established that 74% did not have a digital technology application on their phone while only 26% had. Of the 74% who indicated they did not have a digital technology application on their phones were required to give reasons in regard to this. 41.1% which were the majority cited security fears implying they felt having such an application does not provide them with the needed security. 20.3% were of the view that privacy issues kept them from not having the digital technology application.7% did not see any need of having the application implying they could bank and perform other transactions without the need of the application. Only a small percentage of 2.9 cited that the application was expensive.

The study then sought to rate how the speed of transactions using a digital banking was. Table 4.11 indicate that 1 being the lowest rate given while 10 was the highest, the customers felt that the speed of processing transactions was fast as indicated with a mean of 7.52. The standard deviation was 1.956 which further implied the responses were one point dispersed indicating varied opinions. This was deduced that customers were confident of the speed of processing transactions through use of digital banking channels. With speed in processing of transaction the challenges of traditional banking can be overcome as customers are able to transact while save time thus the standards of service delivery have been greatly improved financial institutions (Kennedy & Jacky, 2013).

**Table 4.11 Speed of Processing of a Transaction** 

Speed of Processing of a	N	Minimum	Maximum	Mean	Std. Deviation
Transaction					
	350	1	. 10	7.52	1.956
Valid N (listwise)	350				

The qualitative data as presented by the interview schedule revealed that digital banking was fast, this was indicated by the reduced queues that had been experienced with traditional banking systems. There is immediate confirmation of receipt of payment which also proved that digital banking was very fast. It was further established that incase a process is slow, the customers are usually assisted manually and the processes are handled immediately they occur. Feedback is usually given to bank technical team in case of slow processes. However it is important to note that there were few reported cases on processes that were slow giving am implication that digital banking processes are fast in processing of transactions

# 4.5 Accessibility and Customer Satisfaction

The second objective of the study sought to establish how accessibility to digital banking influences customer satisfaction in Bungoma County. Statements were given to determine how customers understand accessibility. The findings are presented in table 4. 12.

**Table 4.12 Statements on Accessibility** 

Understanding Accessibility	Frequency	Percent
Extent to which a consumer or user can obtain a good or service at the time it is needed	158	45.1
Ease with which a facility or location can be reached from other locations	135	38.6
Ease of contact with a person or organization	37	10.6
Authorization, opportunity, or right to access records or retrieve information	20	5.7
Total	350	100.0

The findings as presented by Table 4.12 indicated that majority of the respondents as represented by 45.1% were of the view that accessibility is the extent to which a consumer or user can obtain a good or service at the time it is needed. This finding alluded to accessibility as having an element of time thus if customers are able to transact successful at the needed time then they view that as having access to digital banking. 38.6% were of the view that accessibility can be looked at as the ease with which a facility or location can be reached from other locations. A small percentage of 5.7% were of the opinion that accessibility entails authorization, opportunity, or right to access records or retrieve information.

On access of baking services, a cross tabulation was undertaken to check the extent to which the customers felt they could easily access banking services and the most accessible digital banking technology. The presentation of the finding is in Table 4.13.

**Table 4.13 Access of Banking Services** 

	To what extent do you feel you can easily access banking services whenever there is a need?				
		Small extent	Moderate extent	Large extent	
Which of the following is the most accessible?	Mobile banking		59.4%		59.4%
	E-Banking			3.7%	3.7%
is the most accessible?	POS terminals	12.3%	2.3%		14.6%
	ATM	10.3%		12.0%	22.3%
Total		22.6%	61.7%	15.7%	100.0%

The study revealed that mobile banking was the most accessible form of digital banking as indicated by 59.4%. This was followed by 22.3% who were of the view that ATMs were the most accessible. A small percentage of 3.7% indicated that e banking was accessible. It was further revealed that on a moderate extent (61.7%) the customers felt they could access banking services. 22.6% were of the opinion that to a small extent they could easily access banking services while only 15.7% felt to a larger extent they could access the banking services.

There was need to establish the accessibility of banks. Table 4.14 indicates that 54.9 considered their bank being accessible through the ease with which they could transact, pay bills and access their bank accounts. 26.3% were of the view that banking anytime anywhere, checking balances and having access to statement translated to accessibility. From this finding, it could be deduced that having the ability to bank anytime and anywhere and further check balances and access statements could be interpreted as accessibility.

**Table 4.14 Accessibility of Banks** 

	Frequency	Percent
I can bank anytime anywhere, check my balance and access statements	92	26.3
I can easily transact, pay bills and access my account	192	54.9
I can easily interact with my bank; express my opinions and grievances without visiting the branch	36	10.3
I hardly visit my branch for services, thanks to E- banking, Mobile banking and POS terminals	30	8.6
Total	350	100.0

Lastly on this objective, there was need to establish the challenges faced by bank customers while trying to access digital banking. Multiple responses were given hence a multiple response analysis was conducted to this effect.

Table 4.15 indicates that majority of the respondents were faced with challenges as a result of use of technology, this is represented by 50.8%. The second challenge was concerned with safety and security issues (33.4%). Only a small percentage indicated that they faced challenges related to expenses incurred in digital banking. From these findings it was deduced that challenges caused by use of technology were the major barriers towards accessibility.

Table 4.15 Challenges Faced while Accessing Digital Banks

		Resp	onses		Percent of Cases
		F	Percent	Number of Cases	
	Distance between digital outlet	50	14.4%	85	27.5%
	Challenges in use of technology	178	50.8%	301	97.4%
	Expenses incurred in digital banking	5	1.4%	8	2.6%
	Safety and security issues	117	33.4%	198	64.1%
Total		350	100.0%	592	191.6%

On the qualitative findings, the banking staff felt that digital banking was more accessible and this could be proved by the increase in ATM card requests by customers, there was an increase in number of mobile banking and additionally the number of bank customers using internet banking had also increased. It was however revealed that the bank had not increased on its ATM machines to capitalize on the increased number of customers instead agent banks had been introduced and increased to enable accessibility to the growing number of customers. To ensure bank customers are able to access the various agent banks, the banks ensure that customers are furnished with information on the various points at which they can access the different agent banks. It was revealed however that there were no specialized services to persons with disability in regard to digital banking.

## 4.6 Adaptability of Digital Banking Channels

The third objective of the study sought to determine how adaptability of digital banking influences customer satisfaction in Bungoma County. There was need to rate on how easy it was to adapt to certain digital banking technology. Table 4.16 presents the findings of the study.

Table 4.16 Ease of Adapting to Various Digital Banking

-	N	Minimum	Maximum	Mean	Std. Deviation
Mobile banking	350	1	10	7.24	2.702
E-Banking	350	1	10	4.09	2.716
POS terminals	350	1	10	5.65	3.210
ATM	350	1	10	4.58	3.179
Pay bill numbers	350	1	10	5.93	2.724
Mobile Money	350	1	10	7.69	3.304
Funds Transfers	350	1	10	3.81	3.338
Valid N (listwise)	350				

It is indicated in Table 4.16 that mobile money was the easiest digital channel to adapt. With the smallest rating scale weighing 1 and the highest 10, the findings presented a mean of 7.69 and a standard deviation of 3.304 which implied that the mean was 3 point widely dispersed. This was followed by mobile banking which had a mean of 7.24. It could thus be deduced that any channel that uses the mobile phone is easily adapted as there is personalization and a feeling of mobiles being close hence customers find it easy, accessible and convenient to adapt to the given technology. Further it gives the notion of closeness in proximity of the money and the customer thus this enhances customers satisfaction. Pay bill numbers were also easy to adapt as indicated with a mean of 5.93. Adaptability of ATM ranged on a moderate mean as indicated by a mean of 4.58. This could be attributed to their location. Funds transfer was the least form of digital banking that was adapted as indicated by a mean of 3.81. This could be attributed to the perception of risk.

There was a need to understand how the customers do their transactions. To this effect the study sought to understand the number of times the customers transact and the years that the customers had used digital banking. Table 4.17 indicate that with a minimum of one transaction

daily and a maximum of 20, it was revealed that at least 5 transactions are usually carried out as indicated by a mean of 5.44. The standard deviation was 4.038 which implied the transactions were 4 point dispersed. From these findings, it was then deduced that the customers daily transactions indicated they had easily adapted thus they were able to carry at least five transactions in a day.

Further, the study revealed as presented in Table 4.17 that majority of the customers had been using banks for six years. The minimum number of years of use of banks was 1 while 11 was the maximum. This further indicated that the customers had adapted to use of banking services which digital banking is one of them.

Table 4.17 Number of Transactions and Years of Banking

		Maximum	Mean	Std. Deviation
350	1	20	5.44	4.038
350	1	11	6.19	3.187
250				
		350 1	350 1 11	350 1 11 6.19

The study sought to understand whether the customers had problems in adapting the digital banking platforms offered. The results are tabulated in 4.18 as follows.

Table 4.18 Ease of Adapting to Digital Technology

Ease of Adapting to Digital Technology	Frequency	Percent
Yes	133	38.0
No	217	62.0
Total	350	100.0

From the finding as presented in Table 4.18, 62% indicated they did not find it hard to adapt to digital technology while only 38% revealed adapting to technology was hard. This implies that majority easily adapted to technology.

There was need to understand how many online banking channels the customers operated and how reliable they thought the banking channels were. This is presented in Table 4.19

Table 4.19 Number of Banking Channels and Reliability of the Channels

Number of Banking Channels	Frequency	Percent
1-2	29	8.3
3-4	213	60.9
5-6	92	26.3
7 and above	16	4.6
Total	350	100.0
Reliability of Digital Banking		
Not reliable	11	3.1
Slightly reliable	45	12.9
Very reliable	294	84.0
Total	350	100.0

Majority (60.9%) of customers had between 3-4 banking channels, those with between 5-6 banking channels were 26.3%. Only 8.3% had between 1-2 banks with 4.6% having 7 banking channels and above. From these findings, it could be deduced that customers had more banking channels hence this is a pointer to adaptability. Customers will only embrace digital channels if they are able to adapt. Having several digital banking channels indicate bank customers have adapted digital technology.

Further, there was need to establish how reliable the digital channels were. Table 4.19 indicates that a majority of 84% though digital banking channels were very reliable. 12.9% were of the view that the channels were slightly reliable while 3.1% indicated the channels were not reliable. The general deductions made implied that the digital banking channels are reliable thus the bank

customers can easily adapt to their use. With increased adaptability then customer satisfaction increases.

There was further a need to understand weather the customers had used a digital banking channel that they failed to adapt. Presentations have been made in Table 4.20.

Table 4.20 Channels that Failed to be Adapted

Channels that Failed to be Adapted	Frequency	Percent
Yes	304	86.9
No	46	13.1
Total	350	100.0

It was revealed that 86.9% had used digital banking channels that they failed to adapt while only 13.1% had a contrary view. This implied that majority had failed to adapt to digital banking channels at one point of use.

The 86.9% who had indicated failure to adapt were required to explain the reasons for failure of adaption. The responses were multiple choices hence a multiple response analysis was utilized. Table 4.21 gives a presentation of the findings.

**Table 4.21 Reasons for Failure to Adapt** 

		R	Responses		Percent of
		F	Percent	Number of Cases	Cases
	Long Queue	41	11.8%	142	42.4%
	Machine breakdown	59	16.8%	202	60.3%
	Service not available	54	15.5%	186	55.5%
	Complicated system	63	18.0%	217	64.8%
	Double transaction charges	35	10.1%	121	36.1%
	Wrong transaction done	97	27.8%	335	100.0%
Total		350	100.0%	1203	359.1%

Majority cited as presented by 27.8% that they had failed to adapt due to the wrong transaction they had carried. This might have been in terms of money sent to wrong recipients thus this

culminates into fear of using the same digital channel thus this leads them not to adapt. 18% cited complicated systems while 16.8% failed to adapt due to machine breakdown. The least reason for not being able to transact was cited as double transaction.

There was further a need to establish what makes it easy for bank customers to adapt to digital technology. The findings have been presented in Table 4.22

Table 4.22 Ease of Adaptability by Bank Customers

Ease of Adaptability by Bank customers	Frequency	Percent
Easy online banking	32	9.1
Ability to use a debit card and not carry cash	53	15.1
Convenient branch locations	175	50.0
Convenient ATMS	84	24.0
Reduced fees	6	1.7
Total	350	100.0

From Table 4.22, it is clear that most respondents (50%) thought having convenient branch locations would make it easy for them to adapt. 24% thought having convenient ATMs would make them easily adapt . 1.7% were of the view that reduced fees would enable them easily adapt. From these findings, it is clear that customers will adapt to a digital banking technology that is located in a convenient place and which is easy o use. Cost of transaction mostly does not influence on adaptability.

Results from the interview with bank staff revealed that the digital channels used were adaptable. There has been an increase in use of digital banking apart from normal banking transaction of depositing and withdrawal which is an indicator that bank customers are easily adapting to digital banking. Customers have further requested for personalized digital banking services which further was a pointer on their adaptability. There were also few complaints by customers on use of digital banking thus this indicated they were able to carry out transactions and had adapted to the new forms of banking technology. To enable customers adapt easily to the various forms of digital channels, it was established that banks used various ways to pass information on digital banking which include; sending text messages on new digital products and their use, advertising using both print and electronic media, use of road shows and promotions to increase awareness on digital banking thus promote its adaptability. There is also wide use of social

media such as face book and twitter to help customers adapt and also handle various queries in regard to digital banking. It was revealed by the banking staff that there are very few complaints in regard to digital banking hence this was taken as a pointer of customers adaptability.

## 4.7 Affordability and Customer Satisfaction

Lastly the study sought to establish how affordability of digital banking influences customer satisfaction in Bungoma County. To this effect the bank customers were required to rate the level of affordability of any digital channel they use. The findings are presented in Table 4.23 as follows.

Table 4.23 Affordability of Digital Channel Used

	N	Minimum	Maximum	Mean	Std.
					Deviation
level of affordability of the digital channel Used	350	1	10	6.52	3.336
	350				

The study established that the level of affordability of the digital channels used had a mean of 6.52 which was considered high and a standard deviation of 3.336 which implied that the responses were three point dispersed away. It was deduced that the digital channels were affordable as presented by the given mean.

There was a need to determine whether the bank customers had failed to transact as a result of high transaction fees. A cross tabulation was undertaken to check on failure to transact as a result of high transaction fees and the most affordable form of digital banking. The findings are presented in Table 4.24. It was revealed that 66.9% being the majority were of the view that they had never failed to transact due to transaction fees while 33.1% affirmed to have failed to complete transaction due to the fees involved.

On the most affordable means of payment, it was established that pay bill numbers were the most affordable as presented by 45.1%. This is because with pay bill number the customers do not pay for transaction fees unlike other forms of digital banking. ATM Followed as the second most affordable digital banking technique as indicated with 21.7%. The least affordable digital

banking platform was mobile money transfer which had 4%. Mobile banking (10%), E banking (7.4%) POS terminal(6.3%) and mobile money (5.4%) respectively were indicated to be channels that customers had failed to transact as a result of the high transaction fees required.

Table 4.24 Cross Tabulation between Failure to transact and the most Affordable Digital Banking Channel

		Have you ever failed to to result of high transaction	Total	
		Yes	No	
What is the most affordable form of digital banking?	Mobile banking	10.0%		10.0%
	E-Banking	7.4%		7.4%
	POS terminals	6.3%		6.3%
	ATM	3.1%	18.6%	21.7%
	Pay bill numbers		45.1%	45.1%
	Mobile Money	5.4%		5.4%
	Funds Transfers	0.9%	3.1%	4.0%
Total		33.1%	66.9%	100.0%

There was a need to establish the extent of importance of affordability in use of daily digital technology. Table 4.25 presents the findings of the study.

Table 4.25 Extent of Importance of Affordability

Extent of Importance of Affordability	Frequency	Percent
Small extent	93	26.6
Moderate Extent	79	22.6
Large extent	178	50.9
Total	350	100.0

It was established that to a large extent (50.9%) the bank customers were of the view that affordability was important. 26.6% indicated that to a small extent affordability was important which implied performance of transactions need not depend on affordability. The transaction costs should not deter individuals from using any given digital banking channel. Only 22.6% were of the opinion that affordability to a moderate extent was important while carrying out transactions. From the findings, it could be deduced that affordability to digital banking channels

was important however there are other considerations to be put in place apart from affordability while looking at digital banking channels.

Lastly statements were given on affordability of digital banking. Table 4.26 presents the findings of the study.

Table 4.26 Affordability of Digital Banking

	N	Minimum	Maximum	Mean	Std. Deviation
With the various digital banking channels my banking is affordable and the fees levied if any is acceptable	350	1	5	3.50	1.475
Digital banking has made banking affordable and easy to open and run	350	1	5	3.50	1.315
I can efficiently and effectively run my bank account using digital channels without incurring unnecessary costs	350	1	5	2.49	1.375
I do not need to visit my branch to operate my account. This saves on my time and transport incurred to visit my branch.	350	1	5	3.59	1.415

With the highest mean (3.59) it was revealed that digital banking channels are affordable as they save on time and transport that would have been used while banking using the traditional channels. Further, it was indicated that with the various digital banking channels banking has been made affordable and the fees levied if any is acceptable (3.50). Additionally with a mean of 3.50 it was indicated that digital banking has made banking affordable and easy to open and run. From the findings as presented, it was deduced that digital banking has enabled affordability of banking as it has made it easy to carry transactions and rub businesses as desired.

# 4.8 Correlation Analysis

There was a need to check on the association between the dependent and the independent variables. Correlation analysis was performed and the results were presented in Table 4.26 as follows.

**Table 4.26 Correlation Analysis** 

		Customer	Speed of	Accessibility	Adaptability	Affordability
		Satisfaction	transactions			
Customer Satisfaction	Pearson Correlation Sig. (2-tailed)	1				
	N	350				
Pearso Speed of Correl	Pearson Correlation	.749**	1			
	Sig. (2-tailed) N	.000 350	350			
Accessibility	Pearson Correlation	.865**	.600**	1		
	Sig. (2-tailed) N	.000 350	.000 350	350		
Adaptability	Pearson Correlation	.789**	.484**	.764**		
	Sig. (2-tailed)	.000	.000	.000	1	
	N	350	350	350	350	
Affordability	Pearson Correlation	216**	475**	477**	504**	
	Sig. (2-tailed) N	.000 350	.000 350	.000 350	.000 350	

Table 4.26 shows the correlation values between the dependent and independent variables. On accessibility (r=0.865, p< 0.01) thus there is a positive strong correlation between customer satisfaction and accessibility. As accessibility increases customer satisfaction also increases. On adaptability, it was established that a positive strong correlation existed between adaptability and customer satisfaction where (r=0.789, p<0.01) thus the relationship was deduced to be significant. Adaption of uses of digital banking by customers leads to an increase in their satisfaction. The study additionally established that a strong positive correlation existed between the speed of transactions and customer satisfaction(r=0.749, p<0.01) thus as the process of transacting increases customers become satisfied. On affordability it was established that there was a negative minimal correlation between affordability and customer satisfaction. This relationship however was significant as indicated by (r= -.216, p<0.01) which implied that affordability did not influence on customers satisfaction. It was therefore deduced that the most important factors that lead to customer satisfaction included accessibility, adaptability, speed of transactions and affordability respectively.

#### CHAPTER FIVE

# SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter presents summary of findings, discussion, conclusions and recommendation made to the study. Suggestions for further research have been given. The chapter is organized in sub themes basing on the objectives of the study.

## 5.2 Summary of Key Findings

The study had a response rate of 97 % with more male (60.9%) compared to female respondents (39.1%). Majority of the bank customers had used banks for six years. 34.9% who were the majority were diploma holders, further, 63.4% of respondents had IT skills with the majority being self employed. The respondents understood what digital banking entailed.

On speed of transactions, it was revealed that mobile money was the most frequently used digital channel. Digital banking was used because they are considered fast, 74.3% of the respondents were to a large extent satisfied with the speed of digital banking. POS terminals were considered not to be very fast. 68% had never used internet to carry out transactions while 76.3% had internet enabled phones. 74% did not have any digital application in their phone with majority citing security fears that kept them from not having the application. The speed of processing transactions was considered fast (mean7.52). Banks have measures that they undertake incase the process of transaction is slow. A strong positive correlation existed between speed of transactions and customer satisfaction(r=0.749, p<0.01).

On accessibility of digital banking, it was revealed that ability to transact at preferred timing was considered the most important factor while looking at accessibility. Mobile banking was the most accessible form of digital banking with 61.7% indicating to a moderate extent they could access banking services. 54.9% revealed that their bank was accessible as they could transact, pay bills and access their bank accounts. 50.8% were faced with challenges resulting to use of technology. There was an increase in accessibility of digital banking as proved by the increase in number of ATMs, mobile and internet banking. Banks had increased on agency banking to capitalize on the

growing customer's base thus increase on their accessibility. Banks ensured customers were informed on how they could access different digital banking channels. It was however noted that there were no specialized digital services for persons living with various forms of disabilities such as the blind. A positive strong correlation between customer satisfaction and accessibility existed (r=0.865, p< 0.01).

Mobile money was the easiest digital channel to adapt. There were at least five transactions carried out by bank customers in a day. Majority of customers had been using banks for six years. 62% of customers did not have any problem in adapting the digital banking platforms offered. 60.9% had between 3-4 digital banking channels. 84% indicated that digital banking was very reliable however 86.9% had used digital banking channels that they failed to adapt citing wrong transactions as the main reason for this failure. Digital banking was adaptable as revealed by increase in number of financial transactions. There were reduced complaints by customers as banks used various ways to pass information and create awareness on digital baking to ensure adaptability. There was a positive strong correlation between adaptability and customer satisfaction (r=0.789, p<0.01).

Digital channels were affordable as 66.9% had never failed to transact due to transaction fees. Use of pay bill numbers was considered the most affordable as there were no transactional fees levied. 50.9% indicated that affordability is important while carrying out digital financial transactions. It was established that there was a negative minimal correlation between affordability and customer satisfaction. This relationship however was significant as indicated by (r=-.216, p<0.01).

## 5.3 Discussions of Findings

The response rate for the study was 97% which according to Richardson (2005) any response rate of 50% and above is considered adequate and capable of generalization to other studies. The bank ground information indicated the number of male exceeded that of females thus continued marginalization of women where their low incomes and salaries are used in domestic and household budgets hence most of them do not use the banking facility. Most studies still indicate

that the percentage of women using banking facilities is minimal (Culpan, Akdag & Cindogvlu, 1992; Morgan, Schor & Martin, 1993).

The results of the findings indicated that mobile money was the mostly commonly used digital banking technology. This was because it was viewed as reliable and easily accessible thus could be attributed to the speed of transactions. Patri'cio et al., (2003) asserts that the speed of operations, ease of use and accessibility are the strong predator of customer satisfaction. Digital channels of banking provide for speedy transactions thus is looked at in relation to reliability (Khan, 2010). Customers were further satisfied with the speed of the various forms of digital technology they used. The finding of the study resonates well with the thoughts of Premalatha and Sundaram (2012) who argues that that modern banking tend to motivate and satisfy customers due to the quick responses as provided by the digital technology.

While looking at adoption and effectiveness of electronic banking in Kenya Gikandi and Bloor (2010) View that ATM as a technology is fast however the long queues customers make reduces its intended purposes for speedy transactions. POS terminals can be fast however the processes that a customer needs to pass through before the transaction is completed can be a little bit lengthy. Rouse (2011) looks at POS terminals as having the ability to record and track customer orders, process credit and debit cards, connect to other systems in a network and manage inventory. The benefits given by POS terminals are advantageous compared to the traditional banking systems.

Further, it could be deduced that majority might not have experienced speedy transactions as they do not use internet to carry out transaction which has been proven by DeLaCastro et al. (2014) to be very effective. Having internet enabled phones exposes bank customers to new levels of digital banking thus when it comes to use of digital banking techniques the customers can be informed on the channels that are faster compared to other.

74% did not have a digital technology application in their phones. Villers (2012) while deliberating on the digital technology application argues that there ought to be a comprehensive agreement on shared technology standards and processes. Due to this reason he further adds that Private Banks have been slow to introduce digital technology applications for their customers arguing that the private banking industry is a personal and pre-dominantly face to face business

with little need for such applications to enhance the relationship. According to this argument, it is viewed that advancement of technology and applications that can enable customers bank at their convenient might not be positively embraced by private banks. Villers (2012) further argues that security and privacy issues are two of the reasons cited for not embracing these new developments.

From the findings of the study, it can was clear that the customers had an idea of what accessibility was. Time was considered to be the most important element while looking at accessibility which was followed by ease of reach of a location. According to Villers (2012) any channel that makes a meaningful experience to the customer in terms of access to funds, banking facilities, services and feedback can be termed as accessible.

The most accessible digital banking platform was mobile banking and the customers felt they could only access banking services to a moderate extent which implied there is a need to improve on banking services in order for the customers to be able to access the services and improve on their banking experience thus improved satisfaction. Much as Njiru (2014) argue that there has been a rapid increase in access points to technological innovations this study has shown that there is need for improvement in order for the bank customers to access banking services to a large extent.

Technology is changing very fast and without necessary skills then much as an individual might be willing to use digital banking they may at times be unable. Safety and security issues remain paramount when it comes to digital banking. This had been alluded in earlier studies by Villers (2012). Expense incurred in digital banking was not considered as a major challenge as efficiency is given priority and customers might be willing to incur a cost as long as access to technology is enabled.

Most organizations adapt the pay bill system which implies that customers are given no choice but to adapt. To avoid long queues, payment of utilities such as electricity, water and other bills has been made possible with the use of pay bills hence this explains why they are easily adapted. Moreover they are fast and efficient as envisaged by Okiro and Ndungu (2013).

Much as banks have tried to place ATMs near accessible locations and area, they are at times inconveniencing as one has to go to the specific location to access them. Further they might not be reliable in remote areas and during late night areas thus customers opt to use digital channels that are mobile in nature such as mobile money or mobile banking. Jack and Suri (2011); Donner and Tellez (2008) are of the view that with the introduction of mobile money technologies, there has been a reduction in use of banking systems such as cash transfers and ATMS.

Kumbhar (2009) and Shrotriya (2007) while explaining ease of adaptability are of the view that customers look for multiple delivery channels which are flexible and convenient hence they will adapt to technology when it offers advantages compared to the traditional channels. Comninos et al (2008) further argue that potential and existing customers do not like bureaucracy and prefer simple procedures that are easy to follow and use. For this reason technology that is easy to follow will be easily adapted unlike one that is bureaucratic.

It is important to note that adaptability is not apparent hence Khan (2010) argues that banks must increase self-service capabilities with virtual assistance to guide customers in order for them to adapt to technology. Failure to adapt can be traced to various reasons hence if the reasons given are addressed then adapting to the different forms of digital channels can be made easy. For bank customers to adapt, Khan (2010) is of the view that banks must focus on delivering what customers want rather than pushing what is convenient for banks. By doing this, customers can easily adapt to the given digital banking technology.

The results of the finding on affordability differ with held assumptions that affordability mostly leads to customer satisfaction. According to Flood (2014) making financial products very affordable can lead to low income people joining the bank.

#### **5.4 Conclusions**

Basing on the findings of the study as presented in chapter four. The study concluded that mobile money was mostly used as a digital channel. Further digital banking was considered fast and reliable and the speed was considered satisfactory. Not using internet to carry out transaction might be a limiting factor for the bank customer to experience speedy transactions. Customers were moreover confident that digital banking offers immeasurable speed of processing

transactions which could not be compared to traditional banking. The study concludes that speed of transactions has an influence of customer's satisfaction as the speed of transacting increases customers become satisfied.

On accessibility, it was concluded that bank customers were aware of what entailed accessibility. The most accessible digital platform was mobile banking with a feeling that digital banking could be accessed on a moderate extent. Additionally, having the ability to bank anytime and anywhere and further check balances and access statements could be interpreted as accessibility. Use of technology was the major barrier towards accessibility as technology was changing very fast without the bank customers embracing the needed skills to cope with this new phenomenon. The study thus concludes that increase in accessibility leads to an increase in customer satisfaction.

On adaptability, mobile money was the most adaptable digital channel due to the personal touch it offers to the bank customers. Digital banking was seen as fast and efficient hence adapting to their use was easy. Further from the customer's daily transactions, it was concluded that the adaptability to the given digital banking channels was very high as presented by the daily number of transaction and years that the customers had used digital banking. Bank customers used different digital banking channels which was an indicator of their adaptability. Most of the digital platforms of banking used were further reliable however majority of bank customers had failed to adapt to digital banking at one point in their lives with various reasons given for this failure. Banks try to ensure customers can adapt by passing information on how to use digital banking lastly the study concludes that there is a significant relationship between adaptability of digital banking and customer's satisfaction. With an increase in adaption then customer satisfaction also increases.

Lastly, on affordability of digital channels, the study concludes that digital banking channels are affordable. Affordability while transacting using digital banking is important however there are other considerations to be put in place apart from affordability. The negative minimal correlation implied that that affordability did not influence on customers satisfaction. It is therefore concluded affordability is not one of the key factors that is looked at while carrying a digital banking transactions. Customers will transact using any other channel that is fast, accessible and easily adaptable.

#### 5.5 Recommendation

Basing on the findings as presented in chapter four of this study, the following are recommended:

- 1. In order to have faster processes in digital banking, there is need by banks to invest more on robust reliable systems to reduce incidents of failed transactions and transactional errors in ATMs, Mobile banking and POS terminals. Banks should further automate most services like loan recovery, loan disbursement and introduce queue management systems.
- 2. Banks need to come up with an application that can be used to enhance digital banking which will be considered safe and private in order to boost the operations, availability and accessibility of digital banking.
- 3. There is further need to facilitate ICT skills so that technology can be embraced. Through a joined venture with education institutions ICT skills can be impacted through banks teaching individuals and cooperates on the changing world of banking technologies.
- 4. There is need to carry out customer satisfaction surveys to establish how customers are adapting to technology. Suitable techniques should be devised based on what customers want and not what is convenient for banks.

## **5.6 Suggestions for Further Research**

From the presented findings, it is clear that accessibility of digital banking is undertaken while considering only persons that are deemed physically fit in the society. A study needs to be undertaken to determine the influences of accessibility of digital banking amongst persons living with disabilities.

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**Appendix I: Letter of Transmittal** 

KEVIN O. H. MULUKA,

P.O. Box 25-50200

**BUNGOMA.** 

Dear respondent,

**RE:** FILLING OF THE QUESTIONNAIRE

I am a postgraduate student at the University of Nairobi, School of Continuing and Distance

Education, currently undertaking masters Degree in Project Planning and Management. You

have been identified as a respondent to this questionnaire. Please find the attached questionnaire,

which is designed to gather information on" Influence of Digital Banking on Customer

satisfaction in Commercial Banks: Case of National Bank of Kenya, Bungoma County". All

answers are confidential and will only be used for academic purposes.

This research will be carried out in partial fulfillment of the requirements for the award of the

degree of Master of Arts in Project Planning and Management of the University of Nairobi.

I will be glad if you fill and return the completed questionnaire at your earliest convenience.

Thank you.

Yours Sincerely,

Kevin O. Muluka

Student Reg No.L50/71397/2014

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## **Appendix II: Survey Questionnaire**

Dear respondent,

In an effort to improve on and enhance customer Satisfaction, commercial banks have adopted technology to ensure you have seamless experience when transacting with your bank in a secure, fast, 24/7 hours access manner. This is what we refer to as digital banking experience. The purpose of this survey is to investigate the influence of Digital Banking on Customer Satisfaction: Case of National Bank of Kenya Bungoma County. The study is basically educational but could be used by financial institutions to deliver better experience to customers in their various organizations.

#### **Instructions**

This questionnaire will probably take you 10-15 minutes, however there is no time limit for completion. The accuracy of the results depends on how honest you can be - there is no right or wrong answers.

Section A: Demographic and Bank data (kindly tick the relevant box where necessary)

1. Age:	
2. Gender: Male Female	
3. Banking (years):	
4. Qualification: Certificate Diploma Undergraduate Postgraduate	
5. Position (Are you a): Customer Bank staff (internal customer)	
6. Do you have Information Technology Skills? Yes No No	

7. What is your understanding of digital banking?
Use of mobile money Use of technology to bank Payment for utilities
Cashless payment systems
Any other Specify
Section B: Speed of Transactions and Customer Satisfaction
8. Which of the following do you mostly use?
ATM cards [ ]
Pay bill numbers [ ]
Mobile Money [ ]
Online payment options e.g visa cards, pay pall [ ]
9. Why do you use digital banking?
Accessibility [ ]
Affordability [ ]
Speed of transactions [ ]
10. To what extent are you satisfied with the speed provided by digital banking?
Small extent [ ] Moderate extent [ ] Large extent [ ]
11. If to a small extent, which areas do you think should be addressed?
E-Banking [ ] Mobile Banking [ ] ATM [ ] Point of Sale Terminals [ ]
12. Are you aware on how to use internet to carry out a transaction?
Yes [ ] No [ ]
13. Is your phone internet enabled?
Yes [ ] No [ ]

14. Do	you h	ave a diş	gital tec	hnology	applicatio	n?							
	Yes	[ ]	No	[ ]									
15. If r	no, wha	at are the	e reason	s that res	strain you	from usi	ng the	digital to	echnolog	gy application?			
	Not a	pplicable	e[]										
	Secur	ity fears	[ ]										
	Privac	cy issues	s[]										
	Expe	nse invo	lved [	]									
	I don't know how to use the application [ ]												
	I see no reason of using [ ]												
	Other	reasons	[]										
16. Ra	te on h	ow spee	d of tra	nsactions	s using a d	igital ba	nking	is. Use a	scale of	1-10 with 1 being			
slow w	hile 10	being v	very fas	t.									
Very	Slow							Vei	ry Fast				
	1	2	3	4	5	6	7	8	9	10			
Section	n C: A	ccessibi	lity and	l Custon	ner Satisf	action							
17. Wł	nat stat	ement <b>n</b>	ostly d	efine acc	essibility	to you							
	Exten	t to whi	ch a con	isumer oi	r user can	obtain a	good	or service	e at the t	ime it is needed.			
	Ease	with whi	ich a fac	cility or l	ocation ca	n be rea	ched fi	rom other	r location	ns.			
	Ease	of contac	et with a	a person	or organiz	ation							
				unity, or	-	ccess rec	ords o	or retrieve	e informa	ation from an			

18. To what extent do you feel you can easily access banking services whenever there is a need?
Small extent [ ] Moderate extent [ ] Large extent [ ]
19. Which of the following is the most accessible?
Mobile banking [ ]
E-Banking [ ]
POS terminals [ ]
ATM [ ]
20. How accessible is your bank?
I can bank anytime anywhere, check my balance and access statements
I can easily transact, pay bills and access my account
I can easily interact with my bank; express my opinions and grievances without visiting the branch
I hardly visit my branch for services, thanks to E-banking, Mobile banking and POS terminals
21. What are some challenges you face while trying to access digital banking? {Multiple responses allowed}
Distance between digital outlet [ ]
Challenges in use of technology [ ]
Expenses incurred in digital banking [ ]
Safety and security issues [ ]
Any other [ ]

# Section D: Adaptability and Customer Satisfaction

Yes [ ] No [ ]

	ate how easy it is ble while 10 is ver				ollowin	g given	digital	bankin	g chann	nels. 1	is least
	Mobile banking	1	2	3	4	5	6	7	8	9	10
	E-Banking	1	2	3	4	5	6	7	8	9	10
	POS terminals	1	2	3	4	5	6	7	8	9	10
	ATM	1	2	3	4	5	6	7	8	9	10
	Pay bill numbers	1	2	3	4	5	6	7	8	9	10
	Mobile Money	1	2	3	4	5	6	7	8	9	10
	Funds Transfers	1	2	3	4	5	6	7	8	9	10
24. Ho	ow many times do yow many years have	e you	been	using di	gital ba						
	Yes [ ] No [	]									
26. Ho	ow many digital bar	nking	chann	iels do y	ou hav	e?					
	1-2 [ ] 3- 4	[	]	5-6 [	]	7 and a	bove [	]			
27. Но	ow can you gauge t	he re	liabilit	y of dig	ital ban	king?					
	Not reliable [ ]	sligh	tly reli	able [	] \	ery rel	iable	[ ]			
28. Ha	ive you ever used a	digit	al ban	king cha	annel th	at you i	failed to	adopt?			

29. If yes what were the reasons for the failure? {Multiple Responses allowed}													
Long Queue [ ]													
Machine breakdown [ ]													
Service not available [ ]													
Complicated system [ ]													
Double transaction charges [ ]													
Wrong transaction done [ ]													
30. What makes it easy for you to adapt to digital technology?  Easy online banking [ ]													
Ability to use a debit card and not carry cash [ ]													
Convenient branch locations [ ]													
Convenient ATMS [ ]													
Reduced fees [ ]													
Section E: Affordability and Customer Satisfaction													
31. Rate the level of affordability of any digital channel you use? 1 being not affordable while 10 is very affordable.													
1 2 3 4 5 6 7 8 9 10													
32. Have you ever failed to transact as a result of high transaction rates?													
Yes [ ] No [ ]													

33. What is the most affordable form of digital banking?
Mobile banking [ ]
E-Banking [ ]
POS terminals [ ]
ATM [ ]
Pay bill numbers [ ]
Mobile Money [ ]
Funds Transfers [ ]
34. To what extent is affordability important in day to day digital banking transaction.
Small extent [ ] Moderate Extent [ ] Large extent [ ]
32. The following statements are in relation to how affordability of digital banking influences
customer experience in Commercial Banks, on a scale of 1-5 of which one 1= strongly disagree,
2 = Disagree, 3= Neutral, 4 = Agree and 5= strongly agree. Indicate your feelings on each items
listed.
V L

2	Digital banking has made banking affordable and easy to			
	open and run			
3	I can efficiently and effectively run my bank account			
	using digital channels without incurring unnecessary			
	costs			
4	I do not need to visit my branch to operate my account.			
	This saves on my time and transport incurred to visit my			
	branch.			

With the various digital banking channels my banking is affordable and the fees levied if any is acceptable

**Section F: Customer Satisfaction in Commercial Banks** 

How is your customer satisfaction in terms of use of the following digital banking attributes. 1 represents poor while 10 represents excellent.

Speed of transactions	1	2	3	4	5	6	7	8	9	10
Accessibility	1	2	3	4	5	6	7	8	9	10
Adaptability	1	2	3	4	5	6	7	8	9	10
Affordability	1	2	3	4	5	6	7	8	9	10

Thank You

## **Appendix 111: Interview schedule**

As part of my course requirement, I am collecting information on the influence of digital banking on customer satisfaction in commercial banks: case of National Bank of Kenya Bungoma County. Feel free to answer all the questions asked. I will further probe you to get clarity of answers given. Kindly allow me to take 30-40 minutes of your time. The responses sought are only for academic purpose.

## 1. Speed of Transactions of Digital Banking and Customer Satisfaction

- Do you think digital banking transactions are faster? **Explain your answer.**
- If the process is slow, how do you ensure it is fast tract?
- How often do you receive complaints on failed transaction? ( how do you treat such complaints)

#### 2. Accessibility to Digital Banking and Customer Satisfaction

- -Do you feel more customers are using digital channels? (Explain your answer)
- Have you increased on the number of ATMs as a result of increased number of customers? (if no, how do you ensure ease of accessibility?)
- How fast are compensations to customers made (what is the process?)
- Do you offer specialized services to different able persons (Blind, deaf etc)

## 3. Adaptability of Digital Banking and Customer Satisfaction

- Do you consider the digital channels used adaptable?
- How many times do you receive complaints on failed transactions?
- What do you usually do to ensure customer easily adapt to digital channels?
- -How can you gauge the reliability of digital banking channels?
- -How is communication between your bank and its customers? **How do you handle** customer care department? Are you available 24/7? Are they user friendly?

## 4. Affordability of Digital Banking and Customer Satisfaction

- -What are the reasons for bank closure by customers? **Do you attribute this number to high costs in digital banking?**
- -Why do customers chose to use the digital banking channel provided by your bank? Do you think it has anything to do with cost? (Explain, critically look at your bank and compare with other banks when commenting.

# Appendix IV: Documentary Analysis Form

Document to	o be analyzed		Components								
No.	Digital channel	Register of new customers enrolled	Register of accounts closed	Register of complaint s received	Register of customers using POS terminals						
1	Mobile banking										
2	Internet(E-banking)										
3	NBK Agents										
4	ATM cards										
5	POS terminals										

**Appendix V: Letter of Authorization** 

Date	 	•	 	•	•	 		•	•		•	•	•		•	•	•	
Tο																		

The Manager

Name of the Bank.....

P.O. Box .....Code:

NAIROBI.

Dear Sir/Madam,

RE: RESEARCH DATA ON "THE INFLUENCE OF DIGITAL BANKING ON CUSTOMER SATISFACTION: CASE OF NATIONAL BANK OF KENYA BUNGOMA COUNTY".

I am a student pursuing a Master of Arts Degree in Project Planning and Management- at the University of Nairobi. I' am required to undertake a research project as partial fulfillment for the award of this higher degree. With reference to my research topic stated above, I request for your assistance in making the research a success.

This purpose of this letter is therefore to request you to grant permission to collect relevant data from your organization from selected respondents among your customers and members of staff. The information collected will be treated with utmost confidentiality and will be used for the purposes of this research only. For your information, the output of this research will add value to banks in Kenya in terms of appreciating the value or otherwise of innovations within their business operations and how to enhance customer satisfaction with the advent of digital banking.

I wish your Bank fruitful business.

Yours Sincerely

Kevin O. Muluka

Student Reg No. L50/71397/2014