THE ROLE OF MOBILE BANKING IN PROVISION OF PERSONAL BANKING SERVICES

BY

WINNIE W MWANGI

UNITED STATES INTERNATIONAL UNIVERSITY – AFRICA

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WINNIE W MWANGI

A Research Project Report Submitted to the Chandaria School of Business in Partial Fulfilment of the Requirement for the Degree of Masters in Business Administration (MBA)

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STUDENT’S DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution or university other than the United States International University in Nairobi for academic credit.

Signed: ___________________________ Date: ________________

Winnie W Mwangi - 642896

This research report has been presented for examination with my approval as the appointed supervisor.

Signed: ___________________________ Date: ________________

Professor Paul Katuse

Signed: ___________________________ Date: ________________

Dean, Chandaria School of Business
ABSTRACT

Mobile technology is revolutionising the global banking and payment industry. This study seeks to understand the role this technology has played in provision of personal banking services it offers as new opportunities for banks to provide added convenience to their existing customers in developed countries and reach a large population of unbanked customers in emerging markets.

This study sought to further understand the role mobile banking has played in provision of personal banking services, answering questions in relation to access of the banking from wherever someone is. This means one does not need to be near their bank to enjoy the services that their banks offer. It answers the question of accessing of capital or loans from their bank. Has this technology assisted individuals in accessing financing and if so how? The last question that this study answered is, has the mobile banking service assisted individuals in building savings? Does it support a savings culture or does it encourage more spending. This study intended bring more clarity on the role of mobile banking and seek to understand its use as stipulated above.

This study employed descriptive research design techniques in gathering analysing and interpreting and presenting the information. The descriptive research design showed the relationship between mobile banking and personal banking services. This study used simple random sampling. Simple random sampling is the basic sampling technique where we select a group of subjects (a sample) for study from a larger group (a population). Each individual is chosen entirely by chance and each member of the population has an equal chance of being included in the sample

This study used questionnaires for data collection and use of the quantitative method of the descriptive method of data analysis. This ensured that the data concerned can be represented visually and in narrative form. The study used data analysis tools like Statistical Package for Social Scientists (SPSS).

The study concludes that mobile banking is effectively a channel whereby a customer interacts with a bank via a mobile device notably the mobile phone. Therefore mobile banking does assist in accessing personal banking services whereby one does not need to visit their bank physical for some services but can do this through their mobile phones.

The research recommends that banks look into improving the awareness and benefits of using mobile banking because though there are a number of services offered by Banks
through mobile banking many people are not using these services and if they are these are not frequently used. The research recommends further research into factors affecting mobile banking uptake in the country this would further explain the study findings in mobile banking access to personal banking services, mobile banking and access to loans and finally mobile banking and building a savings culture.
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LIST OF ABBREVIATIONS

ATM - Automated Teller Machines

CAGR - Compound Annual Growth Rate

CBK - Central Bank of Kenya

DTSV - Digital Satellite Television

GDP – Gross Domestic Product

KCB – Kenya Commercial Bank

MFSs – Mobile Financial Services

MNO - Mobile Network Operator

M-PESA - Mobile Phone-Based Money Transfer

MVNOs - Mobile Virtual Network Operator

POS - Point of Sale

SPSS - Statistical Package for Social Sciences

USSD - Unstructured Supplementary Service Data

USIU – United States International University
CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the problem

Internet evolution is changing the way people communicate and interact with others within their social circle. The growing demand for “always-on” internet connectivity is shifting usage from desktops to laptops and mobile devices. Telecommunications are also migrating not only from fixed to mobile but also from voice to data, allowing people to be connected anywhere, anytime. In order to meet customer expectations, financial services companies are pursuing alternative channels in order to increase customer convenience, reduce costs and maintain profitability. Phone banking and automated teller machines (ATM) are already widely used by financial institutions in many countries and are becoming everyday more sophisticated (Puschel, Afonso, Mazzon, & Mauro, 2010).

Mobile banking has high potential, since it follows on the success of internet banking (Brown et al., 2003). Therefore, mobile banking is not only a natural evolution of internet banking, but it is also a better digital alternative to other traditional bank channels such as ATMs, internet banking and physical branches (Puschel, Afonso, Mazzon, & Mauro, 2010).

Since it was first launched as SMART Money in the Philippines in 2003, at least 72 mobile money deployments have been launched across 42 developing countries. The implementations have taken place under many different models. Some are offered entirely by banks (bank-led), others are offered entirely by mobile network operators (MNOs) for example G-Cash in Philippines; M-PESA in Kenya, still others involve a partnership between a bank and a telecommunication provider MTN Banking in South Africa whilst some are independently provided for example Celpay in Zambia and txtnpay in Ghana (Jonathan & Camilo, 2008).

Although no particular model is emerging as superior, MNO models thrive in developing markets because of their ability to reach large numbers of unbanked people in physically remote locations beyond the presence of bank and landline infrastructures (Tobbin, 2012).

Besides individual access to financial services, mobile money generates a variety of social benefits for consumer communities: an increase in domestic capital formation, incorporation of credit into the banking system, savings in time and cost that MFSs provide. Access to credit facilitates entrepreneurship, new business creation, and
employment (Bhavnani et al., 2008). Remittances and domestic payments infuse money into the economy, and the increased savings within the banking system enable credit to expand.

Overall, Mobile Financial Systems (MFSs) can reduce financial exclusion by 5-20 per cent through 2020 and increase GDP by up to 5 per cent (Pakistan, for instance, would experience a 3 per cent increase (Boston Consulting Group, 2011).

This increase in additional jobs and businesses generates additional tax revenues for governments. Besides collective social benefits, MFSs reduce the impact on families of financial shocks caused by floods, earthquakes, and drought. In Pakistan, for example, Easy Paisa launched a relief payment distribution system, which solicited and distributed donations during floods.

A similar concept was implemented in Haiti to provide earthquake relief. Kenya’s M-PESA UAP Insurance insures poor farmers against weather-induced crop failures (Reeves & Sabharwal, 2013).

BMI estimates Kenya's mobile penetration rate was 73.8% by the end of 2014, the 16th highest among the 27 countries in our Sub-Saharan Africa coverage, while the forecast compound annual growth rate (CAGR) of 4.6% over the five years to 2019 is ranked 10th in the region. Kenya is also a regional hub for technological innovation, especially in the mobile money realm. The use of such technology will improve efficiency, increase product offerings and accelerate the adoption of formal financial services (Business Monitor International Industry Forecast, 2015).

According to BMI Kenya's mobile market continued to record steady growth throughout 2014, with net additions of 2.9mn over the twelve-month period, bringing total subscriptions to 33.633mn and the penetration rate to 73.8%. Kenya's mobile market is fiercely competitive, with the country's two smaller operators - Airtel Kenya and Orange Kenya - looking to erode market leader Safaricom's dominance.

Safaricom has successfully dominated Kenya's mobile market for many years, with price wars initiated by its competitors in 2010 having only a temporary impact on its market share. Ongoing network expansion to underserved areas and innovation in non-voice services, especially the M-Pesa mobile financial service (MFS), are key factors in its ability to retain existing customers and attract new ones. While it continues to have exclusive control over M-Pesa, it will remain dominant.
The decline in voice revenues owing to intense price competition in that segment has led Kenyan mobile operators to explore a wide range of non-voice services. Arguably the most prominent non-voice offering is MFS, which is currently dominated by mobile market leader Safaricom through its popular Mpesa platform.

According to the Central Bank of Kenya, 2015 mobile payments transactions in Kenya grew 24.7% year-on-year (y-o-y) to KES2.37tn (USD25.95bn) in 2014. Mobile money subscribers transacted about KES6.49bn (USD71.07mn) a day in 2014, up from an average of KES5.21bn (USD57.05mn) a day in 2013. The rise was attributed to increased public uptake of mobile cash transfer and acceptance by more merchants. Mobile money transactions increased 24.4% to 911.3mn y-o-y, with the average number of active mobile money agents rising 17.6% y-o-y to 120,472 a month in 2014 (Business Monitor International Industry Forecast, 2015).

Safaricom is the dominant player in Kenya's m-commerce market, mainly due to its first mover advantage and the continuing popularity of its M-Pesa money transfer service. Safaricom reported 19.7mn registered M-Pesa customers at the end of September 2014, of which 12.8mn were 30-day active users. The operator's market dominance is reflected by its more than 90% share of total transactions volume and value, according to the operator and regulators' data. In April 2015, Safaricom completed the migration of M-Pesa servers to Kenya. The operator noted that service outages on the mobile money service should be reduced as M-Pesa is now hosted locally. The service was previously hosted in Germany and was open to interruptions whenever undersea fibre cables were damaged. The service will now run at a double speed of 900 transactions per second (Business Monitor International Industry Forecast, 2015).

Perhaps the biggest threat to Safaricom's dominance, and a potential game changer if implemented, is the creation of an open access m-commerce platform. In July 2014, the operator decided to open access to its network of M-Pesa agents, a move we believe will act as a litmus test for how granting access to its M-Pesa platform to third parties could affect its revenues and business as a whole (Business Monitor International Industry Forecast, 2015).

Safaricom has previously required all of its M-Pesa agents to sign an exclusivity agreement preventing them from processing MFS transactions for any operator or company. With a network of 85,000 agents, M-Pesa truly responds to the need for basic
financial services in areas that will likely not be reached by traditional financial service providers. By contrast, Airtel Money has a network of just 10,000 agents, while Orange has around 5,300 MFS agent (Business Monitor International Industry Forecast, 2015).

According to Business Monitor International the best long term solution for Kenya's mobile and MFS markets would be the emergence of a network- and financial institution-agnostic m-commerce platform, which would allow for much greater scale and the development of more complex financial services for subscribers.

This would then force Safaricom to compete with other mobile operators more directly on quality of service and other non-voice services. In the meantime, despite putting pressure on Airtel's network capacity, hosting three MVNOs will provide the operator with a stable source of revenue, which will in turn improve its ability to invest in network upgrades and expansion and challenge its larger rival (Business Monitor International Industry Forecast, 2015).

1.2 Statement of the problem

This paper seeks to help individuals understand the value add services offered by the bank in providing banking services through Mobile Financial services. This will then decrease consumer resistance to the latest innovation in banking technologies and provide superior services in the sector boosting economic growth and fostering stability in the country.

Kenya has seen significant uptake of the mobile financial services which range from Mpesa through Safaricom which allows transfer of funds locally, cross border remittances, and saving of funds. There is internet banking and now coming soon M-akiba which allows one to purchase bonds from treasury and earn interest encouraging a savings culture in the country though the mechanics of it will be revealed in due course.

How has mobile banking assisted in accessing banking services? We can easily relate the growth in mobile banking in Kenya to the growth in the banking industries. In Kenya many are still unbanked however the Kenyan banking sector has been accelerating steadily since early 2014 as the domestic economy has started to pick up. The latest figures from the Central Bank of Kenya (CBK) show that total commercial banking assets grew by 19.3% in 2014, compared to 16.1% in 2013, while client loans increased by 22.9%, up from 17.9% the previous year (Business Monitor International Industry Forecast, 2015).
Due to the growth in mobile banking, many people in towns and rural areas have had access to capital through Mshwari. M-Shwari is a partnership between Safaricom and the Central Bank of Africa. It allows customers to take out loans and save money on their mobile phones through a mobile banking system. The program has had success since its launch in 2012, boosting the number of bank accounts in Kenya. A key factor that will drive the development of Kenya's financial system, and where it has an advantage over its Sub Sahara Africa peers, is the growing reach of MFS. (Business Monitor International Industry Forecast, 2015)

Kenya is arguably a global pioneer in this field, with the money flowing through Safaricom's M-Pesa service totaling over 40% of the country's GDP. The country has a vibrant technology industry, and is far ahead of its peers, with Nairobi having become a regional hub for communications and technology investment (Business Monitor International Industry Forecast, 2015).

In the developing countries with the right regulatory framework, people are storing money digitally on their phones and using their phones to make purchases, as if they were debit cards. By 2030, 2 billion people who don't have a bank account today will be storing money and making payment with their phones. And by then, mobile money providers will be offering the full range of financial services, from interest-bearing savings accounts to credit to insurance. Poor people don't have access to a bank to help them use their assets effectively. If their savings are in the form of jewelry or livestock, for example, they can’t very well chip off tiny pieces to cover routine daily expenses (Gates, 2015).

Therefore, it is necessary for Kenyans both at an individual level or organizational level to know the role of the Mobile Financial Services that will see this sector support the economic growth of Kenya. Though the penetration of the Mobile Financial Services has been widespread in the country, I would like to know the role this has played in Kenyans' lives from a financial services perspective. The gap is that little research has been done in understanding how this technology has impacted many Kenyans and their need or access to banks and banking services. This begs to answer the question of how this technology has improved their lives from a personal financial services perspective and what need has this platform offered to the population.
1.3 Purpose of the study

This study is geared towards understanding how the mobile Banking Services have influenced the personal banking services required by individuals in their day to day operations.

1.4 Research questions

1.4.1 How does the mobile banking help people in accessing personal banking services?

1.4.2 How does the mobile banking service enable people to access loans?

1.4.3 How does mobile banking support a culture of savings?

1.5 Importance of the study

1.5.1 Banking industry

For banks to know the importance of having a mobile banking platform. Though mobile financial services have taken the country by storm not all the banks in the country have taken up the initiative to provide their customers with the mobile banking services platform.

1.5.2 General Public

People need to know the role mobile banking platform plays in assisting them access personal banking services like bank statements and account balances. The accessibility of information and guidance empowers one to make informed decisions and enables one to access better services.

1.5.3 Business Fraternity

For institutions to see the importance of accepting payments from the mobile banking platform which enables these institutions to receive payments faster. Different business offer diverse services and a quick and efficient payment system from creditors or debtors will enable business to grow become sustainable

1.5.4 Economy of Kenya

The study is important as it will show the benefits of the use of mobile banking which contributes to the economy of Kenya. Due to its wide use we can see how this ability to
make payments, access capital and build savings to the population in Kenya will impact out economy and case it to thrive.

1.6 Scope of the study

The study will be conducted in Nairobi Kenya with a case study of United States University-Africa (USIU) MBA students based here in Ruarka. In context this study is seeking to investigate the role mobile banking has had in providing personal banking services in the country. This specifically touches on accessing personal banking services, access to capital and support to building savings.

1.7 Definition of terms

1.7.1 Banking

Banking is the service of saving, sending and receiving of funds from the institution of a bank. Banking provides the liquidity needed for families and businesses to invest for the future through Bank loans and credit. It also provides a safe place for deposits. (Amadeo & Kimberly, 2016)

1.7.2 Mobile banking

Mobile banking services is the ability to use the telephone handset to make financial transactions. This is where people are now able to use the mobile telephone to make financial transactions which they would have otherwise made in the bank.

Mobile banking a subset of online Internet banking, as classified in (Muller, 2001)Mobile banking can be defined as the ability to conduct bank transactions via a mobile device, or more broadly to conduct financial transactions via a mobile terminal (Drexelius & Herzig, 2001). This definition is a suitable working one as it includes not only basic services such as bank account statements and funds transfer but also electronic payment options as well as information based financial services e.g. (alerts on account limit or account balance, access to stock broking). It compares ell with the definition found in (Kiesnoski, 2000) where mobile banking is referred to as the “ability to bank virtually anytime, anywhere”. This definition needs to be expanded to include the two different types of customer account access: a Web based interface and a simple text-messaging interface.
1.7.3 Mobile

Mobile is a hand held telephone device used in communication.

The mobile phone is evolving towards the dominant medium. It is becoming the natural interface through which people conduct their shopping, banking, booking of flights, etc. Moreover, it is turning into the single unique instrument of mediating communication not just between people, but also between people and institutions or more generally between people and the world of inanimate objects”.

The mobile phone is also joining the sphere of mass media. In the next few years the mobile phone will be the primary source for radio and television signals, as well as the link to up-to-the-minute information. We conclude this section by underscoring that not only the concept of mobility, but also that the concept of the third hear-and-talk organ triggers changes far beyond those imagined by its two billion users. (Cyprus, 2015)

1.7.4 Personal banking services

Personal banking services refers to financial services like transfer of funds to make payments, saving of money, ability to make deposits or withdrawals, ability to access loans and accessing one’s personal account information.

1.7.5 A loan

A loan is a financial contract in which one party the lender agrees to give another party the borrower a specific amount of money, to be paid back monthly over a set period of time. There will also be interest payments at an agreed rate, and sometimes additional charges for the administration of the loan.

The terms and conditions of a loan will vary from lender to lender, but will be specified in the contract. The borrower must adhere to the repayment terms stated in the contract especially repayment dates and interest rates. (Tesco Bank)
1.8 Chapter summary

The mobile financial services have taken the world by storm and enables people to access their money or accounts without having to personally visit the bank as was the case previously. In Kenya the use of the mobile phone is not only for receiving or making calls, checking the time, receiving or sending text messages but it has become a tool to use for making financial transactions. The M-pesa platform has opened up the financial and banking sector to all persons no matter their locality.

People in rural Kenya did not access their banks easily due to distance and many banks did not have branches in the outskirts of Nairobi or major towns around the country. This then inhibited people in the rural area from accessing funds either their own or bank loans. Now with the use of the mobile financial platform everyone can access funds through M-Pesa and soon to come M-akiba. Now one does not need to go their bank branch to access their basic personal banking services. This has enabled easier and faster flow of funds people, institutions and overall in the economy. I am then seeking to find out how this platform has impacted the general public and their ability to access financial services that primarily were given by banks.

In the next chapter we look to understand what empirical studies have been done in this area and what have been the findings.
CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter presents studies that have previously been carried out by researchers and academicians. It gives a deeper insight into the research questions that guide this study. The first question seeks to find out how mobile banking has impacted personal banking services. This looks at various insight into banking and the kind of services received in banks and how mobile banking which has parallels in electronic banking has affected these services. The second question looks at how mobile banking has assisted with accessing loans or capital for the population. This looks into deeper insight if banks have been able to offer loan access services to its customers and how customers view this kind of service. The final research question seeks to find out how mobile banking has assisted to build a savings culture among the populations in that are people saving more or they are accessing their savings more easily for use.

2.2 Mobile banking on accessing personal banking services

Commercial banks are the most important banks. They offer many services, different forms of accounts and also loans. While, at first, commercial banks only offered its services to businesses and companies, they are for everyone today. Investment banks do not take or keep the money of individuals. They help organizations and large companies raise money on the international financial markets.

The rapid rise in the growth of mobile technology throughout the world is a phenomenon that has been particularly remarkable among poor people, largely because of the prepaid model. As a result, all classes of society now have access to financial services as people become increasingly familiar with a mobile-money system. In fact, mobile technology, viewed as a payment or banking channel, has the potential to allow two important questions to be addressed at the same time: on the demand side, it represents an opportunity for financial inclusion among a population that is underserved by traditional banking services. On the supply side, it opens up possibilities for financial institutions to deliver a great diversity of services at low cost to a large clientele of the poorest sections of society and people living in remote areas (Tobbin, 2012).
For today’s tech savvy customers banking is not a place you go it’s a thing you do. Many banks have worked hard to provide convenient online and mobile tools to make everything from checking balances to making deposits at home or on the go a simple seamless process for customers. Mobile conveniences help banks deepen relationships with customers and create a bond based on trust and anticipation of their financial service’s needs. Despite the utility of mobile services financial services marketers need to continue seeking the best ways to increase monetization in the mobile banking channel whether through driving acquisitions or nurturing deeper customer relationships with additional services and offerings (Reeves & Sabharwal, 2013).

In simple words, Banking can be defined as the business activity of accepting and safeguarding money owned by other individuals and entities, and then lending out this money in order to earn a profit. However, with the passage of time, the activities covered by banking business have widened and now various other services are also offered by banks. The banking services these days include issuance of debit and credit cards, providing safe custody of valuable items, lockers, ATM services and online transfer of funds across the country or world. It is well said that banking plays a silent, yet crucial part in our day-to-day lives. The banks perform financial intermediation by pooling savings and channelizing them into investments through maturity and risk transformations, thereby keeping the economy’s growth engine revving (Goyal, 2016).

The companies pioneering mobile banking find it profitable to serve the poor because the marginal cost of processing a digital transaction is near zero. And because so many people in developing countries have mobile phones, more than 70 percent of adults in many countries are subscribers now; the volume of transactions can be very high. By making small commissions on millions and millions of transactions, mobile money providers can make a profit serving poor customers, just as brick-and-mortar banks do serving the wealthy.

Once these services get going, then there will be competitive innovation in offerings like special savings or credit plans related to farming or education (Gates, 2015).

In simple words, we can say that Bank is a financial institution that undertakes the banking activity ie.it accepts deposits and then lends the same to earn certain profit (Goyal, 2016).
Banks provide their customers with a number of services. With a checking account you can pay your bills. A check is a slip of paper that tells the bank how much money it should withdraw from your account and pay to someone else. Today, more and more people use the internet, also a banking service, to pay their bills. Banks also give their customers plastic cards with which they can get money from their account everywhere and whenever they want. They can also use them to pay without cash at shops, gas stations and other stores. Checking accounts are a comfortable way for customers to handle their money (English Online, 2016).

Modern banks offer their customers many other services as well. They tell them how they can make money with investments in stocks and bonds. Credit cards are given to customers as a cash free way of buying things. Almost all banks have automatic teller machines (ATM) at which customers receive money from their account. Telephone banking is an easy way to pay your bills by calling a special telephone number and typing in a certain sequence of digits. Some banks even deal with insurance (English Online, 2016).

As behemoth banks and mammoth mobile carriers consider the next generation of service offerings, mobile banking occupies the focal point of growth strategies in both industries. Indeed, the ability to fit a financial institution on a cell phone and place it in the pockets of future users is an exciting idea. The notion, however, beckons images of elephants and hippos trying to tango gracefully and begs a legitimate question: could such huge institutions avoid each other’s toes in the marketplace? Cross-industry convergence is propelling these two big players, endowed with different capabilities and business models into the mobile banking arena. Confronted with a spectrum of partnering options, from go-it-alone strategies to exclusive and open partnerships, banks and mobile carriers need to evaluate the optimal partnering model that will allow them to rapidly achieve critical mass and brand leadership (Goswami & Raghavendran, 2009).

Cross-industry convergence between banks and mobile providers can transform existing businesses and generate compelling new services to end-users. While each partnering model has some merits, banks-going-solo and open federations are the most probable options for achieving a critical mass of customers and providing compelling services. In the long run, banks and mobile providers, despite their size and their operational differences, must learn to interact.
While this sometimes seems as intuitive as elephants and hippos engaging in a graceful tango, open federation provides a conducive environment for innovating, reducing costs, and achieving dominance in the mobile-banking space (Goswami & Raghavendran, 2009).

Mobile banking has been defined as an interaction in which a customer is connected to a bank via a mobile device such as cell phone, Smartphone or personal digital assistant. (Laukkanen & Kiviniemi, 2010).

Mobile banking is defined as the delivery of financial services through mobile devices such as a mobile phone. It is effectively a channel whereby a customer interacts with a bank via a mobile device notably the mobile phone. It depicts the ultimate convergence of mobile technology and the broader range of banking services such as account-based savings or credit facilities (Tobbin, 2012).

Mobile services and their consumption have lately become a burning issue among information systems (IS) and marketing scholars. At the same time many service providers are making substantial investments to take advantage of the business opportunities offered by wireless technology. It seems that delivering value-added mobile services to customers is becoming increasingly important in gaining a competitive edge in the marketplace. In the financial services sector, for example, mobile banking represents an additional service for certain occasions adding the element of true mobility to internet banking used over fixed networks (Laukkanen & Kiviniemi, 2010).

According to (Laukkanen & Kiviniemi, 2010) it has been argued that whereas today internet banking services provide huge economic benefits for the banks, mobile services serve rather as a way to offer customers value added. The value of mobile banking for consumers is in its immediate location-free access to banking services enabling time savings, real-time information, and enhanced feelings of control.

The services today enable bank customers, for example, to request their account balance and the latest transactions of their accounts, to transfer funds between accounts, to make buy and sell orders on the stock exchange and to receive portfolio and price information.

However, while internet banking innovation has diffused well in many countries and recent studies indicate high user satisfaction it appears that a number of consumers are not yet willing to adopt or frequently use mobile banking services (Laukkanen & Kiviniemi, 2010).
Initiatives to increase customers’ banking convenience, financial services companies are launching banking services also through a mobile network. This service, called mobile banking, has been defined as a way of executing financial services through the use of mobile communications technology (Pousttchi and Schurig, 2004).

2.2.1 Accepting Deposits

Accepting deposit from savers or account holders is the primary function of bank. Banks accept deposit from those who can save money, but cannot utilize in profitable sectors. People prefer to deposit their savings in a bank because by doing so, they earn interest.

2.2.2 Advancing of Loans

Banks are profit oriented business organizations. So they have to advance loan to public and generate interest from them as profit. After keeping certain cash reserves, banks provide short-term, medium-term and long-term loans to needy borrowers.

2.2.3 Discounting of bill of exchange

Bill of exchange is a negotiable instrument, which is accepted by the debtor, drawn upon him/her by the creditor and agrees to pay the amount mentioned on maturity. Discounting bill of exchange is another function of modern commercial bank.

Under this, banks purchase bill of exchange from holder in discount after making some marginal deduction in the form of commission. The banks pay the deducted value to the holders when traders discount it into bank.

2.2.4 Cheque Payments

Banks provide cheque pads to the account holders. Account holders can draw cheque upon bank to pay money. Banks pay for cheques of customers after formal verification and official procedures.

2.2.5 Enabling of funds remittance

Remittance is a system, through which cash fund is transferred from one place to another. Banks provide the facilities of remittance to the customers and earn some service charge. Mobile banking now allows individuals to send funds to other people without having to visit a branch.
2.2.6 Collection and Payment of Credit Instruments

In modern business, different types of credit instruments such as bill of exchange, promissory notes, cheques etc. are used. Banks deal with such instruments. Modern banks collect and pay different types of credit instruments as the representative of the customers.

2.2.7 Foreign Currency Exchange

Banks deal with foreign currencies. As the requirement of customers, banks exchange foreign currencies with local currencies, which is essential to settle down the dues in the international trade.

2.2.8 Consultancy

Modern commercial banks are large organizations. They can expand their function to consultancy business. In this function, banks hire financial, legal and market experts, who provide advices to customers in regarding investment, industry, trade, income, tax etc.

2.2.9 Bank Guarantee

Customers are provided the facility of bank guarantee by modern commercial banks. When customers have to deposit certain fund in governmental offices or courts for specific purpose, bank can present itself as the guarantee for the customer, instead of depositing fund by customers (Account Learning, 2013).

With Mobile Banking, you can carry out many everyday banking tasks while you’re out and about. The app allows you to carry out the main tasks that you use Internet Banking for, such as:

Checking your balances on your UK personal accounts, Transferring funds between your eligible accounts, Pay people and bills and pay your phone contacts using just their mobile number, View full transaction histories, pending debit card transactions, cheques being processed and one off pending payments, managing your direct debits and standing orders, finding your nearest Bank of Scotland branch or ATM. If you’re new to banking on the move, please don’t worry. Using the app is easy and secure (Bank of Scotland).

As for CfC Stanbic bank the mobile banking services gives you the below functions. Through the mobile one can also access the internet banking which allows one to do more or less the same things but through the laptop or personal computer.
Single step direct M-PESA payments to any destination; this means one can then access their accounts and use Mpesa to transfer funds to different beneficiaries.

2.2.10 Internal funds transfer
This means a customer can transfer funds to other beneficiaries who have accounts in the same bank.

2.2.11 Real-time bill payment
This means one can send funds to make payments like DTSV from their account through the mobile services.

2.2.12 Bank transfers within Kenya
This means one can make local payments from their account.

2.2.13 Salary advance services for pre-qualified customers
This means one can receive their salary advances on their mobile phones. This enables them to save on transaction fees if they then had to go to their banks to access these funds. This also saves time and money required to go to a branch which in many cases is far from where one lives.

2.2.14 Monitor your account activity
This is where one has access to information about their account. It answers questions like what is my balance, what payments have been made? What funds have been received?

2.2.15 Airtime Top up
A customer can top up their credit on their mobile by accessing their account and also through MPESA which is a mobile service.

2.3 Mobile banking on accessing loans
Almost 80 per cent of people with cell phones use them for mobile payment and banking and three quarters of the people in Kenya own cell phones, primarily through the M-Pesa system. Half of all mobile money transactions in the world take place in Kenya, where annual transfers have reached $10 billion. This rapid adoption was spurred by the invention of M-Pesa, which was created in 2007 by Safaricom, Kenya's leading mobile service provider.
According to Calestous Juma, the idea of mobile banking was born in Kenya, the director of the science, technology, and globalization department at Harvard and a recognized authority on technology and development in Africa. Africans did not invent mobile phones, but they invented a new way of using mobile phones, which is for money transfer.

The success of M-Pesa is a combination of many reasons, including the domination of Safaricom in the mobile market and the high rates of families sending money home to Kenya from abroad. One study from the University of Edinburgh showed that rural households saw their income increase anywhere from 5 per cent to 30 per cent when they used M-Pesa. (Gilpin, 2014)

There are also several spin offs of the M-Pesa system in Kenya, including:

2.3.1 Lipa Na M-Pesa

Allows people to pay their fares for the Matatu public transportation service with mobile devices instead of cash. The plan was announced at the end of last year. It is competing with Google’s Beba Pay, an electronic card compatible with several bus systems, and Kenya Bus Abiria Card, a prepaid card for transportation fares.

2.3.2 Lipa Karo

Allows customers to pay for school fees through mobile phones by depositing money through one of the outlets and sending it to the school administrators via a specific code. There is also a reduced risk of theft since the school does not handle the cash.

2.3.3 Lipa Kodi

This is a service that lets Kenyans manage and pay rent through mobile transactions among banks, landlords, tenants, and homeowners.

2.3.4 M-Shwari

A partnership between Safaricom and the Central Bank of Africa. It allows customers to take out loans and save money on their mobile phones through a mobile banking system. The program has had success since its launch in 2012, boosting the number of bank accounts in Kenya.

Diaspora remittances were most recently added to the list of Safaricom’s services. The company partnered with Skrill, a UK-based online payment company. All the customer
needs is a full name and M-Pesa account number to transfer money back home to family or friends in Kenya. Skrill charges a 1 percent fee for each transfer. Kenya diaspora inflows rose 10 percent in 2013 to $1.3 billion. (Gilpin, 2014) One has access to money from their account any time whether the bank is open or not. This helps one save on time and the cost of travelling to your branch plus the hustle of queuing.

Since the service is accessed through your mobile phone, it lowers the risk associated with handling cash. You can use the cash withdrawn to pay utility bills, pay for purchases and for money transfer. This makes Bank to M-PESA very convenient in emergency situations. This service is available to M-PESA registered customers through the PayBill functionality on the M-PESA menu and Via USSD for Bank to M-PESA

Traditional banks cannot afford to serve the poor because of their costs. That's why 2.5 billion adults don't currently have a bank account. In villages where people borrow or save in tiny denominations, building and maintaining a bank branch just doesn't make sense. And when most people think about financial services specifically for the poor, they think of microcredit, such as small loans to businesswomen in poor countries. Indeed, small loans have helped millions of people, but loans are only one of the financial services the poor need, interest rates are relatively high, and these services have reached only a small fraction of the poorest (Gates, 2015).

A global explosion in the use of electronic commerce has been witnessed in recent times with the monetary value of products and services exchanged electronically being estimated at above US$ 7 trillion in the year 2004. Research has followed the same pattern especially in investigating factors influencing the adoption and effectiveness of e-commerce in retail businesses. However, little has been done to establish these factors in electronic banking (e-banking) in developing countries (Gikandia & Bloor, 2010).

According to an annual report by Central Bank of Kenya (CBK), its adoption and usage has been surpassed by mobile banking (Mbanking) in the last few years (Kenya(CBK), 2008). Currently, there are about 8 million users of M-banking services compared to 4 million people who hold accounts in conventional financial institutions in Kenya (Kenya(CBK), 2008). The tremendous increase in number of people adopting M-banking has been attributed to ease of use and high number of mobile phone users. This is consistent with the theory of consumer choice and demand as conceptualized in (Kauffman, 2008) in relation to mobile payments. Based on their observation, customers
can choose to adopt a particular banking technology such as M-banking, perceived to offer such advantages as ease of use (Gikandia & Bloor, 2010).

A total of 13 million Kenyans own a mobile phone, out of which 73% have used mobile banking services (Parliament, 2008) Mobile phone providers have formed partnerships with banks and non-financial institutions to offer financial-related mobile services which reduce the need to have wide Internet coverage in Kenya. This also explains the downward shift in importance for the difficulty of using online banking by some customers and pricing of Internet services since the burden has shifted to the service provider rather than the banks (Gikandia & Bloor, 2010).

(Thorton & White, 2001) Compared several electronic distribution channels available for banks in US and concluded that customer orientation – towards convenience, service, technology, change, knowledge about computing and the Internet – affected the usage of different channels. Convenience of conducting banking outside the branch official opening hours has been found significant in cases of adoption. Banks provide customers convenient, inexpensive access to the bank 24 hours a day and seven days a week (Moutinho, Davies, Deng, Miguel, & Alcaniz, 1997) pointed out that each ATM could carry out the same, essentially routine, transactions as do human tellers in branch offices, but at half the cost and with a four-to-one advantage in productivity.

The rapid advancement in electronic distribution channels has produced tremendous changes in the financial industry in recent years, with an increasing rate of change in technology, competition among players and consumer needs (Hughes, 2001) Increasing competition among banks and from non-bank financial institutions also raises concerns as to why some people adopt one distributional channel and others do not, and identifying the factors that may influence this decision is vital for service providers (Kaleem & Ahmad, April 2008).

Mobile banking apps have greatly transformed how Kenyans access loans, and consumers no longer need to fill out lengthy forms, pledge collateral or undergo vetting by a mean-looking credit officer. Take the example of Branch, a Facebook-linked mobile application that allows users to borrow and repay micro-loans via mobile money platform M-Pesa. In March, it received $9.2 million in equity funding to help grow its loan book. The Android app awards users a credit score by remotely analyzing information such as calling patterns, mobile money transactions and Facebook behavior (Herbling, 2016)
2.4 How Mobile banking helps on accessing savings and building a savings culture

The poor use financial services that are extremely inefficient. They save by hiding cash around the house or buying commodities that lose value over time. When they send money to friends and relatives to help them through tough times, they either take a day off and deliver the cash themselves or trust someone else to do it for them. If they need to borrow money for an emergency, they have to pay usurious interest rates to a moneylender. Not having access to a range of cheap and easy financial services makes it much more difficult to be poor. In the next 15 years, digital banking will give the poor more control over their assets and help them transform their lives (Gates, 2015).

Much emphasis the role of culture when transferring information technology applications across culture, before any technology transfer, it is necessary to study user requirements and needs. Those needs and requirement are heavily influenced by culture. Hence, there is a need to explore the role of national culture as one of the factors that is likely to influence the acceptance or resistance of electronic banking services (Al-Smadi, September 2012).

The relatively high prevalence of mobile phone and Smartphone use among younger generations, minorities, and those with low levels of income groups that are more likely to be unbanked or under banked makes mobile phones a potential platform for expanding financial access and inclusion. As the use of mobile banking increases, mobile phones are increasingly becoming tools for managing personal finances and controlling spending. As smart phones become more common and more versatile, they can play an increasingly large role in the interactions between consumers and financial service providers, retailers, and other businesses. Paying bills online and making online or in-app purchases are the most common mobile payment activities, followed by making a POS payment (Board, March 2015).

The key to this will be mobile phones. Already, in the developing countries with the right regulatory framework, people are storing money digitally on their phones and using their phones to make purchases, as if they were debit cards. By 2030, 2 billion people who don't have a bank account today will be storing money and making payment with their phones. And by then, mobile money providers will be offering the full range of financial services, from interest-bearing savings accounts to credit to insurance (Gates, 2015).
There is no generally accepted definition for culture. One can define culture as the collective programming of the mind which distinguishes the member of one human group from another. Culture can also refer to the variation between values, beliefs and motivation of a diverse group (Al-Smadi, September 2012).

Electronic banking enhances the development of the banking system, and it is considered as a strategic weapon for banks. Although it provides various benefits for both banks and customers, low level of customers' adoption of electronic banking services is noted. However, electronic banking services cannot achieve expected benefits if it is not used by banking customers (Al-Smadi, September 2012).

Electronic banking has enabled customers to carry out a number of financial transactions from many different locations with just a few clicks. E-banking helps in reducing costs by providing financial services cheaper and faster with less staff. Electronic banking has created variety for customers. Customers can choose the time, place, the products they want and the method by which they want to use to access the service or product. Electronic banking has become significantly popular, employed by making financial institutions to reduce costs associated with having personnel to serve customers physically. Electronic banking can help banks achieve competitive advantage. The internet is therefore a critical medium which offers the bank competitive advantage in sustaining the future growth and profitability level of the bank (Asare & Sakoe, 2015).

For people who want to save money banks offer savings accounts. Usually, banks pay more interest for savings accounts than they do for chequing accounts. They hope that the customers will leave their money in the bank for a long time, which is why the bank can work with this money and offer it as loans. Banks, however, cannot give all of their money as loans. In most countries the government limits the amount of money that banks can use as loans. They must always keep back a certain percentage in the form of cash.

People who need money for certain things like buying a house or a car need a lot of money quickly. The money they borrow from a bank is called a loan. In most cases they do not pay back all of the money at once but a small part of it, with interest, every month. If someone cannot pay back a loan the bank usually can take away valuable objects like cars or houses (Account Learning, 2013).

Savings can be an important buffer for times of financial emergency but young people are not saving enough to protect themselves during these periods, people claim influences
their saving behavior. The key influences to emerge were: affordability: the rising cost of living has made it difficult to put money aside spending and saving priorities: young people often want to save but feel pressured to take on debt and to spend family: parents can ingrain good saving habits in their children from a very young age and are the main source of financial advice for young adults products: savings vehicles can be designed in ways that encourage saving (Dolphin, 2012).

What we call access to finance approach recognizes that there is no difference in savings cultures and places emphasis on the lack of ‘savings instruments’ available to the poorer sections of society that impedes a willingness to save. This approach focuses on the cost of saving instruments provided by the formal financial market, and on the need to include into the formal financial market (Positive analysis is economic terminology for studying how economic processes work whereas normative economics is concerned with how the economy ought to be run (Black, 2002).

The importance of savings and investment cannot be overemphasized if there must be improvement in the standard of living of the people. The more cash you have coming in, the more options you have in terms of life style, ability to weather an emergency or economic downturn, and to build a war chest for future investment or business opportunities. Savings and investments guarantee your future. No matter how small is your income, you must learn to save to be able to mobilize capital towards financing investment. Whatever form of investment one contemplates, it is very important to assess the risk-return trade off of such investment either in real assets, financial assets, or foreign exchange. Savings and investments must be our life style to escape the poverty trap (Imegi, 2002).

Saving a play a prominent role in economic development, especially in emerging and developed countries characterized by high rates of saving. Cultural factors as well have a major role in determining savings behavior in different societies, where developed and advanced societies highly regard the concept of saving as well established social value, contrary to what is prevalent in many other societies.
2.5 Chapter summary

In this chapter I seek to understand further the place of mobile banking in enabling persons to access their banking services. One then needs to understand how mobile banking has affected customers banking needs from what services they receive through the mobile to their ability to access loans and advances on their phones and finally how the mobile banking users are able to save and consequently build a savings culture.

Mobile banking have revolutionized the banking industry and many who did not enjoy banking services are now able to enjoy with the help of the mobile phone. I seek to understand the services the banking services they are now enjoying and how this has enables them to have a relationship with their bank.

Many people were previously not able to access loans and advances however this has been made possible with the use of Mshwari which is a platform that allows one to get short term loans in conjunction with Commercial bank of Africa and Safaricom on the back of ones Mpesa transactions and activity.

In the next chapter we look to see how this study will be carried out and information put together. What kind of methodology will suit this study in an effort to get information in relation to this study?
CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

In this chapter I am looking to further look into how to gather data in relation to my research questions as stipulated in chapter one and two. The chapter will further look into research design method where I will be looking at a descriptive research design which represents an approach to examining a research problem. This design encompasses looking at quantitative methods. The population will be picked out from Master of Business Administration student in United States University-Africa. These students attend evening classes and have a higher likely hood of having access to mobile banking services.

3.2 Research design

According to Mouton (2011) a research design is a blueprint showing the systematic, methodological and accurate execution of collection and analyzing data. A research design enhances the validity and reliability of the research and according to (Collis & Hussey, 2009) states that the findings should be accurately reflected in the topic of study thus validity.

According to, B, D.R., & Schindler (2008) research design is the strategy one would use in an effort to answer the research questions asked by the researcher. This can be said to be a blue printing for data collection and analysis. In this study I have used descriptive research design which is a design meant to give an explanation which are of course are associated with a subject in a sample derived from a population. This research design was best suited for the study as it sought to understand the role of mobile banking in provision of personal banking services (Leedy & Ormrod, 2001).

The Quantitative data collection methods rely on random sampling and structured data collection instruments that fit diverse experiences into predetermined response categories. They produce results that are easy to summarize, compare, and generalize. Quantitative research is concerned with testing hypotheses derived from theory and/or being able to estimate the size of a phenomenon of interest. Depending on the research question, participants may be randomly assigned to different treatments. If this is not feasible, the
researcher may collect data on participant and situational characteristics in order to statistically control for their influence on the dependent, or outcome, variable.

If the intent is to generalize from the research participants to a larger population, the researcher will employ probability sampling to select participants.

In Quantitative research (survey research), interviews are more structured than in Qualitative research. (Leedy & Ormrod, 2001) In a structured interview, the researcher asks a standard set of questions and nothing more.

3.3 Population size and sampling design

3.3.1 Population

A study population is that aggregate of elements from which the sample is selected (Babbie, 2005).

This study focuses on the individuals who are using mobile banking services to interact with their banks. Therefore anyone who is using a mobile banking service no matter their bank is eligible. Currently there are 44 licensed banks in Kenya and put of which approximately less than ten have mobile banking services.

3.3.2 Sampling design

Sampling is a process of selecting subjects from a population for the purpose of drawing conclusions or making inferences about the population under study (Descombe, 2014).

Sampling design on the other hand refers to a working plan that provides details about the population frame, sample size and sample selection procedure to make explicit the characteristic of the population (Copper & Schindler, 2005).

This study will seek to use simple random sampling refers to a sampling method that has the following properties. The population consists of N objects. The sample consists of n objects. All possible samples of n objects are equally likely to occur. An important benefit of simple random sampling is that it allows researchers to use statistical methods to analyze sample results.

Simple random sampling is the basic sampling technique where we select a group of subjects (a sample) for study from a larger group (a population). Each individual is chosen entirely by chance and each member of the population has an equal chance of
being included in the sample. Every possible sample of a given size has the same chance of selection (Easton & McColls, 1997-98).

### 3.3.2.1 Sampling frame

A sampling frame refers to the list of elements which the sample is drawn and contains all the representative elements in the population selected for the study. (Copper & Schindler, 2005) This study will use a sampling list which will be made of the masters of business students. Further to this (B, D.R., & Schindler, 2008) says that a sampling frame represents a list of elements from which a sample is actually drawn.

### 3.3.2.2 Sampling Technique

This study used simple random sampling which refers to a sampling method that has the following properties. The population consists of N objects. The sample consists of n objects. All possible samples of n objects are equally likely to occur. An important benefit of simple random sampling is that it allows researchers to use statistical methods to analyze sample results.

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### 3.3.2.3 Sample size

A sample size of 10% of the population size is recommended as an adequate sample (Mugenda & Mugenda, 2003)

Sample size is the actual number of respondents that would be representative of the population in the study and this should be large and should be proportionate of the size of the population. Sample size is determined by level of precision, the level of confidence and the degree of variability in the variables being measured.

### 3.4 Data collection methods

Data collection can be said to be the process of gathering and measuring information on variables of interest in an established and systematic fashion that enables one to answer stated questions, test hypothesis and evaluate outcomes. In order to gather the information
in relation to the three questions I shall need to incorporate data collection techniques. For this research projection I shall use questionnaires incorporating quantitative techniques.

As for questionnaires, paper-pencil-questionnaires can be sent to a large number of people and saves the researcher time and money. People are more truthful while responding to the questionnaires regarding controversial issues in particular due to the fact that their responses are anonymous. But they also have drawbacks. Majority of the people who receive questionnaires don't return them and those who do might not be representative of the originally selected sample (Leedy & Ormrod, 2001).

Questionnaires often make use of Checklist and rating scales. These devices help simplify and quantify people's behaviors and attitudes. A checklist is a list of behaviors, characteristics or other entities that the researcher is looking for. Either the researcher or survey participant simply checks whether each item on the list is observed, present or true or vice versa. A rating scale is more useful when a behavior needs to be evaluated on a continuum. They are also known as Likert scales (Leedy & Ormrod, 2001).

3.5 Research procedures

The research procedure will entail preparation of data collection tools, also involve briefing of a research assistant who will assist in data collection and actual distribution of the data collection tools.

The researcher should also look to conduct a pilot test. This is will assist to analyze the questions thus determining if the questions are well framed, not ambiguous or leading. This also will assist the researcher to analyze the time it takes to fill in the questionnaire and address the validity of the questions given. Overall this enables the researcher to fine tune the questionnaire. Different research designs have different research procedures. Descriptive research design provokes the why question (De Vaus 2001). Descriptive designs tend to provoke the explanatory research.

The questionnaires will be distributed through emails as well as hand and follow up will be done through telephone calls. Completion of the questionnaire will take an average of twenty minutes for each respondent who will be guided by the research or research assistants. The research assistants overseeing the exercise will help with the data entry.
3.6 Data analysis methods

This study will make use of the quantitative method of the descriptive method of data analysis. This will ensure that the data concerned can be represented visually and in narrative form. This will include use of measures of central tendency that is mean mode and median. The analysis will include frequency distribution tables, charts and graphs. The researcher will also use Statistical Package for Social Sciences (SPSS) and excel as tools to assist in analyzing the data collected.

3.7 Chapter summary

This Chapter presents the research methodology that will be used for this study. It covers the research design population, sampling, data collection methods, and research procedures and data analysis methods. The key instrument for collecting data was the questionnaires which were majorly administered through emails and by hand. The research methodology was keenly designed to enhance the efficiency objectivity and accuracy of the findings. The next chapter will look to now give the results of the finds from the method stipulated in chapter three.
CHAPTER FOUR

4.0 RESULTS AND FINDINGS

4.1 Introduction

This chapter presents the analyzed results and finding on the raw collected in the field. This raw data was in the form of questionnaires that were answered by respondents. The data was analyzed and presented in the form of tables and pie charts. The first section covers the background information of the respondents whose information represents the response rate as well as the demographics. The second section deals with how mobile banking enables one to access personal banking services. The third section deals with how mobile banking enables one to access loans. The fourth section looks at how mobile banking assists with building a savings culture.

4.2 Background information.

This section covers the background information on the respondents used in the study. The information includes the respondent’s gender, the banks the respondents use, if these banks offer mobile banking and how long they have used mobile banking.

4.2.1 Response rate.

This section shows how many of the targeted respondents participated in the study. The table below shows this information. The targeted sample population was 50 respondents. Out of this target 49 people responded which constitutes 98% while one person did not respond which constitutes 2%.

Table 4.1 Response Rate

<table>
<thead>
<tr>
<th>Sample respondents</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responded</td>
<td>49</td>
<td>98%</td>
</tr>
<tr>
<td>Did not respond</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100%</td>
</tr>
</tbody>
</table>
4.2.2 Number of years worked.

The table below shows the length of years worked by the respondents. This goes to relate the respondents work life with the use of mobile banking. Out of the 49 respondents only 45 had valid information.

**Table 4.2 Number of years worked**

<table>
<thead>
<tr>
<th>Years worked</th>
<th>Frequency</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 years</td>
<td>9</td>
<td>20.00%</td>
</tr>
<tr>
<td>1 years</td>
<td>3</td>
<td>6.70%</td>
</tr>
<tr>
<td>2 years</td>
<td>4</td>
<td>8.90%</td>
</tr>
<tr>
<td>3 years</td>
<td>3</td>
<td>6.70%</td>
</tr>
<tr>
<td>4 years</td>
<td>4</td>
<td>8.90%</td>
</tr>
<tr>
<td>5 years</td>
<td>4</td>
<td>8.90%</td>
</tr>
<tr>
<td>6 years</td>
<td>5</td>
<td>11.10%</td>
</tr>
<tr>
<td>7 years</td>
<td>2</td>
<td>4.40%</td>
</tr>
<tr>
<td>10 years</td>
<td>5</td>
<td>11.10%</td>
</tr>
<tr>
<td>11 years</td>
<td>2</td>
<td>4.40%</td>
</tr>
<tr>
<td>12 years</td>
<td>1</td>
<td>2.20%</td>
</tr>
<tr>
<td>13 years</td>
<td>1</td>
<td>2.20%</td>
</tr>
<tr>
<td>20 years</td>
<td>2</td>
<td>4.40%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>45</strong></td>
<td><strong>100.00%</strong></td>
</tr>
</tbody>
</table>

**Figure 4.1 Years Worked**

91% of respondents had worked less than 11 years. 20.4% of the respondents had worked for less than one year.
4.2.3 Gender of the respondents

The table below shows the total number of the respondents as well as the gender distribution who participated in the study. The chart and table shows that the majority of the respondents were male who comprised of 61.2% of the sample population while the female respondents comprised of 38.8% of the population. The information depicted below shows that there were more male respondents in USIU than there were female.

Table 4.3 Gender of respondents

<table>
<thead>
<tr>
<th>Sample respondents</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>30</td>
<td>61.20%</td>
</tr>
<tr>
<td>Female</td>
<td>19</td>
<td>38.80%</td>
</tr>
<tr>
<td>Total</td>
<td>49</td>
<td>100%</td>
</tr>
</tbody>
</table>

4.2.4 The banks used by the respondents.

The banks with the highest users of mobile banking came from Barclays which had 22.4% Co-op bank with 26.5% and KCB which had 20.4%. This goes to show which banks have the higher market share in the sector.

Table 4.4 Banks Used.

<table>
<thead>
<tr>
<th>Banks</th>
<th>Frequency</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barclays</td>
<td>11</td>
<td>22.40%</td>
</tr>
<tr>
<td>Equity</td>
<td>3</td>
<td>6.10%</td>
</tr>
<tr>
<td>CfC</td>
<td>2</td>
<td>4.10%</td>
</tr>
<tr>
<td>Co-op</td>
<td>13</td>
<td>26.50%</td>
</tr>
<tr>
<td>NIC</td>
<td>1</td>
<td>2.00%</td>
</tr>
<tr>
<td>Standard chartered</td>
<td>4</td>
<td>8.20%</td>
</tr>
<tr>
<td>KCB</td>
<td>10</td>
<td>20.40%</td>
</tr>
<tr>
<td>Chase</td>
<td>3</td>
<td>6.10%</td>
</tr>
<tr>
<td>DTB</td>
<td>1</td>
<td>2.00%</td>
</tr>
<tr>
<td>None</td>
<td>1</td>
<td>2.00%</td>
</tr>
<tr>
<td>Total</td>
<td>49</td>
<td>100%</td>
</tr>
</tbody>
</table>
4.2.5 Do the banks offer mobile banking?

Table 4.5 Banks Offering mobile Banking

<table>
<thead>
<tr>
<th>Mobile banking</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>48</td>
<td>98%</td>
</tr>
<tr>
<td>No</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>Total</td>
<td>49</td>
<td>100%</td>
</tr>
</tbody>
</table>

98% of the respondents advised that their banks offer mobile banking while 2% said that their bank does not offer mobile banking services.

4.2.6 Period of usage of mobile banking services

Mobile banking use had a mean if 2.4 median of 2.0 and standard deviation of 1.26. 32.7% have used mobile banking for between 0-6months and 32.7% respondents have used mobile banking for 18months and above. Also to note is that 18.4% have used mobile banking for 6-12months and 16.3% have used Mobile banking fir 12-18months.

Table 4.6 Period of Usage

<table>
<thead>
<tr>
<th>Period</th>
<th>Frequency</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-6 months</td>
<td>16</td>
<td>32.70%</td>
</tr>
<tr>
<td>6-12months</td>
<td>9</td>
<td>18.40%</td>
</tr>
<tr>
<td>12-18months</td>
<td>8</td>
<td>16.30%</td>
</tr>
<tr>
<td>18 and above</td>
<td>16</td>
<td>32.70%</td>
</tr>
<tr>
<td>Total</td>
<td>49</td>
<td>100%</td>
</tr>
</tbody>
</table>
The first objective of this study was to understand how mobile banking enables persons to access personal banking services. This relates to how mobile banking has enabled people to be able to transact with the bank and day to day banking needs met.

### 4.3.1 Cash Withdrawal

37.5% of the respondents frequently use mobile banking to withdraw cash while 25.0% do not use mobile banking to withdraw cash from mobile banking.
4.3.2 Cash deposit

33.3% of the respondents have not used mobile banking to deposit cash only 6.3% very frequently use mobile banking to deposit funds into their account.

![Bar chart showing cash deposit frequency]

Figure 4.4 Cash Deposit

4.3.3 Intra-Bank Transactions

50% do not use mobile banking for intra-bank transactions however 6.3% of the respondents use mobile banking very frequently for intra-bank transactions.

![Bar chart showing intra-bank usage frequency]

Figure 4.5 Intra-Bank Usage
4.3.4 Inter-Bank Transaction

57.4% of the respondents do not use mobile banking to do inter-bank transactions while 4.3% very frequently use mobile banking to do inter-bank transactions.

![Figure 4.6 Inter-Bank Transactions](image)

4.3.5 Paying Utility Bills

34% of the respondents do not use mobile banking to pay utility bills while 23.4% very frequently use mobile banking to pay for utility bills.

![Figure 4.7 Utility Bills Transaction](image)
4.3.6 Account Status Confirmation

35.4% of the respondents do not use mobile banking for transaction status confirmation while 22.9% very frequently use mobile banking to receive confirmation on their transactions.

![Figure 4.8 Account Status Confirmations](image1)

4.3.7 Checking account balances

32.6% of the respondents do not use mobile banking to check their account balances however 28.3% of the respondents very frequently use mobile banking to check for their account balance.

![Figure 4.9 Account Balances Transaction](image2)
4.4 Mobile banking on access to loans

The second objective of this study was to understand if mobile banking enables persons to access loans. This relates to how mobile banking has enabled people to be able to access funds for their businesses and projects.

4.4.1 Ability to access loans

49 respondents advised if they use mobile banking to access loans through their bank. This was distributed with a mean of 1.61 standard deviation of 1.15. However 73.5% did not have the ability to use mobile banking to access loans through their banks while 4.1% very frequently did have the ability to access loans through mobile banking.

4.4.2 If Banks Offer Loans through Mobile Banking

48 respondents advised if their banks offered loan through mobile banking. This was distributed with a mean of 2.3 standard deviation of 1.58 while 47.9% of the respondents did not access loans through their bank and 10.4% very rarely used mobile banking to access loans.

![Loan Offers on Mobile Banking](image_url)

**Figure 4.10 Loan Offers on Mobile Banking**
4.4.3 Preference to Accessing Loans on Mobile Banking

48 respondents advised if they would prefer to access loans through their mobile banking, this was distributed with a mean of 2.6 and standard deviation of 1.63. 41.7% did not prefer to access loans through their mobile phone while 10.4% would very rarely access loans through their mobile.

Figure 4.11 Preference to Accessing Loans on Mobile Banking

4.4.4 Rate of Access to Loans through Mobile Banking

49 respondents advised on the how frequently they would use mobile banking to access loans. This was distributed with a mean of 2.2 and standard deviation of 1.35. This shows that 46.9% would not frequently use mobile to access loans while 6.1% would very frequently use mobile banking to access loans.

Figure 4.12 Rate of Access to Loans through Mobile Banking
4.4.5 Use of Mpesa to Access to Loans through Mobile Banking

49 respondents advised if they sue Mpesa to access loans through their bank. This was distributed with a mean of 2.1 and standard deviation of 1.6. This shows 63.3% not use Mpesa to access loans through their mobile banking platform while 16.3% very frequently used Mpesa to access loans through their mobile banking platforms.

![Figure 4.13 Use of Mpesa to Access to Loans through Mobile Banking](image1)

4.4.6 Use of Mshwari to Access to Loans through Mobile Banking

49 respondents advised if they use Mshwari to access loans through their mobile banking platforms and this was distributed with a mean of 2.2 and standard deviation of 1.6. The result therein was that 61.2% do not use Mshwari to access loans through their mobile banking platforms while 12.2% very frequently used Mshwari to access loans.

![Figure 4.14 Use of Mshwari to Access to Loans through Mobile Banking](image2)
4.5 Mobile banking on savings
The third objective of this study was to understand if mobile banking enables persons to build savings. This relates to how mobile banking has enabled people to be able to save funds for their businesses and projects.

4.5.1 Mobile Banking and Building Savings
All 49 valid respondent’s standard deviation of 1.569 mean of 2.4. This showed that 44.9% do not use mobile banking for purposes of savings while and 16.3% very frequently use mobile banking for purposes of savings.

Figure 4.15 Mobile Banking and Building Savings

4.5.2 Mobile Banking and Access to Savings
All 49 respondent’s advised if they have access to savings. This was distributed with a mean of 2.4 and standard deviation of 1.55. 32.7% do not use mobile banking to access savings in their banks while 18.4% very frequently used mobile banking to access their savings in the bank.

Figure 4.16 Mobile Banking and Access to Savings
4.5.3 Mobile Banking and Ability to Save

All 49 respondents advised if they are able to save due to use of mobile banking in their day to day lives. This was distributed with a mean of 2.7 and standard deviation of 1.45. Therefore 30.6% do not see mobile banking as a tool that enables them to save while 14.6% very frequently see mobile banking as a tool to enable them to save.

![Figure 4.17 Mobile Banking and Ability to Save](image)

4.5.4 Mobile Banking and Motivation to Save

All 49 respondents advised if mobile banking motivated them to save and this was distributed with a mean of 2.6 and a standard deviation of 1.46. This revealed that 32.7% do not get motivated to save by using mobile banking while 12.2% very frequently get motivated to use mobile banking to save.
Figure 4.18 Mobile Banking and Motivation to Save

4.5.5 Use of Mpesa to Access Savings

All 49 respondents advised if they use Mpesa to save, this was distributed with a mean of 2.6 and standard deviation of 1.63. The respondents advised that 44.9% do not use Mpesa to access or save their money while 18.4% very frequently used Mpesa to access or save their money.

Figure 4.19 Use of Mpesa to Access Savings

4.5.6 Use of Mshwari to Access Savings

All 49 respondents advised if they use Mshwari to access their savings, this was distributed with a mean of 2.1 and a standard deviation of 1.60. This showed that 59.2% do not use Mshwari to access savings while 16.3% very frequently used Mshwari to access their savings.
Chapter four has provided the results and findings from the analysis of the data derived from the questionnaires answered by the respondents. The first section covers the background information on the respondents used in the study. The information includes the respondent’s gender, the banks the respondents use, if these banks offer mobile banking and how long they have used mobile banking. The second section covers the first objective of this study which was to understand how mobile banking enables persons to access personal banking services. The third section covers the second objective of this study which was to understand if mobile banking enables persons to access loans. The last section covers the third objective of the study which was to understand if mobile banking enables persons to build savings.
CHAPTER FIVE

5.0 SUMMARY, DISCUSSION, CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter presents the summary discussions, conclusions and recommendations by the researcher on the study. This chapter is divided into three main parts. The summary discussion section covers the purpose of the study, the research questions, the research methodology and lastly the findings of the research.

The second sections covers the conclusion based on the research findings on the specific research questions and the final section covers the recommendations on the research finding and research questions improvements.

5.2 Summary

This study was geared towards understanding how the Mobile Banking Services have influenced the personal banking services used by individuals in their day to day requirements and in an effort to improve services. Mobile banking has in effect affected people’s day to day interaction with their bank. Therefore this study was to further understand the mobile banking impact on the public and their interactions with banks and what services they enjoy and which services they would like to enjoy. This would then prompt different stakeholders on how to be part of this industry, improve customer service and even create jobs.

The study diligently used the descriptive research design to gather analyses and interpret the data. The descriptive research design was used to further relate how mobile banking services offered by different banks in Kenya has enabled people to interact with their bank remotely on different requirements or banking needs. To gather these data questionnaires were used to obtain relevant and appropriate information from respondents. The targeted population was Masters Students in United Stated University International University either from the day or evening classes but who have access to bank accounts.

The Study adopted inferential statistics in the data analysis which was presented in the form of tables, bar graphs and pie charts. The Statistical Package for Social Sciences (SPSS) was used to explore the relationship between the responses to the different questions in the questionnaire and generation of statistical data.
The study found that mobile banking is used to access some personal banking services. This was backed up by where majority of the respondents 37.5% frequently use mobile banking services for the purposes of withdrawing. Therefore it is seen that respondents use mobile banking for purposes of withdrawing from their bank accounts. It was also found that majority of the respondent’s 35.4%, use mobile banking for purposes of receiving notice alerts for transactions going through their bank accounts. It is therefore noted for other banking services like inter-account transfers, intra-account transfers, utility bill payments respondents do not use their mobile banking platforms to access these services.

The study findings on mobile banking and accessing loans revealed that the respondents do not use mobile banking to access loans through their bank and they would also not prefer to access loans through their mobile banking platform. The study revealed that 73.5% of the respondents do not access loan through their mobile banking platform, 47.9% of the respondents advised that their bank does not offer loans through the mobile device, 41.7% do not prefer to access loans through the mobile phone, 46.9% of the respondents advised that they would not use mobile banking to access loans in your bank if the bank offered the service and Finally 63.3% and 61.3% advised that they do not use Mpesa or Mshwari respectively to access loans through their bank.

The study also found that mobile banking does not supports a culture of savings. It was found that 48.9% of the respondents do not use mobile banking to assist save their money. It was found that 32.7% do not frequently access their savings in the bank through the mobile banking platform while 30.6% would say that they do not save their money due to use of the mobile banking platform. 32.7% of the respondents revealed that they are not motivated to save with the use of the mobile banking platform. It was also revealed that 44.9% of the respondents do not use Mpesa to access their savings and thus consequently not using Mpesa to save while 59.2% do not also use Mshwari to access their savings in the bank and consequently do not use Mshwari to save their money.

5.3 Discussion

5.3.1 How mobile banking helps in accessing personal banking services

The study analyzed the different personal banking services and how the respondents are able to access these services through their mobile banking platforms. It emerged that 98%
of the respondents, their banks provide mobile banking services and 32.7% of them have used mobile banking for 0-6 months and also 32.7% of them have used mobile banking for over 18 months. This gives a good mix of those who are starting to use the services and those who have been using the service for some time.

The study agrees with Tobbin (2012) when he says that mobile banking is effectively a channel whereby a customer interacts with a bank via a mobile device notably the mobile phone. It depicts the ultimate convergence of mobile technology and the broader range of banking services such as account-based savings or credit facilities as we have seen majority of the respondents, 37.5% frequently use mobile banking services for the purposes of withdrawing. The study also reveals that 35.4% use mobile banking for purposes of receiving notice alerts for transactions going through their bank accounts.

Many people are still not willing to use mobile banking to its full capacity or potential as seen where it was noted that for other banking services like inter-account transfers, intra-account transfers, utility bill payments respondents do not use their mobile banking platforms to access these services. This agrees with Laukkanen & Kiviniemi (2010) who said that while internet banking innovation has diffused well in many countries and recent studies indicate high user satisfaction it appears that a number of consumers are not yet willing to adopt or frequently use mobile banking services.

While there are a large number of banks who have these services the knowledge and uptake of the platform has not spread across the customers as it should. Many of these banks are seeing value in having the mobile banking platform and this agrees with the statement that It seems that delivering value-added mobile services to customers is becoming increasingly important in gaining a competitive edge in the marketplace. In the financial services sector, for example, mobile banking represents an additional service for certain occasions adding the element of true mobility to internet banking used over fixed networks (Laukkanen & Kiviniemi, 2010).

The result showed that mobile banking is has not been steadily increasing in use and we would need to see more application of its capability in the banking sector. The key players are needed in the forefront to increase in the uptake of the platform this is supported by Goswami & Raghavendran (2009) where they say that Cross-industry convergence is propelling these two big players, endowed with different capabilities and business models into the mobile banking arena. Confronted with a spectrum of partnering
options, from go-it-alone strategies to exclusive and open partnerships, banks and mobile carriers need to evaluate the optimal partnering model that will allow them to rapidly achieve critical mass and brand leadership.

The study showed though there is access to mobile banking many people do not use Mpesa to transact with their bank and thus according to (Mbiti & Weil, 2011) M-Pesa could also affect economic activity directly by increasing access to funds and indirectly by increasing savings and banking rates. Plyer, Megan, Hass, & Nagarajan (2010) Argue that M-Pesa has promoted the growth rates of small-scale firms in the communities they studied, and they argue that this was largely driven by the increased circulation of money in these communities (Mbiti & Weil, 2011).

5.3.2 How mobile banking helps in accessing loans

The study analyzed and looked to understand how mobile banking assisted people to access loans. The use of mobile banking though a recent new phenomenon in Kenya has not yet grown where many people are looking using the platform to access loans. The banking institutions have also not been able to provide this access to extent that it is being used by many consumers. It emerged that 46.9% would not frequently use mobile to access loans and that 41.7% did not prefer to access loans through their mobile phone while 10.4% would very rarely access loans through their mobile.

The study findings agreed with the statement that, when most people think about financial services specifically for the poor, they think of microcredit, such as small loans to businesswomen in poor countries. Indeed, small loans have helped millions of people, but loans are only one of the financial services the poor need, interest rates are relatively high, and these services have reached only a small fraction of the poorest. (Gates, 2015).

A large number of people do not use banks to access loan facilities, they use their small groups to borrow and also borrow through micro-credit finance institution. The study revealed that small percentage of the respondents used Mpesa or Mshwari to access savings. This is seen even where there are ways to access loans like through Mpesa and Mshwari they still do not since 16.3% very frequently used Mpesa to access loans through their mobile banking platforms while 12.2% very frequently used Mshwari to access loans.
The study agreed with Gilpin (2014) the idea of mobile banking was born in Kenya, the director of the science, technology, and globalization department at Harvard and a recognized authority on technology and development in Africa. He said Africans did not invent mobile phones, but they invented a new way of using mobile phones, which is for money transfer. While this is true from a money transfer aspect, many financial institutions are yet to catch up with this technology as seen where 73.5% of the respondents did not have the ability to use mobile banking to access loans through their banks while 4.1% very frequently did have the ability to access loans through mobile banking. If banks can tap into this aspect of mobile we are bound to see an uptake in loans from individuals.

5.3.3 How mobile banking helps in building a savings culture

The study analyzed the different service aspects of mobile banking that can be used to help save money or access savings in the bank and how the respondents are able to access and use these services through their mobile banking platforms. The study revealed that 44.9% do not use mobile banking for purposes of savings while and 16.3% very frequently use mobile banking for purposes of savings.

The findings agreed with Black (2002) who said that, what we call access to finance approach, recognizes that there is no difference in savings cultures and places emphasis on the lack of ‘savings instruments’ available to the poorer sections of society that impedes a willingness to save. This approach focuses on the cost of saving instruments provided by the formal financial market, and on the need to include it into the formal financial market. This is because 32.7% do not get motivated to save by using mobile banking while 12.2% very frequently get motivated to use mobile banking to save. While also 30.6% do not see mobile banking as a tool that enables them to save while 14.6% very frequently see mobile banking as a tool to enable them to save.

According to Department of economic studies (2009) Cultural factors as well have a major role in determining savings behavior in different societies, where developed and advanced societies highly regard the concept of saving as well as well-established social value, contrary to what is prevalent in many other societies. As seen with the study finding many people do not take the mobile banking platform as a tool that can assist them save money. This is seen where 44.9% do not use mobile banking for purposes of savings while and 16.3% very frequently use mobile banking for purposes of savings.
However due to inaccessibility to savings through use of mobile banking this can assist many people to not touch their savings in the bank as seen where 32.7% do not use mobile banking to access savings in their banks while 18.4% very frequently used mobile banking to access their savings in the bank.

The study did not agree with Kimenyi & Ndung'u (2009) who said today, millions of Kenyans use M-PESA to make payments, send remittances and store funds for short periods. As Mpesa do not give interest thus offering no incentive to save funds however many of the users those without bank accounts are able to use this service, at low risk and cost.

5.4 Conclusions

5.4.1 Mobile banking on accessing personal banking services

The study concludes that mobile banking is effectively a channel whereby a customer interacts with a bank via a mobile device notably the mobile phone. Therefore mobile banking does assist in accessing personal banking services whereby one does not need to visit their bank physical for some services but can do this through their mobile phones. Additionally it can also be concluded that range of personal banking services do need to be increased and awareness build in order to see an increase of mobile banking usage on a broad spectrum. It can also be concluded that many banks do have mobile banking platforms but many of their customers do not use this platform which can be attributed to awareness and support.

5.4.2 Mobile banking on accessing loans

The study concludes that many people do not see mobile banking a tool to access loans from their banks. Additionally it can be concluded that many people are also not able to access loans from their banks and this can be attributed to access such a service from their bank. It can also be concluded that a large percentage of Kenyans do not access loans through their banks and they use their small groups to borrow and also borrow through micro-credit finance institution.

5.4.3 Mobile banking on building a savings culture

The study concludes that a large percentage of people do not use mobile banking for purposes of savings while and only small percentage very rarely use mobile banking for purposes of savings while very small percentage very frequently see mobile banking as a
way to build savings. The study additionally concluded that mobile banking is not used to access savings in the bank which means that one can save due to not accessing the savings in the bank. The study also concludes that mobile banking does not motivate people to save as only a small percentage of people are motivated to save through mobile banking.

The study also concludes that mobile platforms like Mshwari and Mpesa are not frequently used to build savings rather people are using this to transact. The study therefore concludes that mobile banking is not being used to build savings.

5.5 Recommendations

5.5.1 Recommendation for Improvement

The following recommendations were made for improvement;

5.5.1.1 Mobile banking on accessing personal banking services

The study recommends that banks look into improving the awareness and benefits of using mobile banking because though there are a number of services offered by Banks through mobile banking many people are not using these services and if they are they are not frequently using them. Improving in awareness and building trust for these services banks will enjoy a larger customer base and reduce banking queues because many people will use the mobile banking platform.

5.5.1.2 Mobile banking on accessing loans

The study recommends that banks offer loans through mobile banking platform that will allow many customers access loans through their mobile. This means that applications can be done through the mobile and subsequent correspondences. This will ensure timely turnaround for applications and increase customer satisfaction as the process can then be easily automated from application to decline or acceptance. The banks will also realize increase in customer base due to accessibility of the bank through the mobile.

5.5.1.3 Mobile banking on building a savings culture

The study recommends that people to explore the many possibilities that mobile banking brings like building savings where instead of only withdrawals one can deposits funds into different accounts in order to save. Also one can deposit funds into the account
instead of holing funds in their mobiles. The study also recommends that banks should encourage the use of mobile banking platform to build savings not only to increase the use of mobile banking but also increase liabilities that sit in the bank.

5.5.2 Recommendations for further research.

The objective of the study was achieved and despite the researcher facing many challenges one of them being time. Time to carry out the research had to be extended in order to collect data from the respondents. I would recommend further research into factors affecting mobile banking uptake in the country this would further explain the study findings in mobile banking access to personal banking services, mobile banking and access to loans and finally mobile banking and building a savings culture.
REFERENCES


APPENDICES

APPENDIX I: RESEARCH QUESTIONNAIRE

I am a graduate student at The United States International University currently studying Strategic Management. As part of the program I am undertaking a research project and this research questionnaire is aimed at identifying and collecting data about the role of mobile banking in provision of personal banking services. Your kind and objective responses will be highly appreciated. Please note that all information provided is private and confidential.

SECTION ONE: GENERAL BACKGROUND INFORMATION

1. Number of years worked: (optional) .................................................................

2. Gender of respondent: please tick (✓) one
   Male (  )  Female (  )

3. Which Bank/s do you use: .................................................................

4. Does your bank offer mobile banking services? (Tick one)
   1. Yes (  )
   2. No (  )

5. How long have you used mobile banking services? (Tick one)
   1. 0-6months (  )
   2. 6months-12months (  )
   3. 12months-18months (  )
   4. 18months and above (  )
SECTION TWO: MOBILE BANKING AND ACCESS TO PERSONAL BANKING SERVICES

Please rate in a scale of 1-5 by placing a (√) where appropriate the mobile banking services that you use on a day to day basis (1) not used (2) very rarely (3) rare (4) frequent (5) very frequent

<table>
<thead>
<tr>
<th>Mobile banking services</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<td><strong>Financial services</strong></td>
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<td>1 Account cash withdrawal</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2 Account cash deposit</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>3 Transferring money from one account to another in the bank</td>
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<td></td>
<td></td>
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<tr>
<td>4 Transferring money from one account to another bank</td>
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<tr>
<td>5 Paying of utility bills e.g. Electricity</td>
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<tr>
<td><strong>Information alert</strong></td>
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<tr>
<td>6 Alert on account activity deposit/withdrawal</td>
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<tr>
<td>7 Check of account balances</td>
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<td></td>
<td></td>
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<tr>
<td>8 Status confirmation and execution alert</td>
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<tr>
<td><strong>Credit and loan access</strong></td>
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<tr>
<td>9 Access to short term loans</td>
<td></td>
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<tr>
<td>10 Access to account overdrafts</td>
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</tbody>
</table>
11. What would be other services that you would like to receive from your bank under mobile banking service?

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SECTION THREE: MOBILE BANKING AND ACCESSING LOANS

Please rate in a scale of 1-5 by placing a (✓) where appropriate the mobile banking services that you use on a day to day basis (1) not used (2) very rarely (3) rare (4) frequent (5) very frequent

<table>
<thead>
<tr>
<th>Mobile banking services</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Do you use mobile banking to access loans from your bank</td>
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<tr>
<td>2. Does your bank offer loans through the mobile device</td>
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<tr>
<td>3. Would you prefer to access loans through the mobile phone</td>
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<tr>
<td>4. At what rate would you use mobile banking to access loans in your bank if the bank offered the service</td>
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<tr>
<td>5. Do you use Mpesa to access loans</td>
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<td></td>
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<tr>
<td>6. Do you use Mshwari to access loans</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

59
8. What would be other loan services that you would like to receive from your bank under mobile banking service?
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………………………………………………………………………………………………
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………………………………………………………………………………………………

SECTION FOUR: MOBILE BANKING AND SUPPORT OF A SAVINGS CULTURE

Please rate in a scale of 1-5 by placing a (√) where appropriate the mobile banking services that you use on a day to day basis (1) not used (2) very rarely (3) rare (4) frequent (5) very frequent. Please tick (√) one

<table>
<thead>
<tr>
<th>Mobile banking services</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Do you use mobile banking to assist you to save your money?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 At what rate would you say you are able to access your savings in the bank through the mobile</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 At what rate would you say you are able to save money due to use of the mobile banking service?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Rate your motivation to save due to your use of the mobile banking service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Do you use Mpesa to access savings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Do you use Mshwari to access savings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8. How would mobile banking be used to assist you to build your savings?
........................................................................................................................................
........................................................................................................................................
........................................................................................................................................
........................................................................................................................................
........................................................................................................................................

Thank you for your time and feedback!
## APPENDIX II: WORKPLAN

<table>
<thead>
<tr>
<th>Duration</th>
<th>Action plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1-10</td>
<td>Printing of questionnaires</td>
</tr>
<tr>
<td></td>
<td>Distribution of the questionnaire</td>
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<td></td>
<td>Discussion with the supervisor</td>
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<tr>
<td>Day 11-20</td>
<td>Follow up with the respondents</td>
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<tr>
<td>Day 21-30</td>
<td>Collection of the questionnaires</td>
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<td>Day 31-40</td>
<td>Data analysis</td>
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<td></td>
<td>Finalising on the report</td>
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<tr>
<td></td>
<td>Discussion with the supervisor</td>
</tr>
<tr>
<td>Day 41-45</td>
<td>Final discussion with the lecturer</td>
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<tr>
<td></td>
<td>Printing of the final report</td>
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<tr>
<td></td>
<td>Sign off of the report</td>
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</table>
### APPENDIX III: BUDGET

<table>
<thead>
<tr>
<th></th>
<th>Amount</th>
<th>Cumulative</th>
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</thead>
<tbody>
<tr>
<td>Fuel</td>
<td>KES 5,000</td>
<td>KES 5,000</td>
</tr>
<tr>
<td>Airtime</td>
<td>KES 1,000</td>
<td>KES 6,000</td>
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<tr>
<td>Stationery</td>
<td>KES 5,000</td>
<td>KES 11,000</td>
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<tr>
<td>Research assistant</td>
<td>KES 2,000</td>
<td>KES 13,000</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>KES 5,000</td>
<td>KES 18,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>KES 18,000</strong></td>
<td>-</td>
</tr>
</tbody>
</table>