

**MOBILE BANKING AND CUSTOMER FINANCIAL BEHAVIOUR:
CASE OF EQUITY BANK IN OTHAYA**

BY

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D61/77010/2014

**A Research Project Submitted in Partial Fulfillment of The Requirements for The
Award of Master of Business Administration (MBA) School of Business, University
of Nairobi**

2016

DECLARATION

This project is my original work and has not been presented in any other university for an award.

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DEDICATION

To my dear wife Regina Kate; you inspired me with your affection which gave me the courage to pursue and achieve my ambition. To my Family, Dad Joseph, and Mom Magret, who instilled in me the core values of integrity, hard work, and discipline. Your prayers, hope and support are my pillars of strength.

May God bless you all.

AKNOWLEDGEMENT

First of all I thank the Almighty God for his guidance, providence and protection from the beginning of this program until now. I also thank Him for giving me good health and helping me to get finances for this course.

Secondly, special thanks go to my supervisor MR. JOEL K. LELEI, for providing unlimited; invaluable and active guidance throughout the study.

Thirdly, I also thank my entire family for their support and for letting me steal their valuable time to work on this project.

Finally, I owe my gratitude to a number of people who in one way or another contributed towards completion of this project especially friends and all the people who took their time to fill my questionnaires.

ABSTRACT

Mobile banking which is provision of banking services using handheld devices such as mobile phones and personal digital assistants, has continued to prove its potential in provision of flexible financial services to both banked and unbanked people. Although mobile banking has been adopted widely the needs, barriers and opportunities to enhance financial empowerment through leveraging mobile banking platforms in linkage to customer financial behavior in the banking sector has not received adequate examination. The study purposes to break through such gap. It adopted these objectives: to determine drivers for mobile banking adoption by Equity bank customers, to establish the extent of utilizing the mobile banking by users, to establish the challenges faced by Equity bank customers' in adoption of mobile banking and to show the relationship between mobile banking and customer financial behavior among Equity bank customers in othaya.

A descriptive study was undertaken in which the population of the study were customers from Equity bank in Othaya branch. The study used a sample size of 190 Equity bank Othaya account holders using m-banking. A structured questionnaire was administered on these respondents during the period of August to September 2016 and the data gathered dissected by use of means and standard deviation. The data was analyzed using SPSS (version 24) and then laid down in form of tables, pie charts and graphs.

The study established that the use of mobile banking provided easy access to banking account information, mobile bank brockage and mobile banking accounting which cut across daily customer financial behavior. Majority prefer mobile banking for its convenience in conducting banking transactions. More preference for use was given to utility bills settlement. Further findings revealed that mobile banking transactions were limited by relative increase of transaction costs and network failure.

Since service delivery via mobile banking in consideration to customer financial behavior has not been fully utilized, the study recommends elevation of level of awareness and leveraging of m-banking platforms in reflex to customer needs to climax usage of banking services for growth and sustaining of customers.

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LIST OF ABBREVIATIONS AND ACRONYMS

ATMS	-	Automatic Teller Machine
CAK	-	Communication Authority of Kenya
CBK	-	Central Bank of Kenya
FDIC	-	Federal Deposit Insurance Corporation
FSD	-	Financial Sector Deepening
GSMA	-	Groupe Spécial Mobile Association
ICT	-	Information Communication Technology
IPO	-	Initial Public Offering
MFI	-	Micro Finance Institutions
M-Pesa	-	M-Pesa is derived from —M for mobile and —Pesa for money in Swahili.
MSP	-	Mobile Phone Financial Service Provider.
OECD	-	Organization for Economic Co-operation and Development
SACCOs	-	Savings and Credit Co-operatives Societies
SMS	-	Short message services

CHAPTER ONE

INTRODUCTION

1.1 Background of Study

Round the past years, advancement in information technology has changed the way businesses maintain conduct with their customers and mode of operation of their business (Al-Jabri, 2012). This has brought out technological progression and online service delivery, and development the overall sector of banking and especially M-banking. All around the sphere the sector has experienced tumulus and completion pressure within and outside as more pressure cumulating from more banking institutions and microfinances avail with new innovation venture for survival. Banks, initiated tech-savviness and enlarging, has caused positive response and stimulation to situations acquiring new long term goals to satisfy and maintain the customer with frequent innovation on services and products. This new turn is also geared to minimizing operating, transaction prices hence encouraging economic value storage (Silheil &Shammalah, 2003). This has necessitated the adoption of technologies such as mobile banking.

Kenya having been subjected to a noteworthy information and communications technology (ICT) revolt. In the early years, few as three in proportion of households in Kenya possess movable phone, and lessor than one in a thousand within the republic had the service access. As at the two thousand and eleven, over ninety three percent of Kenyan families owned a mobile phone (Demombynes & Thegeya, 2010). In Kenya this quick transformation in banking sector promoted by market pressure, technological building up, personal ambition and regulatory alteration has brought up innovations including; advanced new products, new players, raw channels which are appearing daily. M-banking platform and other developed Apps have made it easy to absorb and cope up with the daily changes for easy access of various services (Cudjoe, 2015).

Both the Internet working in par with m-banking has not only availed finances near to the customer but similarly equipped the financially excluded with a quick accession money and credit and other benefits from the bank. The need to curb administrative, operating

costs and market rivalry has pushed banks towards innovation and acquiring m-banking. Notwithstanding effective business growth is achievable with a change in individual Customer financial behavior and an increase in adoption (Bradley & Stewart, 2003).

1.1.1 Mobile Banking

The term Mobile banking can be qualified as an activity necessitating the allotments of possession such as services and goods and assigning the possession to another. The activity and transaction is done electronically by use of cellular or mobile devices via use of computer enabled networks (Tecktal, Buse & Herstatt, 2007). By use of applications people can use their mobile telephones to keep electronic money in to their hand sets, conduct business transactions using the created account, access tailored information from the bank, transfer funds, or insurance products or access credit (Karjaluo, 2002). The phenomena of m-banking is more than often performed using mobile internet or short message services (SMS). The service can also be utilized and accessed by users downloading and installing given programs widely known as clients.

Several studies have been carried out in respect to factors leading to mobile banking approval and adoption. Mattila (2003) established that the ability by the service provider to be able to cater for mobile banking and motivation by service provider played a immense role towards its use. More so availability of internet facility, compatibility, previous experience of use, awareness, less complexity and interest play an important role in m-banking adaptation. Such motivators as usefulness, self-efficacy, relative financial cost, and credibility accelerate and influence customer financial behavior regarding m-banking application (Luarn & Lin, 2005). Mobile money services, also variously referred to as mobile wallet or mobile payment; generally are payment services operated and performed using a phone (Rasmussen, 2010). By replacing the use of cheques, credit cards, cash one can initiate the use of mobile phone to enjoy the services and also hard or digital goods (Morawczynski, 2011). The introduction of mobile money services thus seems to have opened up new bounderis for access to formal financial services due to its security advantage, convenience, social influence and efficiency (Jack and Suri, 2011).

Although many examinations regarding telephone use have laid a building block to the acceptance by looking at the benefits of the sevices provided. Many other factors are seen

to hinder the growth and assimilation of the technology. Rammile and Nel (2012), in their study revealed that there being a large pool of customer's reliability and scalability of m-banking service is lowered. They factored drawbacks as privacy and risk, personalization and upgrades such as user alerts, preferred language, and default transactions. The cost incurred during downloading of applications, internet connection and delayed transaction rolling back also were advanced as ingredients that thwart the use of m-banking.

1.1.2 Customer Financial Behaviour

Behaviour can be explained as the response by individuals regarding stimuli in their environment (Minton & hale, 2014). Several researches have revealed that financial behaviour is a predecessor to dissimilar financial behaviours, in which case representative financial behaviour plays a role for an individual financial preparation for retirement (Adams & Rau, 2011). Van et al. (2011) states that financial knowledge can and may lead to wealth accumulation. According to Lusardi and Mitchell (2008) literature shows that basic knowledge is connected to efficient financial behaviour such as saving and planning for retirement. Investing in wealth accumulating instruments as the stocks ascertained direct impact geared to and linked into financial behaviour (Stango & Zinman, 2009). Some inclination also towards individual financial illiteracy puts pressure to borrowing behaviour contributing to a increased costs and consequently debt (Moore, 2003).

Individual Customer financial behaviour can be viewed through measures such as saving habits, and spending, budgeting level, borrowing patterns, and access to financial products. Thomas (1997) provides that excellent Customer financial behaviours such as investment in assets, paying bills on time, and checking loan terms irrefutable impact one's family life. Furthermore spending than one's earning can bring about more regularly running out of money, failure to contribute to ones future life demand such as a pension scheme or plan and inability to pay due bills on time. In today world the bank sector is aligning towards customer focus considering factors as Social, Cultural, Psychological, Personal backgrounds (Benamati, 2007) with the emergence of mobile and internet banking.

1.1.3 Equity Bank

The Equity Bank started its operations upon registering in 1984. During its struggle to stabilize, it moved to become a Building Society, then a Microfinance Institution, and finally to be involved in stock dealings at the Nairobi Stock Exchange inclusive of other financial dealings. The bank has over seven and a half million established accounts, to which calculation accounts for across fifty-seven percent established bank accounts within the republic. It is also regarded to be having the largest number of operating accounts for customers, which is over 10 million and operates in six East African countries that it serves (Wikipedia, 2015). Currently it maintains over 170 branches to which 38 of the branches are located in Nairobi.

According to “Wikipedia” (2015) Equity Bank is praised for bringing and availing services near in many nations at an affordable, capable, and pliable delivery to the satisfaction of clients. Having an increasing customer base and through its Equitel mobile money transfer platform providing access to loans as Eazzy loan and Eazzy plus loan, the bank needs to innovate to meet the customers’ needs for the ever-increasing money transfer subscriptions (CAK, 2015). Such would include m-banking technological advancements as security on internet-connected devices, upgrading of m-banking base to cater for the increasing number of customers, and user adoption preferences.

Equity bank provides detailed customer service for all the existing in addition to potential customers to help them convey their feedback of its services and products. The bank provides opportunity to access financial services at agency banking, custody services, treasury and trade finance, money transfer services and products as card services, loans accounts and most recently digital banking (Equity bank, 2015). There has been an increase in banks’ population and other financial institutions which offer varied services to the economy, these have posed a competition platform for the bank. Increased advertisement costs and curbed interest rates have leveraged the returns from loan instruments by the bank. The loss due to defaulting and congestion by customers in banking halls conducting traditional banking lower service delivery by the banks. Looking at the banking service delivery there is heavy human labour requirement which tends to be relatively expensive as

compared to managing information systems. For the bank to counter challenges as cash borrowing, integrity, and resource management, increased competition and selection, marketing and customer loyalty, risk and regulation management, would necessitate strategic alignment of technological ventures which are un-earthed by this study.

1.2 Research Problem

An increase of mobile phones all-round the developing world can be seen as a remarkable technology tale of the past decade. Technological advancement has helped banking institutions to replacement of physical cash with less risky flexible and cost effective payment system (Fasan, 2007). This more so has been privileged by inexpensive handsets and prepaid cards, hundreds of millions of first-time mobile phone owners made text messages and voice calls part of their daily lives (Castells, 2006). This being the display case, many of the new telephone users live in cash and informal economies, without adequate access to financial services (Ngai & Gunasekaran, 2007). In developing world, many people as regards the studies with mobile handsets are more than those with bank accounts and hence the necessity to incorporate them in banking environment via m-banking.

Many studies have looked into methods which can be used by financial providers to ensure you of mobile can help bring about interaction among the market banks and the customers it is serving. These include who are able to get access to banking value within and outside a nation. The utilization of instruments as tablets, smartphones have accelerated the modeling towards its advantage by the banks and its financial customers. A study by FDIC (2014) concluded that mobile financial services have the ability to be used and installed for demands to assist in a great extent continuity of having access to financial products. Its increment has been brought about due to its safety to operate and security in provision.

Inadequate and poor access to financial services continues to be a hindrance to the development and growth of low-income households in both developing and underdeveloped economies. On its part, Kenya has had a majority of its people suffer low access to affordable financial services over many years (FSD, 2013). In agreement to Jack

and Suri (2011) one of the most visible new platforms for improved acquisition of financial services is mobile money services since it is easy to use features and rapidly spreading geographic reach. A study carried by Merwes (2001) examined in details the drawbacks on security regarding mobile financial access. The same lane was narrowed to by Ndunga (2006) which gave the reasons as to why Kenya banking customers have settled on the use of electronic money system on their daily activities. Being a wide area to be researched and having great potential, much has not been invented; especially on the barriers while using the technology. Therefore more is yet to be unveiled.

In Kenya, though many studies have been carried out with regards banking industry there has been inadequate number of studies looking into the banking industry with reference to m- banking and customer financial behavior. This study endeavours to establish the barriers, needs, and opportunities to increase financial inclusion through leveraging mobile banking platforms in linkage to Customer financial behavior and financial empowerment in the banking sector. The study therefore attempts to interrogate the association amongst variable mobile banking and customer financial behavior?

1.3 Research Objective

- i. To determine drivers for mobile banking adoption by Equity bank customers in Othaya.
- ii. To establish the extent of use of mobile banking by Equity bank customers in Othaya.
- iii. To establish the challenges faced by Equity bank customers' in adopting mobile banking in Othaya.
- iv. To show the relation back amongst mobile banking and customer financial behavior among Equity bank customers in Othaya.

1.4 Value of the Study

The results can and will be utilized in the banking sector, by bettering m-banking performance, its features and look into the factors that influence customer financial behaviour towards losing or achieving goals by the banking industry for further making decision.

This study will be of value to the country's economic policy makers. The mobilization of savings requires a sound policy and it is clear that what has been revealed should be helpful in defining such policies in connection to the marginalized and community in general.

Finally the results by the study will include to already in place literature, specially in advancing internet and m-banking to both developing and undeveloped countries and especially on financial behavior and its management.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter provides review of the theoretical framework, the concept of mobile banking and technologies involved, drivers and the extend of use of mobile banking and finally gives analysis of mobile banking with regards to customer financial behavior and the summary of the literature review

2.2 Theoretical Literature

Theoretical review presents a body of knowledge studied and developed by experts. This section reviews three theories propounded by scholars. Technology acceptance model, Innovation diffusion theory, and theory of reasoned action.

2.2.1The Innovation Diffusion Theory

The diffusion looks at how information move from one person to another in a given medium. It gives the likelihood that with due regards to culture and people's behavior they will increase or decrease the use of an innovation. According to Womacks (2003), the social system by individuals receive and act differently in varied time duration. One of people who influence innovation are change agents. He also advanced that in information sharing there needs to be social understanding of information being shared so as to come to same platform of understanding. Womacks further informed that the process of diffusion can be categorized to the preliminary the start or origin which leads to invention then the dispersion within a given system in a given time and finally the repercussion or the consequences.

The response to which a given individual will give to an innovation is defined by the ease of use. Furthermore it is determined by the extent of knowledge and its newness. A given invention make people respond differently with due regards to persuasion and feel after the decision. The most important constituent ingredients include the advantage to be gained

from use, how the innovation is compatible with current platforms and the intricate complexity. Any technology with combination of compatibility, more advantageous and less complicated related part will be fast acquired widely be used. In such regards mobile banking has been leisurely adopted for its advantage in comparison to traditional banking and improved mobile platform compatibility which has necessitated both customers and banks to acquire, due to the technologies quick innovation to satisfy needs.

2.2.2The Technology Acceptance Model

This framework developed in 1985 by Davis proposed that innovation admission can be subdivided into perceived relative use, perceived utilization and psychological human attitude. This measure is only possible to already users of initialized technology. The TAM as propounded has two sides of a coin. The first being (PU) –the perceived usefulness and lastly the (PEOU)- perceived ease of use. The model was consequently and continually studied and incremented by other scholars at Venketesh (2000), and all came to a conclustio that PU as to the degree a person using a given system would believe it to increment the performance of a job or activity. On the other side PEOU as to the extent that a person utilizing a technology is conscious of it having a fruitful outcome.

The common interests in the IS have been captured in the framework to explain the taking over and giving judgments further to which gives some flaws exposed and identified. One fact failure that its utilization cannot give the overall user motive or acceptance behavior(Moon &Kim, 2001). The perceived financial cost was also included in its analysis. Other factors included in the mastery of literature were perceived self-efficacy which was studied as the power to effect a desire, and perceived credibility, meaning the give system is worthywhile and believable. Conclusively the TAM gave an analysis to persons intention and behavior to an innovation which can be applied in banking(Luarn &Lin, 2005) M-banking technologyand Internet banking is regarded as easy to apply and has more applicability for customer needs which has led to its acceptability as a way of day to day bank transaction (Hernandez & Mazzon, 2007).

2.2.3 Theory of Reasoned Action (TRA)

This framework by fitting has analogized Ajzen and Fishbein (1980) to give to information adjoining. It is particularly based on behavior. The move was a behavioural move upon persuasion. The rational move can be compromised and hence its prediction. For example going for a date can be stopped by lack of money. This model separates behavioral intention from the behavior giving the intention. Wherever an attitude leads us by looking at attitude and norms can thwart or induce us to perform a certain act (Davis, 1985). The TRA as advanced by Fishbein and Ajzen, furthermore gave suggestion on persons behavioural intention, and which the attitude to the actual behavior is in conjunction to subjective norm that is adjoined to behaviour (Ajzen & Fishbein 1980).

The theory has been utilized to synthesize human behavior to assist create appropriate interventions in early years. This theory's importance can be used to predict and explain the attitude, behaviour of an individual as such as utilizing m-banking to have an access to financial and other services but still it is limited in which case causal factors cannot specially be bracketed around a given factor (Werner, 2004). Customer's financial behavior changes have been uprising leaning towards technology assimilation. Many of the accomplishments have been influenced by the necessities brought about by both technological, social and financial influences.

2.3 Mobile Banking Concept and Technologies

Mobile banking also defined as electronic use of system and devices to give access to significant activities available and done by use of declining traditional banking. The services are made accessible by use of a mobile cell phones, commonly smart of cellular phones (Pei & Lionel, 2006). In other circumstances, wholesomely umbrellared m-banking technology can give a one on one ability to acquire goods as that provided while using a credit card or ATM, the only difference is the purchaser used electronic money stored in devices. Banks have been acute on raising their customer base and portfolios while still redesigning how they can market their services using evolved technologies such as m-banking (Kondabagil, 2007). The most commonly used methods for the technologies are client-based, short messaging service, and browser-based services.

Customers by sending a text or SMS to the bank works in two ways, through either a push and/or pulling manner. By using the push process a user submits a message via the mobile which has already planned request to be received or obtained from the bank, to which the same channel is used for reply. Upon its reply the service provider provides detailed and easy understandable information to the customer. On the other side pull method originates from the service provide (bank) providing some important information on already transected activity from the users account being held by bank (Beck and Cull, 2010). M-banking purchasers and especially those located in many cities in kenya utilize the service.

In client framework still on based customers they utilize a software installation. This installation mediates customers and the banking system. It helps customers in using m-banking services which can be specified before establishing a connection. The specific details are entered on the platform upon which an activity is completed which the software and the bank systems are linked for drawing data. One of the greatest advantage of this service is the users can effectively utilize the service before joining the network to which data processing is minimal and hence cost, inclusive of time (Dilg et al., 2004).

The other method a customer can utilize is a browser to be connect to online to a bank system. The connection mostly is established via server and then comitted to the device, either the cell phone or a computer. The information requested is then commuted exhibited using a web machine browser (Olasina & Gbolahan, 2015). The technique is efficient counting on origin (banks server) to which the customer is linked to. The only negative side of this method, it dictates that throughout the process to access and committing the whole processs the customer should be one on one and linked to the internet which increases cost.

2.4 Operation Method by the Service Supplier/Provider

Operators and service providers have established a varied lay out m-banking theme cumulatively being presently utilized. Specially identified are 3 frameworks which are quite unique but having a close link to each other. The same models were based on what they share in the framework and are (Either, Non-Bank also Telecom Company or Banks)

of opening an a/c, withdrawing borrowing, save value by clients. These include the Bank Focused model, Non-bank-led model and Bank-led model.

2.4.1 The Bank led Method

The prototype explains how the users perform their very activity by utilizing mobile devices. The method is not specially use of headquartered infrastructure but utilizing partners to which the service provider has established business with. It can be viewed as substitute to conventional branch-based banking (Porteous, 2006 & Otuba 2009). The establishment of this method can be produced between telecommunication companies and banks. The organization give the customers or users a cordial linkage which is managed, maintained by provider in this case the bank. Equity bank has its own established equitel telecomm service inclusive of joint ventures with other mobile service providers as Safaricom, Airtel which help enhance customer satisfaction.

2.4.2 The Bank-focused Method

This is a case where the provider and in this case the bank, primarily chooses to use more effective ways to bring its services close to the customer. Current and more efficient agencies are employed such as automatic teller machine (ATMs), use of m-banking facilities, banking electronically. The framework being linear and nature wise incrementing This being a prolongation to branch or conventional system of conductin banking (Anyasi, 2009). Equity bank has several an established internet banking where customers can operate as in a banking hall. More so ATM outlets are distributed all over the country for access of mobile banking services.

2.4.3 Non-Bank-focused Method

This is the model in which non-bank-led is not employed unless when is called for as need arises for it to be a secure storage of excess finances. In this method a telecom service provider takes over the mandate of handling the processes involved (Aosethes et al, 2008). Most of these endeavours are directed to scummy receivers of wages in an habitation. The same in most frequent cases are found in the rural area or developing area who utilize tellers and other outlets. Many installed of these service agents conduct the business using the sale

of credit cards to which banks can use and utilize pharmacy, bakery and other outlets established for the purpose.

2.5 Drivers Towards Use of Mobile Banking

Much of the previous research channeled their fruitful efforts to growing nation, basing on; adoption and introducing greater focus to technological ventures which gave wide literature and various theories and models which are believed to have an effect the acceptance of an innovation (Gao & Owolabi, 2008). Most of the studies have unanimously channeled down to four major drivers leading to adoption of any new uprising technology and specifically mobile banking. These include convenience, trust, perceived risk, and Relative advantage.

2.5.1 Perceived Risk

The results by Chong et al (2012), produce five aspects of risk. These are defined to be inclusive of security/privacy risk, financial risk, time risk, social risk and performance risk. The first point of risk, that is Performance; relate draw backs brought about by malfunctions or deficiencies in most servers and especially the established m-banking. Security/privacy risk cited to be the possibility of loss brought about by hacking through vulnerable security details of user of the service. Time risk which is inconvenience incurring and any loss of time due to the delays on difficulty of navigation or the receiving payments. Social risk which is the possibility that utilizing m-banking service may lead to negative attitude by social group and finally Financial risk concern the likelihood for funds being lost as a result of bank account misuse or transaction mistake. The customer in m-banking sector is more tended to accepting and approving the service if the risks are handled before venturing into the technology.

2.5.2 Trust

Studies by Bhattacharjee (2002) indicated three dimensions to which trust is incline to these are; integrity, ability, and benevolence. To which ability can be cited as the perception of the customer about the salient knowledge and competency of the service provider. The users view of the service integrity of the services provided to be honest, fair. These services also need to stipulate certain service checks during activity and finally benevolence level

to which the supplier is willing to show empathy and receptivity towards the user. It has been seen that mobile banking customers in great number establish trust with an organization if it has the ability to sufficiently undertake the informed activities and is fairly contributing to and for the economy such as societal growth to the poor and involvement in social matters.

2.5.3 Convenience

According to Navinie (2007) it is the ability to receive text alerts, view account activity in short period when certain transactions happen in one's account or receiving banking information through simple text commands. It is also defined as the magnitude a given mobile banking activity can serve the users' needs (Davis, 2003). Relative Usefulness can be referred as the extent to which an individual is cleared of doubt that by use of given device or innovation would increase her or his job performance and lastly Perceived Ease of Usefulness as can be cited as extent to a customer conforms to using an innovation would not be complex to use. More so services availability by convenient means make the customers to have a repeat use of the technology.

2.5.4 Relative Advantage

Pikkarainen (2004) defined relative advantage to as comparative gains that a user of mobile banking technology may get which she/he cannot get from formerly the traditional banking services. He further analyzed that benefits would include time and cost. Lee (2007) in his analysis gave relative cost Savings to as price or cost of business deal by use of m-banking and conclusively Time Saving as duration of time to be spend by the user to finalize any given transaction. When customers and consumers are provided with a technology which is relatively cheap on its performance and is more efficient they tend to stick to it.

2.5.5 Extent of Use of Mobile Banking

Studies by Federal Reserve (2014) revealed the common uses of mobile banking such as transaction inquiries or checking financial account balances, users getting a notification from a bank using an SMS, push notification, or e-mail, transferring money between accounts, depositing a cheque to one's account electronically using a mobile phone camera.

This can be done remotely by utilizing the camera capture and submission. In other cases bills can be made up using a cellular phone. The usage mostly revolve around balance inquiry, utility bills payments, international remittance, and most importantly cash withdrawal at mobile money agents.

According Shankar (2016) Mobile banking users have access to; Mobile accounting which include: - sales transaction checking invoices and processing payroll), Mobile Brokerage services (account information, stock prices, re-sell or re-order shares, subscribing to the IPO's, sell to buy investment trusts) and Mobile financial information services (check transaction status, check account balance, Fund transfers, PIN alteration, order statement account). Shankar view is diverse and is analyzed into lessor and smaller constituents composed into his three wheel explanation of m-banking use.

In many occasions service provides and in particular banks give information on financial status on an autonomous way with no combination to either brocking of accounting. The very extent to which the mobile services are rolled out are provided and not bracketed to order statements of account, facilities to make balance enquiries, for stock prices or balance-levels, important alert upon reaching a certain transaction extreme, getting affirmation to already finalized transactions are request and other market improvements essential to the (Tecktal & buze, 2007).

2.6 Mobile Banking Challenges

While mobile banking provides services to access to bank accounting information which is more secure than traditional banking and which is easy to utilize and learn it still has some challenges to customers (Marsden, 2013). The study results indicated and showed that transactions cannot be conducted when the network is down, sometimes the transactions are not online, and phone software not able to access some utilities of mobile banking. It further revealed that customers were not able to understand and navigate the mobile banking menu. According to Gerrand and Cunningham (2003) perceived risk of loss in using the mobile banking services and lack of education to help in understanding

information concerning a cell phone made customers unwilling to adopt mobile banking service.

Many customer have execute hasty error transactions which cannot be immediately rolled bank (Muturi, 2014). More so he advanced lack of personalization, complexity in language used, failed upgrades in including new banking features and varying mobile transaction costs which increase overall financial cost of using m-banking. Customers are unwilling to transact on the assumption that the m-banking environment is secure enough to encapsulate their personal data.

2.7 Mobile Banking and Customer Financial Behaviour

Many issues have been advanced to which have an effect on customer financial bahaviour as regards use of m-banking services. Scholars have come into conclusion that human ecology (demographic factors), psychological feature, and persons consent on an uprising technology or innovation to be vital inducements. In the cases of developing countries, position of the mind or a given attitude can lead of attract customers who had a former pleasant feel for a give technology to which there is incision on adopting comparatively to when the idea on a certain technology is in its armature stage and a grounding. Benamati and Serva (2007), advanced that users and in this cases of innovation (banking) look at integrity such as interception of password being used, issue of hacking, personal protection and data encryption and financial details regarding acquisition of electronic transaction dealing.

Venkatesh (1999) and Ellen, Bearden and Sharma (1991) in their study, looked into barriers as to the assimilation of a given technology invention. This was in line to behavior changes and assimilation to cope with the invention. The results obtained were that many avoided a technology which is seemingly unsecure and which encourages a behavioor of frequent and unecessaary use of money. Further a thwarting effort was non ability to key in the required information to finalize a transation. Much and many of these barriers which had previously been looked into were rectified by upgrading of the services which included advanced screens. More flexible devices including those for the blind were introduced increasing the use of mobiles. Sophisticaled application were also designed with the idea

of simplifying the use of the devices to curb security issues (Stite & Kahrahma, 2006). The invention further fueled offline applications for cost cutting to the poor in the community.

Traditional banking which is seen as a service to the poor is avoided by early adopters as they shift their interest to modern ways of accessing value and conducting their business without much effort and inconveniences. The evolution of electronic money has presented an opportunity for utilization by many customers as platforms are designed to suit all users of banking services. The focus on the customer satisfaction by whichever means is vital and with regards to completion for quick services and dominance in the market the use and development of technology is key (Sichael, et al 2010). In the current world the customers are at liberty to conduct and access the banking services at anytime and all places where the mobile has link to banking servers. The services which can be accessed are unlimited and cost effective to enjoy. Ranging as far from account balance inquiry, share trading and all other traditional banking service utilization.

2.8 Empirical Literature Review

This section presents the international and local studies done by scholars and researchers on customer financial behavior; the methodology used, summary of their findings and the conclusions drawn.

Previous study by Mohammad (2013) on referred elements and ingredients of m-banking in Bangladesh. The results obtained revealed and established that perceived risks (social risk not included), convenience, trust, and comparative advantages as some of the factors affecting the behavioural intention of mobile users to embrace mobile banking services.

According to Medhi et al (2007) who narrowed to the non bank method and way of operation using outlets in day to day conducting of business by assimilation and adoption to marginalized and the less upbraided by education. The over whole study revealed differences along the parameters such services adopted, household type, frequency of usage, pace of uptake and ease of use. Furthermore it gave factors which are responsible for such effort which include trust, pricing, use of loose outlets, cell phone design by

manufacturers, cost terms, transaction turnaround time, agent closeness, needs, and level of human or agent's support.

The results obtained by sakthi (2014) on Customer financial behavior towards information technology adoption and acceptability as regards to mobile technology usage in India suggested that awareness, perceived ease of use, influenced Customer's use and adoption to a technology. Further awareness training campaigns or programs to customers create better knowledge and understanding utilization of information technology in mobile phone, by providing adequate information and details about the benefits of its applications and features.

The efforts by Wambari (2009) regarding mobile banking technologies was waved in developing nations. It was geared to give benefits which are achievable by acquiring this technology to monstrous business the growing and small. It was also to generate ways and instruments of streamlining with the advantages and blunting the sharp nodes of disadvantages to the well-being of the organizations. In the conclusion he advised and advocated to the use of uprising advancements are a way of economically contouring operation. The results also established that phones utilization has been encouraged by social matters, and their practices which leads to some economic benefits.

Adaka (2010) who looked at micro-economic variable geared his study to consequence brought about by m-banking evolution. He used a sample of 44 commercial banks which are registered and analyzed data using multiple regression model. He established that with increased innovation and awareness of a technology resulted to increase of registered customer use for mobile banking. It also found out that mobile banking is positively linked to saving and investment. The decline in the value of money in the year two thousand and seven and two thousand and eight followed by a decrease in subsequent years proved otherwise as the results showed an inverted relation by customer and banker.

Studies by Muturi (2014) in Kenya on banks involved specially on business and utilization of m-banking technology revealed that perceived risk had a negative effect on adoption and assimilation of mobile banking since no one had experienced an insecure occurrence.

It further showed that user embraced mobile banking for transferring of funds, paying bill service, balance inquiry, and application of loans in a small margin.

It is affirmed that certain factors are responsible for influencing the relationship between mobile banking and customer financial behavior by individuals which may include age, level of education, perceived credibility, and level of income, relative cost of financing, societal tempt, gender, relative usefulness and the relative easy usage of the devices.

2.9 Summary of Literature Review

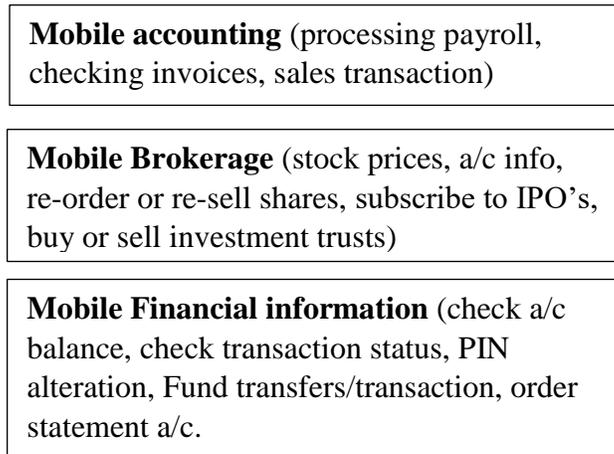
Mobile banking has been worldwide concern to bankers, microfinances and individual customers. Studies have unveiled that a person can and will still show a certain behavior, either positive or negative whether they really or not have formal bank accounts. Many authors and researchers have confirmed positive association between customer financial behavior and mobile banking. For instance (Bandura, 2012) on analyzing how best one can attain given goals and actions came up with a result that favored former use of an innovation and its feel and compute utilization and individual behavior.

In Kenya, the use of m-banking by the established customers and the present service providers has been examined including key factors on mobile banking such as the technology used and the modes or methods of operation. In the same manner already theory in place towards an innovation, technology and specific behavior and in this case the use and availability of finances which have been examined are hereby used as the background and frame for this study.

2.10 Conceptual Model

The study advanced the following model after deliberating on the discussed literature and relevant models by the researcher and consists of three independent and dependent variables.

Independent Variables



Dependent Variables



Figure 2.1 Conceptual Model

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the research methodology that was adopted while carrying out the research. It discusses the research design, the target population, sample size, data collection procedures and data analysis.

3.2 Research Design

The study used descriptive design as a method of research, with combination of qualitative and quantitative analysis. The choice was informed since research was related to giving a numeration as to the number of times in an occurrence of a phenomena or the extent of association among variables (Bryman and Bell, 2003). Descriptive surveys are utilized to provide an informal view of a given phenomena of concern as it involves large samples. It involves elements of comparison and of relationship of one kind or the other and also it establishes associations between variables. It helps to describe characteristics of certain items or ideas and also estimate proportion of people who behave in a given way. The study therefore sought to explain the connection or linkage among variables mobile banking and Customer financial behavior in banking sector with reference to Equity bank. It sought to provide information for suggesting generalization of results from a population sample.

3.3 Population

Babbie (1992) in his study explained population to be an integral grouping of certain events to which might include people, and or articles giving and having common discoverable behaviours or qualities. Equity bank has network of 173 branches across Kenya, which have been divided into regions according to counties. Equity bank Othaya branch has a customer base of 50,000 among which more than 1,900 use mobile banking services (Equity Bank, 2015). The study targets 190 customers from Othaya Equity bank branch.

3.4 Sampling Design

Systematic Random sampling method was used to draw respondents from 190 target population. Every 5th customer arriving at the bank was be given a date and selected by the researcher. The sample size was obtained with reference to Kombo and Tromp (2006). They pushed for use of sample size ranging 10-30 percent representation. This was advanced as sufficient in a population under investigation. The study obtained a sample size was 97 respondents.

3.5 Data Collection

The study used structured questionnaires for primary data collection from equity bank customers. The researcher undertook self-administration of the questionnaires which were fractioned to 5 different parts and identified as A, B, C, D and E; that is the general demographics, driving factors towards use of mobile banking, the extent of use, challenges in mobile banking use and individual customer financial behavior towards mobile banking respectively. The respondents replied on their own will and were free from influence by the interviewer. This was done to avoid biasness and in particular interviewer bias. It took two waves the first one to refine the content of the questionnaire and final phase for data collection.

3.6 Data Analysis

Data was later edited for accuracy and completeness and then dissected using Statistical tool of analysis ie the SPSS Version 24. All the measures involved in the study as description, centrality of data and the extent of dispersion were looked into during analysis. The mean of the data was the only variable examined in centrality of the raw data. This was used on Sections A, B, C, D and E in analyzing elements as mobile accounting, mobile brokerage, mobile financial information. Variance measures and other factors as deviation of the data was looked into from the questinnares issued. This gave better understanding of likes as the relative advantages, perceived risk trust and convenience (B). Pearson method of analyzing the extent of correlation was used to assess and determine the connection between the drivers and also with due regard to their linear relationship (B) and the extent of use of mobile banking (C). Tables, pie charts and graphs were employed by

the researcher to provide mental view, clear and precise data interpretation and quick understanding.

$$Y = a_0 + a_1x_1 + a_2x_2 + a_3x_3 + e$$

Whereby Y= customer financial behavior

a_0 = constant term

x_3 = mobile financial information

x_1 = mobile accounting

e = standard error

x_2 = mobile brokerage

a_1, a_2, a_3 = coefficients of independent variable

The model treated customer financial behavior as the dependent variable while independent variables as mobile accounting, mobile brokerage and mobile financial information.

CHAPTER FOUR

DATA FINDINGS AND ANALYSIS

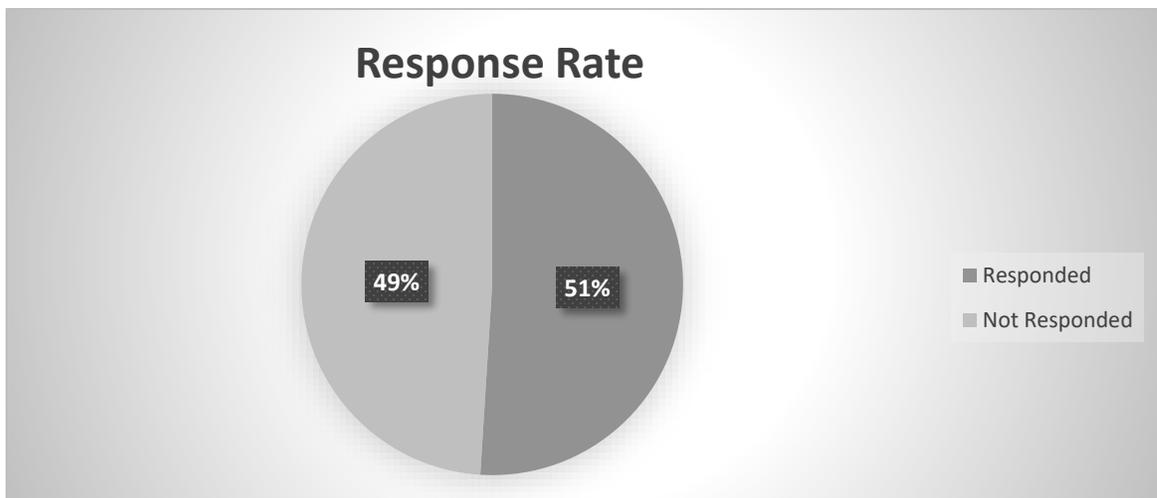
4.1 Introduction

The chapter presents data analysis and also the findings in line with the projected research objectives as given in research methodology. The research gathered the data using primarily questionnaires as an instrument of research. Standardized questions were used to which the respondents marked the level to which they felt use and practiced the variables in a 5 extent point scale selection. The study majorly looked into the mobile banking and customer financial behavior in Othaya Equity bank. The data obtained was then analyzed, summarized in tables, graphs and pie charts for clear understanding in line with drivers towards mobile banking, the extent of use of mobile banking and the challenges by the users of mobile banking on their day to day transactions.

4.2 Number of the Respondent's

A total of 190 questionnaires were administered. The filled questionnaires were revised to ensure they were consistent and also complete for the activity. Out of the 190 questionnaires issued, only 97 were returned and correctly filled.

Figure 4.1 Response Rate.



Source: Researcher, (2016)

The study targeted 190 respondents in data collection. Figure 4.1 shows that out of 190 target individual respondents, 97 filled the questionnaire a contribution of 51% in response rate, which is enough to be used for report giving and analyzing the results in conformation to Mugenda and Mugenda (1999) stipulation response rate. This response rate was achieved by the researcher employing other aids in administering the questionnaires forms.

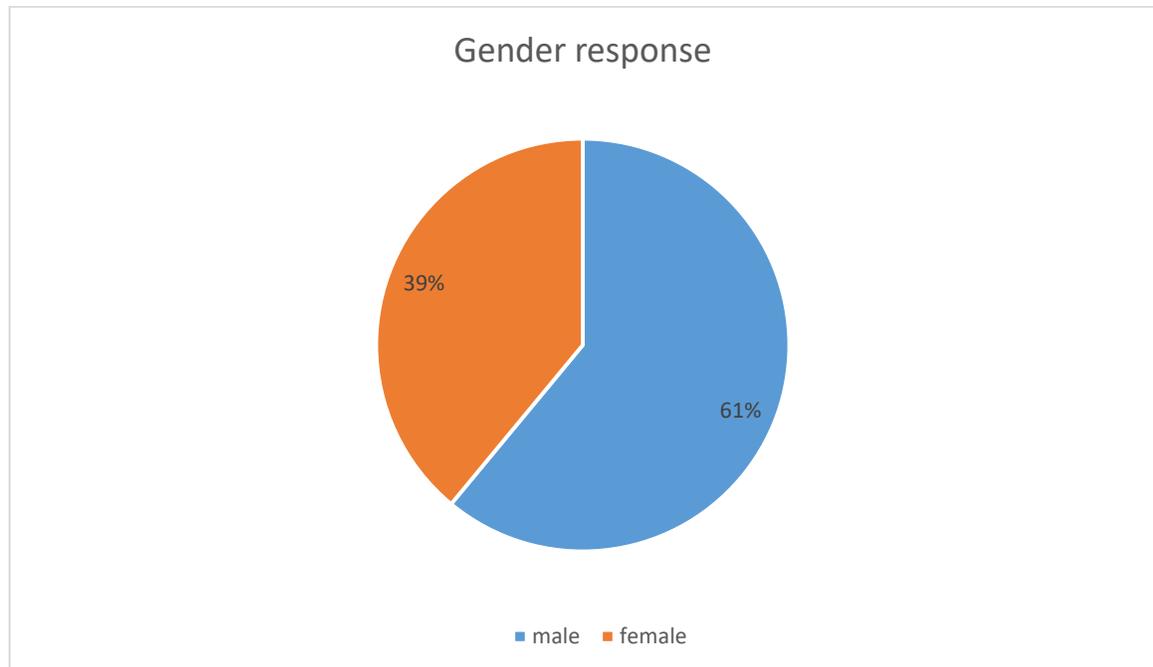
4.3 Respondent's Demographic Characteristics.

This section provides the study findings on respondent's age, marital status, gender, occupation, level of education and duration in the occupation.

4.3.1 Age of the Respondents

The study collected data on gender of the respondents. The data was analyzed and the results were as shown in **Figure 4.3.1**.

Figure 4.3.1 Gender and Mobile Banking use.



Source: Research Findings

Above results as regards gender response from the study show that out of the total respondents 61% being of male gender 39% being given by female gender. The results indicate the majority of the people who use mobile banking are male.

4.3.2 Marital status of the Respondents.

The marital status of the respondents was also examined by the study. Table 4.3.2 gives the frequency of the response marital status.

Table 4.3.2 Marital status and Mobile Banking use.

Marital Status	Frequency	Percentage
Single	73	75.2%
Married	22	22.7%
Window	20	2.1%

Source: Research Findings

The results presented show most of the respondents were single as shown by 75.2% of the response, 22% are married and the least given by 2.1% who are windows.

4.3.3 Occupation of the Respondents

Table 4.3.3 presents data collected on the occupation of the respondents as regards the study.

Table 4.3.3 Occupation and Mobile Banking use.

Occupation	Frequency	Percentage
Blue-collar	56	57.7%
Not at work	1	1%
Unskilled	8	8.2%
Entrepreneur	15	15.5%
White-collar	14	14.5%
Student	2	2.1%
Retired	1	1%
Total	97	100%

Source: Research Findings.

The results in Table 4.3.3 indicate that 57.7% of the respondents are in the occupation of blue collar. 1% of the respondents either not at work or retired. 8.2% in unskilled occupation, 15.5% being entrepreneurs, 14.5% and 2.1% in white collar occupation and students respectively.

This points out that most of the respondents were engaged in a utile form of employment or another. Paralleling the study results income level presents the Bottom of the Pyramid economic segment who represents most of the people in developing countries like Kenya.

4.3.4 The Education Level by the Respondents.

In the study, data regarding education level of the respondents was collected. This was to establish significant difference in adoption of mobile banking and users of different education status which yielded outcome in Table 4.3.4.

Table 4.4 Level of education and Mobile Banking use.

Level of education	Frequency	percentage
Primary education	1	1.0%
Secondary education	48	49.5%
College diploma	30	30.9%
Undergraduate	12	12.4%
Postgraduate	6	6.2%
Total	97	100%

Source: Research Findings.

The findings show that most of the respondents have secondary education level which is represented by the 49.5%. In the results however most of the mobile banking adopters have a level of education of secondary school, college diploma and undergraduate.

4.3.5 The Duration in the Occupation by the Respondents

The study collected data to establish the duration the respondents have been in the occupation. Table 4.3.5 presents the findings.

Table 4.3.5 Duration in the occupation and Mobile Banking use.

Years in the occupation	
Less than 1 year	9.3%
1 – 10 years	49.5%
11 – 20 years	19.6%
Above 20 years	21.6%
Total	100%

Source: Research Findings.

The obtained results Table 4.3.5 show that most of the respondents who use mobile banking have been in the occupation in a range of 1 -10 years given by 49.5%. Though the findings also indicate that respondents engaged in mobile banking mostly form a duration of less than one year to above 20 years.

4.3.6 Age of the Respondents

The data collected also sought to establish a significant difference in the adoption of mobile banking between users of varied age. Table 4.3.6 lays out the findings.

Table 4.3.6 Age and Mobile banking

Age range	Frequency	Percentage
18 – 28 years	22	22.7%
29 – 39 years	44	45.4%
40 - 50 years	17	17.5%
Above 50 years	14	14.4%
Total	97	100%

Source: Research Findings.

The obtained research results Table 4.6 pointing that 22.7% of the respondents were aged between 18-28 years. The highest obtained age percentage was 45.4% of age between 29-39 years, 17.5% aged 40-50 years and 14.4% were of the age 50 years and above. This indicates that most of the people who exercise use of mobile banking are of middle age between 29 -39 years with a 45.4% result.

4.4 Reasons for adopting Mobile Banking by the Respondents

The study collected data to find out respondents drivers towards usage of mobile banking. The respondents gave their views in accordance to a likert scale with a range of 1-5 which translated to 1-no extent, 2-little extent, 3-moderate extent, 4-Great extent and 5-very great extent. The means and standard deviation were calculated by which the mean was interpreted to mean occurrence and scale (1- \leq 1.5-no extent), (1.5- \leq 2.5-little extent), (2.5- \leq 3.5-moderate extent), (3.5- \leq 4.5-great extent) and (4.5- \leq 5.5-very great extent). The results are as shown below.

Table 4.4 Reasons for adopting Mobile Banking

Factor	No extent	Little extent	Moderate Extent	Great Extent	Very Great extent	Mean	Std. Deviation
Convenient (x)	1	1	14	38	43	4.25	.817
Security (x)	1	4	21	35	36	4.04	.923
Faster services (x)	2	2	11	30	52	4.32	.908
Cheaper – less costly (x)	4	21	30	16	26	3.41	1.20
Privacy(x)	3	7	18	24	46	4.04	1.08
Motivated by service provider (x)	14	11	27	23	22	3.30	1.30
Social influence (x)	13	17	24	22	21	3.23	1.32
Ability by the service provider (x)	2	8	23	33	31	3.88	1.02
Charitable deeds by provider (x)	23	25	25	14	10	2.62	1.27
Service provider ability is similar to that of traditional bank (x)	20	14	29	16	18	2.98	1.37
The usefulness of mobile banking (x)	0	0	11	33	53	4.43	.691
Ability to meet other transaction needs (x)	0	3	20	36	38	4.14	.841
Previous use of electronic device (x)	10	17	26	23	21	3.27	1.26

Mobile banking flexibility to interact with (x)	0	2	28	35	32	3.99	.860
Peer influence (x)	29	19	22	16	12	2.64	1.37
Weights (f)	1	2	3	4	5		

Source: Research Findings.

The results obtained in Table 4.4 indicate that most respondents preferred the use mobile banking due to its convenience, security and provision of fast services given by weighted mean of 4.25, 4.04 and 4.32 respectively. Many respondents were of moderate extent that mobile banking is cheap as shown by results of mean of 3.41. The privacy provided by use of mobile banking attracted respondents to use mobile banking given by mean of 4.04. The motivation by service provider and social influence played a moderate role in motivating towards use of mobile services indicated by mean of 3.30 and 3.23 severally. The ability of service provider indicated to have propelled respondents to use m-banking services, this is shown by a mean of 3.88.

However respondents were in little extent intuited by charitable deeds by provider given by mean of 2.63. The respondents further could not give a cut throat decision as to whether the service provider ability is similar to that of traditional bank given by moderate extent mean of 2.98. The respondents to a great extent agreed that the usefulness of mobile banking to their day to day transaction services motivated them to use mobile banking as given by a mean of 4.43. A mean of 4.14 indicated that to a large extent they adopted mobile banking due to its ability to meet their transaction needs but to a moderate extent previous use of an electronic device fairly influenced the respondents, shown by 3.27 mean. The respondent's found mobile banking flexible, clear and understandable to interact with as shown by a mean of 3.99. The results from respondents also shown that peer influence had little extent in motivating the respondents.

With the results, it is therefore seen that mobile banking in Equity Bank Othaya is useful in flexing and useful to the customers as it eases their banking activities. Most of the respondents used mobile banking because it is convenient, secure, private, fast in transacting, its usefulness and the ability to meet their transactional needs. These results are in agreement with studies by Kasyoki (2012) which showed that the concepts of

perceived usefulness and perceived ease of use were convincingly related an individual's behavioural intention to take up mobile banking. Likewise Chung (2009) reported that perceived usefulness importantly drives customers desire and attitude to adopt m-banking.

4.5 Extent of Use of Mobile Banking

The study collected data to find out the services the respondents frequently use after adopting mobile banking. The respondents gave their views in accordance to a likert scale with a range of 1-5 which translated to 1-no extent, 2-little extent, 3-moderate extent, 4-Great extent and 5-very great extent. The means and standard deviation were calculated by which the mean was interpreted to mean occurrence and scale (1- \leq 1.5-no extent), (1.5- \leq 2.5-little extent), (2.5- \leq 3.5-moderate extent), (3.5- \leq 4.5-great extent) and (4.5- \leq 5.5-very great extent). The results are as shown below.

Table 4.5: Services that Respondents Use in Mobile Banking

	No extent	Little extent	Moderate Extent	Great Extent	Very Great extent	mean	Std Deviation
Balance inquiry	1	12	16	23	45	3.98	1.10
View mini-statements	3	13	22	23	36	3.73	1.17
International remittance	46	19	15	8	9	2.15	1.37
Commodity dealing/ investment	21	20	29	10	17	2.74	1.32
Pay third party beneficiaries/ inter-account transfers	11	28	16	20	22	3.15	1.34
Cash withdrawal at Mobile money agents	1	8	13	26	49	4.13	1.04
Brokerage	34	25	14	12	12	2.38	1.42
Request for statements of accounts	16	13	24	22	22	1.98	1.42
Request for chequebook	61	9	7	11	9	1.98	1.42
Utility bills payment	5	9	20	21	42	3.82	1.24

Purchase of airtime	1	2	12	28	54	4.35	.854
Receive text financial advice	18	19	13	16	31	3.26	1.51
Salary deposit	25	5	20	27	20	3.12	1.46
Saving	7	7	24	29	30	3.65	1.23
Pension fund management	56	21	9	5	6	1.89	1.26

Source: Research Findings.

The results from Table 4.5 indicate that respondents to a large extent used mobile banking for balance inquiry shown by a mean of 3.98. viewing mini-statements mean of 3.73, cash withdrawal a mean of 4.13, utility bills payment mean of 3.82, purchase of Airtime being the most frequently used service given by mean of 4.35, receiving financial advice with a moderate mean of 3.26, and salary deposit a mean of 3.12.

On moderate extent the respondents indicated use of mobile banking for commodity dealing by mean of 2.74, requesting statement of accounts a mean of 1.98 and saving having a mean of 3.65. On the other side they had little preference on use of mobile banking on international remittance given by mean of 2.15, paying third party 3.15, brokerage 2.38, requesting cheque book a mean of 1.98, and a mean of 1.89 on pension fund management.

The data from the respondents indicates that many customers from Equity bank are still on their way to fully adopt mobile banking when conducting their banking services and in most times they use for withdrawing cash at mobile money agents and purchase of airtime. The result are in agreement with study by Ng'ang'a (2009). However their response was moderate in other services the least being requesting for statement of accounts, requesting for cheque books and pension fund management.

4.6 Challenges in Using Mobile Banking

The study collected data to find out the challenges facing the acceptance of Mobile banking. The respondents gave their views in accordance to a likert scale with a range of 1-5 which translated to 1-no extent, 2-little extent, 3-moderate extent, 4-Great extent and 5-very great extent. The means and standard deviation were calculated by which the mean was interpreted to mean occurrence and scale (1-≤1.5-no extent), (1.5-≤2.5-little extent),

(2.5-≤3.5-moderate extent), (3.5-≤4.5-great extent) and (4.5-≤5.5-very great extent). The results by the respondents were as indicated below.

Table 4.6 Challenges in while using Mobile Banking

	No extent	Little extent	Moderate Extent	Great Extent	Very Great extent	mean	Std Deviation
Delayed response from the bank	18	38	28	5	8	2.43	1.07
There are increased financial costs on the service	11	26	40	10	10	2.84	1.11
Am unable to roll back error transactions	33	30	14	13	7	2.28	1.26
Loss of money due to wrong entries and transactions	31	30	21	6	9	2.32	1.25
I cannot understand the information in my m-banking menu	63	24	3	2	5	1.56	1.01
I cannot personalize my m-banking account	61	22	7	4	3	1.60	.996
I cannot transact when mobile phone network is down	17	30	16	13	21	2.96	1.42
My phone software cannot be upgraded till I visit the bank	49	16	14	7	11	2.15	1.39

Source: Research Findings.

The results in Table 4.6 show that the respondents to a great extent and percentage unanimously agreed that they faced exception when mobile phone network is down culminating to a mean of 2.96. They results also indicated that they were moderate as regards increased financial cost on mobile banking given by a mean of 2.84. With little extent they encountered challenges in delayed response from the bank a mean of 2.43, being not able to roll back error transaction a mean of 2.28, loss of money due to wrong

entries and transactions a mean of 2.32, understanding the information in m-banking menu a mean of 1.56, being not able to personalize m-banking account a mean of 1.60 and being not able to update phone software by a mean of 2.15.

The results from the data indicate that most of the previous challenges as addressed by preceding studies as Odek (2013) have been addressed but there is still increased financial costs and network hitches from the service providers.

4.7 The extent to which Mobile Banking adoption has influenced Customer Financial Behaviour

The study collected data to find out the changes in customer financial behavior as obtained from the respondents. The respondents gave their views in accordance to a likert scale with a range of 1-5 which translated to 1-strongly disagree, 2-disagree, 3- neutral, 4-agree and 5-strongly agree. The means and standard deviation were calculated by which the mean was interpreted to mean occurrence and scale (1-≤1.5-no extent), (1.5-≤2.5-little extent), (2.5-≤3.5-moderate extent), (3.5-≤4.5-great extent) and (4.5-≤5.5-very great extent). The results are as shown below.

Table 4.7 Customer Financial Behavior

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std Deviation
I purchase only what I need	4	10	12	42	29	3.89	1.05
I do purchase on impulse	30	24	14	24	5	2.47	1.30
I purchase a financial product after gathering information about it.	7	6	20	43	21	3.70	1.09
I pay my bills on time.	4	6	18	39	30	3.89	1.04
I keep a close watch on my financial affairs.	4	3	16	44	30	4.01	.952
I set long term financial goals and set to achieve them.	3	13	21	42	18	3.63	1.02
I borrow to make ends meet.	18	15	17	34	13	3.13	1.328
I am planning for retirement.	29	15	21	19	13	2.78	1.36

I manage my own taxes.	16	24	16	25	16	3.05	1.37
I spend more in a month than I earn.	31	29	10	21	6	2.32	1.26
I balance my credit/debit account each month.	11	14	20	35	17	3.31	1.25
I compare loans from different financial institutions before making a decision.	10	10	10	45	22	3.63	1.21
I examine the conditions of loan sale and terms which explains to me the defaulting consequences	5	5	7	47	33	4.01	1.01
I have invested in shares.	9	12	13	48	15	3.51	1.15
I have invested in real assets.	22	22	14	30	9	2.82	1.29
Weights (f)	1	2	3	4	5		

Source: Research Findings.

The results of Table 4.7 show that respondents financial behavior revolve around purchasing the needy given by a mean of 3.98, purchasing after gathering financial information a mean of 3.70, paying bills on time a mean of 3.89, keeping watch on financial affairs a mean of 4.01, setting long term financial goals to achieve them a mean of 3.63, managing own taxes a mean of 3.05, balancing own credit and debit accounts a mean of 3.31, comparing loans a mean of 3.63, checking for terms and conditions for loans a mean of 4.01, investing in shares a mean of 3.51 and investing in real assets a mean of 2.82. Most of the respondent's needs have been enhanced and stabilized with the adoption of mobile banking.

On the other hand the findings show that financial behavior has also been improved and that availability of funds via mobile banking has not caused a huge significant change to consumer financial behavior, such include: purchase in impulse given by a mean of 2.47, spending more than months earning a mean of 2.32 however there has a little encouragement to planning for retirement given be a mean of 2.78.

The data results showed that the respondents from Equity bank adopted mobile banking to a greater extent for the purposes of keeping close watch on their financial affairs and for checking terms and conditions for loans to understand the consequences of default.

Indicating they are good investors as they balance between loan instruments and the returns on investment.

4.5.1 Regression Findings

The customer financial behavior findings were regressed against the three independent variable namely; mobile accounting, mobile brokerage and mobile financial information findings data.

i) Regression coefficients for the independent variable

Constant term characteristics (Coefficients)									
Model	Unstandardized Coefficients		Standardized Coefficients	t	(p-value) Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
(Constant)	2.577	.374		6.892	.000	1.834	3.319		
Mobile Accounting	.147	.111	.140	1.325	.008	-.073	.368	.877	1.140
Mobile Brockorage	.227	.098	.244	2.312	.023	.032	.422	.884	1.131
Mobile Financial information	-.083	.105	-.084	-.790	.031	-.291	.125	.876	1.141

Source: Research findings.

Dependent Variable: Customer Financial Behaviour

The independent variable however have some association with the average individual customer behavior. Mobile brockorage is significant in the regression.

$$Y = a_0 + a_1x_1 + a_2x_2 + a_3x_3 + e$$

Customer financial behavior = + .140* Mobile accounting + .244* Mobile Brockorage + -.084* Mobile Financial Information.

The results obtained form an equation to which show that an increase in the unit value in customer financial behavior is expected to give .140 increase in mobile accounting, .244

increase in mobile brockrage and a decrease in Mobile Financial information by Equity bank customers. From the regression equation mobile accounting and mobile brockrage have a positive impact while mobile financial information a negative impact on customer financial behavior respectively.

4.5.2 Collinearity Analysis (True Positive Rate-TPR)

The p-value for the tests are have a low p indication that is p-value (<0.05) which indicate that the values have a purposeful increment and positive growth in the model since there is a responsive change to variables giving an overall adaptation of the predictor value(customer financial behavior). In this model the predictor values are significant as the three p-values are Mobile accountin (0.008), Mobile brockrage (0.023) and Mobile financial information (0.031) which all have a less common alpha level of 0.05. This indicates that are statistically significant.

Correlations					
Control Variables			Mobile Accounting	Mobile Brockrage	Mobile Financial information
Customer Financial Behavior	Mobile Accounting	Correlation	1.000	.237	.287
		Significance (2-tailed)	.	.020	.005
		Df	0	94	94
	Mobile Brockrage	Correlation	.237	1.000	.278
		Significance (2-tailed)	.020	.	.006
		Df	94	0	94
	Mobile Financial Information	Correlation	.287	.278	1.000
		Significance (2-tailed)	.005	.006	.
		Df	94	94	0

Source: Research Findings.

The data results show that independent variables have some association with the average individual customer financial behavior at significant level 0.05.

CHAPTER FIVE

SUMMARY, RECOMMENDATIONS AND CONCLUSIONS

5.1 Introduction

This chapter provides summary findings of the data based on the study objectives. The conclusions and recommendations, thereto, are presented. Thus, the chapter is constructed to give discussions, conclusions, recommendations. A further research gap is given for utilization. The objectives of the study were to determine drivers for mobile banking adoption, establish the extent of use of mobile banking, establish the challenges faced during mobile banking adoption and finally show the relationship between mobile banking and customer financial behavior among Equity bank customers in Othaya.

5.2 Summary

The study instituted that many of the respondents were working in a given form of employment which provided a good floor for analysis. Most of the respondents revealed to use mobile banking as they found it convenient in performing bank dealings. More so mobile banking is seen to be secure with fast services and provided privacy. Many other respondents were influenced by the society and the service providers to adopt the services.

The study shown that there is a wide range of transactions are conducted daily by the bank respondents who are the customers and majorly revolved around balance inquiry, viewing mini-statements, cash withdrawal at mobile money agents, utility bills payment, purchase of airtime among others. With a huge magnitude the use of mobile services was on cash withdrawal from mobile agents, purchase of airtime and balance inquiry.

Although the respondents were objective that mobile banking was cheap to operate and transact via, their more engagement expected more improved time response by the bank, enhanced rolling back or errored transactions and improvement of and sustained network coverage to maintain availability of the service. They were also an exception that they cannot personalize their m-banking account.

Much to the customer financial behavior the study demonstrated that the respondent's financial behavior was importantly influenced by the adoption of the mobile banking. It further revealed that day to day financial customer behavior revolved majorly on paying bills on time, managing of taxes, investment of shares and assets. Furthermore most of the respondent's indicated on setting a long term financial goal to achieve it, planning for retirement was not part of their future plan. As many of the respondents work in blue-collar occupations they have no enough income and hence borrow in order to make ends meet which has been enhanced by quick and easy access to finances, either saved or borrowed.

5.3 Conclusions

The study found a significant relationship between customer financial behavior and mobile banking use driven by mobile bank accounting and mobile bank brockage. The service delivery has not been fully exhausted as not all the services offered are fully utilized. The banks should channel their endeavors on elevating the level of awareness to the services to climax their usage. Kenyan mobile banking sector poses a delightful vintage point of exploitation. The demands of vibrant mobile banking and customer satisfaction revolve around personalization of m-banking account, improved network coverage, quality connection besides reducing transaction costs so as ensure affordability to many. The improvement of the mobile technologies and improving on most frequent challenges; mobile banking users are able to conduct banking services at any time and any place.

5.4 Recommendations

The findings of the research have established that the respondents were on a middle ground as to whether the costs for mobile banking services were relatively lower. With this indicator the prevailing services costs needs to be re-aligned and lowered to attract and net more users in the banking sector. Thus it would boost revenue streams, thereby promoting more transactions and hence leading to economic growth and development.

As much of the previous faced challenges for rolling back transactions and loss of money due to wrong transaction has been efficiently handled by the service providers, there is now need to put strategies to maintain and extend network coverage as many of the transactions could not be carried out when the network was down.

There is also need for service providers to make an improvement on the feature of mobile banking menu to make it more user friendly which would improve on technical problems faced during accessing the services. Information and education with respect to mobile banking products and services also need to be improved by providing various outreach programs to the customers.

5.5 Limitations of the study

The study was with a great extent successful however some technicalities faced include; the scope and the depth finding of information was limited by financial and time factor constraints. The researcher faced challenges on the questionnaire administration since some information requested was confidential and the respondents were unwillingness to provide details for the same.

The respondents needed an assurance that the information provided would be kept confidential. Others showed distrust as to if the researcher would live to the consignment that the use the information provided would be exclusively for the purposes of the research.

The researcher further encountered efficiency exceptions in timely filling of the questionnaires as some kept the questionnaires for so long thereby delaying the process of data analysis.

5.6 Further Research Study areas.

The research recommends further study on the mobile banking since the study mainly focused on equity bank customer in Othaya, the research should therefore be replicated in other banks and the results compared so as to establish whether there is a consistency among the various banking sector customers.

The study also used regression analysis to analyze the data; not considering techniques as Time series technique and the chi-square which might assist in discovering great degree of switching in consumer's financial behaviour in the banking sector. For policy makers, the study recommends a further study on the economic implication of mobile banking money transfers. It should aim at quantifying the economic importance of mobile banking.

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Questionnaire

15th August 2016.

My name is Philip Wambua and I am conducting research on mobile banking in Kenya for my master's degree in Management information system at the University of Nairobi, Kenya. The title of my research project is relationship between mobile banking and Customer financial behaviour. I would like you to answer the questions, as this will help me to complete my project. The use of mobile phone to make transaction such as fund transfer, viewing of account balance, notification of account balance, payment of bill, etc., is known as mobile banking and this facilities or service is provided by banks to its customers. The aim of this research project is to improve the mobile banking service to Kenya customers. I need only 15 minutes of your time to complete the questionnaire. The information given will be treated as confidential and for the purpose it is been collected for. Please, your assistance will be highly appreciated.

Thank you.

APPENDIX I

QUESTIONNAIRE

SECTION A: GENERAL DEMOGRAPHICS

NAME[optional]		
Gender	Male <input type="checkbox"/>	Female <input type="checkbox"/>
Date of Birth (DOB)		
Marital Status	Married <input type="checkbox"/>	Widow <input type="checkbox"/>
	Single <input type="checkbox"/>	
	Others (specify).....	
Select highest Level of education	Primary school	<input type="checkbox"/>
	Secondary school	<input type="checkbox"/>
	College diploma	<input type="checkbox"/>
	Undergraduate	<input type="checkbox"/>
	Post graduate	<input type="checkbox"/>
	Other (specify).....	
Occupation	Blue-collar worker (police officer, fire fighter, foreman...)	<input type="checkbox"/>
	Not at work	<input type="checkbox"/>
	Unskilled worker (cleaner, shop assistant ...etc.)	<input type="checkbox"/>
	Entrepreneur	<input type="checkbox"/>
	White-Collar Worker (executive, doctor, an attorney...)	<input type="checkbox"/>
	Student	
	Other(specify).....	
How long have you been in the occupation		

Section B – DRIVERS FOR USE OF MOBILE BANKING

1. To what extent has each of the following made you to use Mobile banking? (Tick as appropriately using the scale 1,2,3,4,5 below)

	No extent (1)	Little extent (2)	Moderate Extent (3)	Great Extent (4)	Very Great extent (5)
Convenient					
Security					
Faster services					
Cheaper – less costly					
Privacy					
Motivated by service provider					
Social influence					
Ability by the service provider					

	No extent (1)	Little extent (2)	Moderate Extent (3)	Great Extent (4)	Very Great extent (5)
Charitable deeds by provider					
Service provider ability is similar to that of traditional bank					
The usefulness of mobile banking					
Ability to meet other transaction needs					
Previous use of electronic device					
Mobile banking flexibility to interact with					
Peer influence					
Others, specify and rate.					

SECTION C: EXTENT OF USE OF FINANCIAL SERVICES IN M-BANKING

1. Indicate the extent to which you use the following financial services via the mobile banking (Tick as appropriately using the scale 1,2,3,4,5 below)

	No extent (1)	Little extent (2)	Moderate Extent (3)	Great Extent (4)	Very Great extent (5)
Balance inquiry					
View mini-statements					
International remittance					
Commodity dealing/ investment					
Pay third party beneficiaries/ inter-account transfers					
Cash withdrawal at Mobile money agents					
Brokerage					
Request for statements of accounts					
Request for chequebook					
Utility bills payment					
Purchase of airtime					
Receive text financial advice					
Salary deposit					

	No extent (1)	Little extent (2)	Moderate Extent (3)	Great Extent (4)	Very Great extent (5)
Saving					
Pension fund management					
Others, specify and rate.					

SECTION D: CHALLENGES WHILE USING M-BANKING TO AVAIL FINANCIAL SERVICES

1. Indicate the extent to which you face each of the following challenges using mobile banking (Tick as appropriately using the scale 1,2,3,4,5 below)

	No extent (1)	Little extent (2)	Moderate Extent (3)	Great Extent (4)	Very Great extent (5)
Delayed response from the bank					
There are increased financial costs on the service					
Am unable to roll back error transactions					
Loss of money due to wrong entries and transactions					
I cannot understand the information in my m-banking menu					
I cannot personalize my m-banking account					
I cannot transact when mobile phone network is down					
My phone software cannot be upgraded till I visit the bank					
Others, specify and rate					

SECTION E: INDIVIDUAL CUSTOMER FINANCIAL BEHAVIOUR

1. Indicate the extent to which each of the following financial behavior applies to you as you use mobile banking. (Tick as appropriately using the scale 1,2,3,4,5 below)

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
I purchase only what I need					
I do purchase on impulse					
I purchase a financial product after gathering information about it.					
I pay my bills on time.					
I keep a close watch on my financial affairs.					
I set long term financial goals and set to achieve them.					
I borrow to make ends meet.					
I am planning for retirement.					
I manage my own taxes.					
I spend more in a month than I earn.					
I balance my credit/debit account each month.					
I compare loans from different financial institutions before making a decision.					
I check for the terms and conditions of any loan I take and ensure I understand the consequences of default.					
I have invested in shares.					
I have invested in real assets.					
Others, specify and rate					