

**THE ROLE OF MOBILE BANKING ON THE GROWTH OF MICRO AND SMALL
ENTERPRISES IN KITUI COUNTY**

BY

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DECLARATION

This proposal is my original work and has not been presented for a degree or any other award in any other University.

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DEDICATION

I dedicate this research project to my mother Lenah Mutisya, for the courage and advise that has seen me through.

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I wish to express my sincere gratitude to the Lord Almighty for giving me the courage, strength, good health and ability to bring this work to a final stage. I am deeply indebted to many people for their immense contributions in diverse ways towards the successful completion of this proposal.

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LIST OF ABBREVIATIONS AND ACRONYMS

AML	Anti- Money Laundering
CBK	Central Bank of Kenya
CTF	Counter-Terrorism Financing risks
GDP	Gross domestic product
GOK	Government of Kenya
KYC	Know Your Customer
MSEs	Micro and Small Enterprises
MMTS	Mobile Money Transfer Service
R&D	Research and Design
PIN	Personal Identification Number
SIM Card	Subscriber Identification Module Card
ATMs- Automatic	Teller Machines
CCK	Communication Commission of Kenya
ICT	Information Communication Technology
MFI	Micro Finance Institution
M-Pesa	M-for Mobile and-Pesa for Money in Swahili
SMS	Short Message Services.
ANOVA	Analysis Of Variance

Abstract

Mobile Banking has marked a new frontier in banking sector and mobile phone technology with an ever increasing number of Micro and Small Enterprises using it in their transactions to enhance performance. However it is not clear on the role the Mobile Banking plays on the growth of MSEs. Majority of the MSEs owners use mobile banking as opposed to formal banking for their daily transactions. The study established that the use of Mobile Banking contributed significantly to the growth of MSEs through increased sales volume and net profits. In respect of conceptual framework, Mobile Banking transactional costs, accessibility and security have all been shown not to affect MSEs growth significantly through the service despite increased enrolment in Mobile Banking services. This study achieved its objective and obtained detailed information arising from the role of Mobile banking on the growth of MSEs.

Keywords: Mobile Banking, MSEs, Accessibility, Costs, Security, Kitui, MSEs Growth.

CHAPTER ONE

INTRODUCTION

1.1 Background

Mobile Banking is a mobile based technology model for increasing financial services access which can help people fight poverty through investing in productive assets and expanding business. Wambari and Mwaura (2009), asserts that in developing world, 9 out of every 10 people are excluded in accessing financial services. The financial sector in these countries consider the poor people as not viable customers because of their smaller transaction sizes while majority live in remote areas beyond the reach of banks. The introduction of mobile technology has opened an opportunity to banks to view poor as viable customers and offers great potential for reaching out the poor (Wambari and Mwaura. 2009)

Mobile banking can be referred to as a means where customers communicate with the bank through a mobile gadget, either a mobile phone or personal digital device that generates data communication information (Barnes;Corbitt, 2003). Introduction o the mobile telephones which use mobile networks which can reach deep into the remote areas has enabled majority poor people access financial services at low cost through mobile banking. The mobile phones have many features and can be easily adopted to handle banking transactions. Mobile network It is a banking service that uses a bank account and mobile telecommunications network as a platform to carry out traditional banking services like account balance checks, money transfer between accounts and making payments (Wanyonyi & Bwisa, 2013).

Mobile banking is similar to Internet banking and is one of the service packages a bank might offer its clients (Kim, 2008).The first mobile banking applications dating back to 1992 were used in Finland in payment of bills and querying bank account balances using mobile devices which

depended on mobile networks like Global Standard for Mobile (GSM) (Barnes; Corbitt, 2003). The current platforms in use include Short message Service (SMS) and Wireless Application Protocol (WAP) which are likely to make mobile banking key application choice for bank customers interested in wireless data.

Mobile Money Transfer Service (MMTS) subscribers all over the world are using virtual money for transactions like remittances transfers, bill payment, receiving salaries and wages, loan transactions, and payment for goods and services (Beza, 2010). The range of use of mobile money transactions and services is expanding very fast due to mobile telecommunication innovations. Mobile money has revolutionized the use of M-banking by; converting cash into virtual money and using it to make mobile payments and in loan receipt and repayment, thus facilitating financial inclusion through M-banking (Beza, 2010).

Mobile money has enormous potential for development impact due to it's ability to facilitate financial sector inclusion. Given opportunity to reach financial services the poor people can fight poverty in that first, financial services will enable poor people to create employment or acquire asset. (for example, investing in: enterprises, real estate, education or education/training which increases one's job market opportunities); secondly, financial services help reduce vulnerability to uncertainties like accidents, sickness, theft, or drought (Yousif, Berthe, Maiyo & Morawczynski, 2012).

The money transfer services through mobile phone services have dramatically changed the lives of people in the world. This comes from the new services of mobile phone SIM card that can act as a transaction card and as an identification module for calls (Bangens, 2008). This new service enables the mobile phone holder to withdraw or deposit cash from the bank, commonly known as mobile banking or simply M- banking. This service is no doubt a new phenomenon to both

developed as well as developing countries and is surely hoped to transform the economy of states by reaching the banking services to previously unbanked (Bangens, 2008).

There has been diffusion of the mobile banking in developing countries and especially in Kenya and South Africa. This is due to the wide acceptance to use of mobile money transfer which is easy to sign up for, less expensive to use and the only slowdown factor is network coverage to some geographic location but is improving by having more network coverage (Kenny & Karemane, 2007).

1.1.1 Mobile banking concept

Mobile banking is a product of convergence of two technological advancements of internet and mobile phones (Barnes : Corbitt, 2003). Mobile communication has broadened the reach and coverage of communication and financial access into the population that was excluded in receiving such services. Financial institutions have made effort to link mobile , communication and financial services by developing mobile financial services Mobile Banking provides an alternative channel for banking services using mobile devices which are enabled through software to perform commercial transactions on either wireless internet or communication network service providers platforms. The use of internet on the wireless mobile phones have provided wireless data services like short messaging services on mobile devices(Barnes :Corbitt, 2003).The saturation of mobile phones has provided banks and other financial institutions, an opportunity to deliver timely and efficient services to many of their customers.

The mobile banking is based on earlier concepts of mobile services channel extension using telephone banking and internet banking aimed to reduce costs and break into online banking channel (Barnes; Corbitt, 2003). Mobile banking has revolutionized the way financial services

industries conduct business by providing banks with new business models. Mobile phone users can conveniently carry out banking transactions 24 hours daily because the user can access a mobile phone all time (Wambari and Mwaura. 2009). Mobile banking has created new large markets for financial institutions offering value added services. With Mobile Banking, banks can now provide a wide choice of services to their clients. Mobile phones are the most promising way to reach the masses and create stickiness among current customers due to their ability to provide services any time, anywhere, high rate of penetration and potential to grow (Wambari and Mwaura. 2009).

In the banking industry, mobile technology has provided another outlet channel, where mobile network providers are acting as the “front office” financial services providers, leaving physical banks to offer back office activities (Wambari and Mwaura. 2009). Mobile banking transaction initiatives are bank-led model which provide information, payments and transactions which compliments available bank service channels like branches, telephone banking and online services. According to Wambari and Mwaura. (2009), the mobile banking access channel using rapidly growing mobile communication infrastructure provide opportunity for faster inclusion of the poor beyond the physical banking network at very low costs.

In Kenya, the sessional paper (2005), recognized the contribution of mobile phones and similar technologies in economic development. Kenya has also encouraged the development of communication infrastructure through the ministry of Information, Communication and technology and the Communication Commission of Kenya (CCK). The introduction of mobile telephony in Kenya has seen an increasing mobile banking activity of phone to bank transfer and vice versa. A more specific situation is the use of Safaricom’s “till number” or “pay bill” options by customers to transact on goods and services. Other popular mobile network products

supporting banking activities include: Equitel of equity Bank, PesaPap of Family Bank; Pata Cash of Kenya Post Office Savings Bank and KCB Connect of Kenya Commercial Bank. Micro Finance operators like Faulu Kenya, SMEP, Musoni, which target SMEs have also benefited from the mobile networks in provision of financial services like enabling clients transact their loans and bank accounts through the “pay bill” option of M-PESA (Gebregziabher, 2011).

1.1.2 Micro and Small Enterprises (MSEs) concept

The concept of micro enterprises was pioneered by Muhammad Yunus in 1976 in Bangladesh (Barnes; Corbitt., 2003). His idea was to help poor women to become economically self sufficient and end poverty. He established a bank (Grameen Bank) to offer credit to the poor women and enable them start microenterprises (Barnes; Corbitt., 2003). A business is created through a single-handed efforts of a dynamic ,hard working entrepreneur (s) (Nichter; Goldmark, 2005). In developing countries like Kenya , MSEs have come up to complement the formal sector jobs creation to the poor. The MSEs provide income and growth opportunities for entrepreneurs and employers (UNIDO, 2003). MSEs are key drivers of economic growth and innovations. MSEs tend to grow due to profitable market opportunities . This growth increases job creation and income per capita. (Nichter; Goldmark, 2005).

The definition of MSEs differs in countries and among researchers (Donner; Escobari, 2010). MSE can be defined as any enterprise, with less than 50 employees and includes sole entrepreneur, part-time or home based entities. Sole proprietorship or single businesses constitute the largest share of MSEs in developing world. Micro Enterprises employing one to nine employees tend to be more than the small entities which employ 11 to 50 employees (Mead; Leidhol, 1998). Most micro enterprises are not registered and are run with small capital investment from entrepreneur’s savings or family contribution. Similarly small Enterprises can

be defined as companies, Partnerships or Entrepreneurships that employ between ten and fifty employees. (Labie, 2006).

Haan (2001) segmented the MSEs into three categories. The first segment is the traditional income generating activities like occasional trading and hawking, animal keeping, and basic crafts. These are seasonal, part time businesses which serve local markets with local goods and services made using traditional technologies. The second category is the Micro (MEs) consisting small shops, metal works, and carpentry, tailoring, repair services, and are family based with one or few permanent workers. They used obsolete technology, semi- skills, lack management and have no access to capital. They serve nearby markets and are found in large villages, rural towns and region centers. The Small Enterprises (SEs) employ 10 to 20 people and are both formal and informal using modern technology. The formal SEs are licensed by the local governments and pay some taxes. They include saw mills, garments, transport, building and construction, agro processing.

The government of Kenya has recognized the growth of MSEs as the foundation blocks for industrial development. The government through the ministry of industrialization has promoted the development of MSEs by creating a special department for them .The government through the Sessional Paper of 2005 has also identified appropriate technology as a major limitation in the country for enjoying the benefits resulting from the SMEs growth. The Kenya's Micro and Small Enterprises ((MSEs) Act 2012 defines Micro and Small Enterprises by the number of workers, the turnover and Assets of the enterprises. The MSEs Sector consists of business operators and entrepreneurs involved in formal and informal sectors like Agriculture, Manufacturing, Trade and Service. Micro-enterprises tend to employ nine or fewer workers or has annual turnover of less than kshs 500,000 and has less than kshs five million invested in it.

Small enterprises employ 10-50 workers or has annual turnover of kshs 500,000 to kshs 5 million (Government of Kenya, 2012).

The 2003 Economic Survey in Kenya indicated a substantial growth in the MSE sector, as evidenced by increase in employment in the Sector from 4.2 million persons to 6.9 million persons in 2002, accounting for 74.2% of employment in Kenya. The survey also showed that sector contributed 18.4% of the GDP. The Kenya Bureau of Statistics Survey (2005) indicated that five million people (19 % of Kenyan population) were employed in the MSEs informal sector an indication of major growth in MSE sector which creates most of the new jobs. Malik (2004) argues that the MSEs constitute 98% of all businesses in Kenya and absorbs most labour force in the country. A baseline survey conducted in 2006 indicated that MSEs in Kenya had grown from 910,000 in 1993 to 1.8 million in 2006 with 66% of the MSEs located in rural areas and majority if MSEs were in trade (64.8%).

1.1.3 Growth of Micro and Small Enterprises and the Mobile Banking concept.

Integration of banking services and the mobile communication technology has resulted to mobile banking, a service being preformed via SMS, the Mobile internet or a special program downloaded to the mobile device (Salzaman, Palen & Harper, 2001). Mobile banking benefits include saving and borrowing by customers in a cost effective and secure manner. Examples of mobile banking services are: checking account balances, accounts transfers, bills payments and loans repayments using mobile devices like mobile phones (venkatesh, 1999). This branchless banking model seem to have taken all small value transactions from the banking halls therefore reducing transaction costs using non bank outlets banks or mobile operators agents perform banking activities using client's mobile device which shows transaction details to and from the bank (Salzaman, Palen & Harper, 2001).

The convenience and security involved in the mobile money services have led to faster and easy money transfers which in turn have increased economic activities (Zutt, 2010). Low costs, increased efficiency and trust on the systems has included many people rural areas in receiving financial services therefore increasing economic activities in those areas. It is easy for a trader to withdraw money from a bank account and buy stocks without travelling to the bank. With the increased uptake of mobile phones, many Kenyans with bank accounts have enrolled into mobile money service and most transactions are being done using mobile money instead of cash. This has made MSEs streamline their operations to increase efficiency and boost operations (Omwonsa, 2009). The MSE owners visit banks less often meaning they have more time to spend running their businesses .More time in business means more customers being served which in turn increases sales volume and therefore profits of the business. The lower transaction costs using mobile money transfer influences the MSEs growth through savings made which are re invested as working capital.

The MSEs have benefited from the mobile banking through ;efficient use of time, on line control of spending of finances, low costs of transaction, convenient, easy and cheap borrowing and repayments (Sarker; Wells, 2004).The use of mobile phones by the mobile operators and the banks have enabled MSEs expand deep into remote areas at low cost because the business owners can save their cash sales and deposit them to their bank accounts using the phone, they can withdraw or borrow cash, from their banks miles, away for re-stocking their goods at low cost. Use of mobile banking in running MSEs has reduced costs, increased income and reduced risks, hence increasing their productivity (Mead; Leidholm, 1998). The mobile phone adoption ,usage and influence has changed the MSEs operations and like any other user, MSEs use

mobile phone for social economic purposes thereby increasing their profits and enhancing social benefits (Chogi, 2006).

The government of Kenya through the ministry of ICT has encouraged MSEs to join information technology networks, in order to become competitive, be global and, and reach more markets through accessing information from all corners in order to increase productivity, profitability, growth and expansion (Wambari and Mwaura, 2009). Adeya (2003) noted that some businesses lack awareness of the potential existing in the usage of mobile phones like the technological innovations that lower costs, increase productivity, widen reach, ability and mobility. Mobile phones can increase business networkings therefore substituting for long journeys, brokers, traders, and other business agents/middlemen (Donner, 2005; Hughes and Lonie,2007).

The sessional paper no. 2 of the financial year 2005 provided a policy framework supporting research and development. One such technological development is the mobile money transfer known as M-Pesa launched in 2007 which is widely used by MSEs (Mbogo, 2010). Other recent mobile money transfer innovations used by MSEs are Lipa na M-Pesa launched in 2013 to enable MSEs pay for goods and services using cashless transactions. The availability of mobile phones and the banks products they offer has attracted Micro enterprise operators in Kenya into use of mobile money services in transacting their businesses. Introduction of M-Pesa services which depends on a short messaging service (SMS), provide solution for SMEs banking desires because they can use mobile phones to conduct their bank transactions, make enquiries, make micro payments and apply credit.

1.2 Reasons for studying MSEs in Kitui County

In Kitui MSEs are major sources of employment to the vulnerable population in Kitui like the women, youth and children. The Juakali and retail businesses are the prominent employer which contributes marginally to the household income. The growth of MSEs in Kitui faces a big challenge due to high bank transaction costs, security and limited long distance banking services. The introduction of ICT – based business operations based on mobile technology and especially the mobile phone transaction services and the mobile banking services are seen as emerging growth drivers for MSEs in the region. This innovation has caused dilemma to the MSEs who are indifferent as to whether using their resources on digital technological integration in their businesses is viable. This study aims to provide answers to this technical dilemma and help MSEs owners in Kitui to make informed decision.

1.3 Statement of the Problem

Studies by Central Bank of Kenya (2010) indicates that most bank customers are using mobile banking applications like PesaPap of Family Bank; Pata Cash of Kenya Post Office Savings Bank and KCB Connect of Kenya Commercial Bank to access basic banking service like; deposits, withdrawals, disbursement and repayment of loans, bills payments, funds transfer, balance checking and querying mini bank statements.

Financial analysts argue that great diversification of the financial market services tend to: enhance competition in the financial market; increases revenue avenues for financial institutions and also reduces the cost of carrying out financial transactions among businesses .This enhances effectiveness in operations between the business, customers and the bank and the business that use mobile banking which encourages growth of businesses (Caporaso & Madeira, 2012).

A lot of research exists on role of traditional banking services on performance of MSEs in Kenya but little has been done in mobile banking services and its effects on growth of MSEs. Some of these studies include; Njenga (2009) on mobile phone banking experiences in Kenya, Nyang, Momanyi and Moenga (2013) on effect of E- money transfer on liquidity of MSEs, Wanyonyi and Bwisa (2013) on effect of virtual money transfer services on performance of MSEs in Kitale municipality, Jack and Suri, (2014) on transaction costs and risk sharing as evidenced from Kenya's E- money revolution. None of these studies has been carried out on the role of mobile banking services on micro and small businesses growth.

This study therefore aims at answering the following question:-

What is the role of M-banking services on the growth of MSEs in Kitui County?

1.4 Study Objectives

1.4.1 The key objective of this study is to establish the role of mobile banking on the growth of MSEs in Kitui County.

1.4.2 The specific objective is to determine out the role of M-banking services on the growth of MSEs in Kitui County.

1.5 Value of the Study

The study will benefit the following: owners of MSEs in Kitui County will understand the roles played by mobile banking and develop necessary measures to optimize the benefits of mobile banking; Financial institutions in Kenya will use the findings of this study to develop policies to enhance development of new services in mobile banking and provide a broader range of services needed by MSEs in Kenya; Government will use the findings of this research to develop policies that regulates the business operations between the SMEs and the service providers; Future academic researchers will use the results of the study for their empirical review.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Review of literature covers; theoretical review and empirical review including summary for the literature review. The study reviews available literature from journals, books, reports, and newsletters from both developing and developed nations.

2.2 Theoretical Literature Review

This study will be based on Mobile Banking Business Models theory, Merton's Market Efficiency theory of innovation, non bank led theory on innovation and Schumpeterian theory of innovation as discussed below.

2.2.1 Mobile Banking Business Models Theory

Wambari and Mwaura (2009) asserts that any model of mobile/branchless banking aimed at attracting low income people will depend on banking agent ie outlets that conduct financial transactions on behave of the financial institutions. They argue that agent banking is a key part of mobile banking business model which tent to creat the link between the banks and their clients. The new mobile banking business models tend to give new market structures for offering existing products of financial services (savings, credits, transactions). The banking business models theory classifies branchless banking into three models; Bank focused model, Bank –led model, non- bank led model.

(i) Bank –Focused Model

Physical bank use low-cost delivery channels different from the traditional channels to offer banking services to its customers. Examples are Automatic Teller Machines (ATMs), Internet Banking, Mobile phone banking, all aimed to offer specific banking services to bank clients.

(ii) Bank –Led Model

According to this model, financial services are offered using retail agents or mobile devices rather than using physical banks. The model offers the opportunity to increase financial services inclusion by offering cheaper various delivery channel, different trade partners (chain stores, telecom) who have capacity and unique market distinct from traditional banks.

(iii) Non- Bank Led Model

Here, the bank acts only as a custody of the excess money and the other service providers (eg telecom) does all the transactions. Kumar, et al (2006) argued that here customers do not operate with a bank but transact using mobile devices or prepaid cards and agents. Clients covert their funds into mobile money stored in a virtual electronic money account not linked to an individual bank. This model is risky because the regulatory environment of the non bank operators might not give much importance to know your customer or customer identification. This may provide leeway for Money Laundering and Terrorism Financing (ML/FT).

Mobile banking business models theory is important to this study by helping in the understanding the alternative low cost and more convenient branchless bank delivery channels and the inherent risks likely when financial institutions allow its customers to operate mobile banking in their financial transactions.

2.2.2 Technology Acceptance Model (TAM)

This theory shows how and why users adopt a technology. Presented with new technology, users are faced with several perceptions that affect their decision to use it. These are perceived usefulness (level of accepting that certain technology will improve productivity) and perceived easiness of use (level of accepting that using certain technology will be effortless) (Davis,1989).

The two factors though determine the adoption and usage of new technology, they are affected by other factors like security, cost, accessibility, trust (Lu,Yu, Liu and Yao ,2003). Perceived

effortless of use influences users perception on the usefulness which both determines perceived use and the real use of the technology (Viehland and Leong, 2007). This model has been commonly used to determine the level of acceptance and use of a technology depending on the users perception on usefulness and easiness of use (Richardson and Ndubisi, 2002). This study used TAM as the study model and considered factors like accessibility, low cost and security. This theory is important to the study by explaining how small business owners have adopted new technology in conducting their businesses. This is particularly the case where small business make use of M-banking in their money transaction which has led to fast, secure and more accessible money transactions.

2.2.3 Demand and Supply side Twin Theory

This model explains financial inclusion and financial literacy (Chakrabarty, 2011). Financial inclusion provides financial markets and services demanded by people while financial literacy stimulates the demand side. Growth in financial inclusion is being driven by demand and supply factors (Mehrotra et al., 2009). Banks are supposed to mitigate the supply side processes that hinder poor people from accessing the financial markets. On the demand side, factors like low income or asset holding prevent financial inclusion. Lack of financial inclusion has resorted to many MSEs rely on personal savings or internal sources to finance their businesses. The banks supply side interventions are key to unlocking this financial exclusivity and enabling MSEs access financial services. Most banks offer financial products and services not customized to informal sector, provide rigid and complex documented processes which deter technology availability and acceptance (Simiyu, 2015). With the introduction of the mobile phones, most of the current financial inclusion channels focuses on hand held devices. This theory is applicable in this study because financial institutions have innovated mobile banking that has

opened up the financial market and created efficiency in financial transaction where money transaction between MSEs and customers is done in a more speedily manner and at cost effective ways therefore enhancing growth of businesses from voluminous sales that they are making.

2.3 Empirical Literature Review

This chapter covers studies carried out on mobile banking services factors of accessibility, costs and security which have contributed to the growth of SMEs.

2.3.1 Accessibility

Accessibility, which means the ability to reach the intended services is a key advantage of mobile payment services (Pagani , 2004). MSEs have greatly benefited from using mobile money transfers with agents spread throughout the country. Due to ease of accessibility, MSE owners rarely visit the bank meaning they have more time in their businesses. With mobile banking ,MSE owners can easily receive or send money to their banks anywhere (Omwonsa, 2009). Most of the MSE owners know how to use mobile payment services which demand no training before use and are easy to use .

Schierz, Schilke and Wirtz (2010) revealed that mobile technology usage has become part of users' daily life. Despite this, mobile payment is amazingly one of the rarely mobile services being used, because mobile payment services have not been fully accepted by the clients. The study by Schierz, Schilke and Wirtz focused on variables affecting users' acceptance of mobile payment services. The study results indicated significant effects of compatibility. subjective norm.and individual mobility. The study recommended more effort in marketing of mobile payment services to attract clients' perceptions to the technology.

Omwansa (2009) while studying M-Pesa progress in Kenya found that the respondents were aware of the service. Mobile transfer services were found to be used by micro business owners because they spend less time visiting the bank and therefore create extra time in managing their businesses. The study also revealed that mobile services on money transfer were easy to use as they need no training and were very convenient when used.

2.3.2 Transaction Costs

Omwansa (2009) revealed that subscribers to mobile money transfers have adopted the technology because it's lesser cheaper to services at the banking hall. He asserts that sending money through mobile phone is much cheaper than using banks and other money transfer channels like securical firms. The lower transaction costs benefit is passed on to consumers (Mallat, 2007). Most MSEs owners have mobile hand sets easy to operate and with all functionalities required in mobile banking making the transaction costs affordable and being below what banks charge.

Mallat (2007) while studying consumer usage of mobile payments used six focused groups' sessions, examined client acceptance of a new mobile payment service. . The study indicated that mobile payments complimented small value cash payments and were more compatible with digital devices and service purchases. The study, however, suggested that certain situational limitations like absence of other payment means or urgency of the service affected the benefits accruing from mobile payments. In this study, time, place, independence, availability, remote purchases, and lack of queue were suggested as the benefits accruing on use of mobile payments. The study indicated a number of barriers to the acceptance of mobile payments .These include; high payment costs, complex payment procedures, limited widespread merchant acceptance, and perceived risks.

Jack and Suri (2014) in their study on Transactions Costs and risk Sharing on MSEs in Kenya revealed a great reduction in transaction costs and entrepreneurs can now conduct financial transactions over the phone without having to travel to banks. Njenga (2009), while studying Mobile phone banking on usage experiences in Kenya found that there was a large business potential to be exploited in the Kenyan mobile banking sector. The study found that most customers accepted the role played by the mobile banking services in their daily activities. Njenga (2009) asserts that the mode of usage is mostly influenced by missions and marketing strategies of M-Banking service providers. M-Banking users tend to use the service in many ways depending on the nature of activities and urgency, however, the “hype factor” is a unique dimension of use. Here, the usage of mobile banking is caused by excitement and imagination originating from the M-banking utilization environment. Banks might be better off by offering the service at lower costs to entice more customers and not focus on high charges which scare off potential customers. This way banks can increase their revenue sources through increased transactions volume.

2.3.3 Security

In mobile banking, users perception on the security and trust to the payment service providers is necessary (Siau et al., 2004; Mallat, 2007). The mobile transactions safety involves; lack of delay of transactions, completeness of the transactions, customer identification and confidentiality of the customer information. Users of mobile banking transactions are more concerned on security and safety which revolves in the use of PIN and security code (Nam, Yi, Lee and Lim, 2005). Shon and Swatman, (1998), assert that the key requirement for any electronic financial transaction is confidentiality, authentication, data integrity and non-reputation. Other security features include users’ anonymity and privacy (Jawyardhena and Foley, 1998; Shon and

Swatman, 1998; Mallat, 2007). Njenga (2009) argues that the demand of high M-banking usage depend on wide network coverage and quality network connections. This ensures easy, speedy and cheap access mobile transactions affordable to all prospective partakers. With wide network coverage and good connections new MSEs can be opened in deep remote areas and or existing MSEs owner can expand their businesses in areas which could have been unreachable without the network operation.

Omwansa (2009) found that losing a mobile phone does not mean lose of one's money because one's mobile money account cannot be accessed without a correct personal identification number (PIN). Mobile banking proves to be both convenient and safe service that users carry around their E- money and can withdraw cash any time at a minimal fee without inconveniences. To use mobile payment system, one should strongly believe in the safety and trust in the providers of the payment system. Users of any payment system are primarily concerned with the Security and safety of mobile payment transactions. Safety means lack of delay or incompleteness of a transaction and non disclosure of private information payment transactions. These security and privacy issues are ensured through the use of the secret code for personal identification for every single M- banking transaction. Omwansa recommended that customer information confidentiality, transaction authentication, data integrity and security were the sole requirements for any financial transaction in mobile banking environment.

Merritt (2011) revealed that mobile money transfer has inherent risks, just like all other retail payments systems of ; privacy and security, money laundering, user protection, fraud, credit and liquidity. The study found that mobile money services were minimizing the inherent risks in cash-based payment services, thereby increasing openness in cash flows and enabling risk management through the regulation of the payment systems. The study recommended

consideration of numerous issues in order to minimize the risks that may be posed by mobile phone payments. Other non bank key players involved in mobile payments, like telecom firms', their agents and technology vendors may pose more risks. The study noted existence of unique risks to telecom firms which may not be detected or monitored by the financial institutions and their regulators due to experience limitations. The multiple regulations exercised on banking and telecommunications sectors are to blame because they operate autonomously and have limitations of joint cooperation so as to provide effective oversight onr mobile money transfers. There is need to merging the two distinct sectors to form an effective joint regulatory environment across all sectors involved in mobile money transactions.

Mbogo (2010) applied theory of Technology Acceptance Model (TAM) on his study on the impact of mobile payments on the success and growth of micro-business in Kenya .The TAM model was extended to include other factors capable of predicting success and growth in micro-businesses. The study revealed that acceptance of the mobile money transfer technology and its influencing factors like accessibility, cost, convenience and security were related to perceived use and actual usage by the MSEs to improve their success and hence growth.

2.4 Summary

The effect of mobile technological innovation like mobile banking services depend primarily on accessibility, costs and security on the services being offered. The studies have shown that the mobile money transfer has resulted in secure and faster accessibility of funds to remote areas enabling entrepreneurs to run businesses in those areas which were financially excluded before the mobile banking innovations. The study also revealed that transaction costs have come down as a result of M-banking since only a small fee is involved in money transaction. This has made it easier for MSEs to access or deposit funds frequently to the financial institutions and also save

funds which are re invested to grow the businesses. Entrepreneurs can now access credit or repay loans instantly at cheap transaction costs compared to when they had to visit the physical bank Offices.

The adoption of M-banking in MSEs has also led to more security in conducting daily businesses. The use of cashless system of doing businesses has avoided unnecessary losses when carrying out transactions in businesses. This means MSEs owners in unsecure areas can transact large amounts of money in receipts or payments without fear giving them opportunity to expand their stocks of goods and offer more services all over the region, hence more growth.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter covers research plan, study population , study sample, sampling technique and data collection and analysis procedures.

3.2 Research Design

According to Orodho (2005), research design is the procedures used by the researcher to select the sample, administer the instruments (collection and measurement) and analyze the data. Kothari (2008) asserts that research design involves data collection and analysis in consideration of relevance to the research purpose and economy in procedure. Sapsford (2007) argues that survey research design is the collection of quantifiable data from a sample frame for purposes of description on identity verifications that may point to casual relationships.

This study used descriptive survey design which provide numerical descriptions and an in-depth explanation of events as they occur, enable in determining opinions, attitudes and habits . This Survey design is very economical, has high turnaround in data collection and can be used to identify characteristics of population from a sample so as to provide quantitative and numeric descriptions of attributes of the population.

3.3 Target Population

This is the specific population on which information is to be obtained from. Ngechu (2004) asserts that population is a specified set of beings, things, services, elements, and events or households be studied. The portion of that population used in data collection is a sample (Denscombe, 2008). In this study the population was MSEs registred in Kitui town managed by the owners, managers and senior managers. Information from Kitui county government (2015)

indicates that there are over six major business segments which contribute to over 50% of her revenue from licenses (Wambua , Munyithya, 2015)..

Table 3.1: Population Target

Category	Size
Retail Shops	38
Wholesale shops	11
hotels	16
Cloth stores	18
Manufacturing Business	2
Butcheries	9
Hardware	11
	8
Garages	11
Petrol station	5
Hair saloon	11
poultry	
Total	140

Source: Kitui County Business Licensing Department: 2105.

3.4 Sampling Design

This is a process to obtaining sample units and sampling frame, setting sampling procedures and determining the sample size for the study (Saunders et al., 2003). The sampling frame means the list of all population units from which the sample units are selected (Cooper & Schindler, 2003). The sample size is determined by ;the objective of the study, importance of the inquiry, available data, usefulness of the study, what is credible and time and resources available for the study (Patonα2002). The researcher used *stratified sampling technique* to identify the sample. The sample was selected randomly from the strata. This method of sampling is applicable in studies

where the sample is selected from a population which is not homogeneous (Orodho, 2003).The sample was selected using the following formulae used by Mugenda and Mugenda (2003)

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

Where N=The population

N= sample size

E=tolerance level of confidence or probability level of $\alpha=0.05$

Given the population N=133 then the sample size $n=140/(1+(140 *0.05*0.05))=105$

The selection of the sample was done across the MSEs using the formula:

(Number of items in the category*sample size) / Total population

Table 3.2: population and sample distribution

Category	Size	SamplePercentage	
Retail Shops	38	27.0%	28
Wholesale shops	11	7.8%	8
Hotels	16	11.4%	12
Clothes stores	18	13%	13
Manufacturing Business	2	1.4%	1
Hardware	9	6.4%	7
Butcherries	11	7.8%	8
Garages	8	5.7%	6
Petrol station	5	3.5%	3
Hair saloon	11	7.8%	8
Poultry	11	7.8%	8
Total	140	100%	105

Source: Author (2016)

3.5 Data Collection Instrument

Data was collected from primary sources using a questionnaire, which is a data collection instrument with a formal statements designed to obtain the necessary information. The questionnaire consisted of a list of structured closed ended statements with likert rating scales for each statement and a space provided for selection of choices of answers. Close ended statements are good for collecting viable quantitative data. A questionnaire was preferred due to its efficiency, low cost and easiness to administer. The questionnaires were completed using structured statements to be rated by the identified respondents who were briefed on their purpose and importance. The first section of the questionnaire collected the demographic details of the respondent; the second part collected data on the first objective, third part on the second objective, fourth part on third objective.

3.6 Data collection procedure

A questionnaire guide was used as research instrument. This was pre-tested for reliability and validity before being administered by a research assistant. The respondents were asked to provide their background and their businesses. Respondents were given a set of statements regarding the influence of mobile banking on growth of their businesses to rate them on a scale 1 to 5 where one stands for strongly disagree and 5 means strongly agree. The researcher sought for permission to collect data from the Chamber of Commerce chairman and obtain a research permit from the University of Nairobi to collect data. The researcher engaged research assistants who interviewed the respondents according to the structured questions on the questionnaire and fill them. The exercise took a period of two weeks to have the respondents interviewed and also ask the questions on the questionnaires. This helped in having a higher response rate.

3.7 Pilot Study

The study subjected the questionnaire to validity confirmation where 10 MSEs from different categories were used to assess validity of the instrument before it could be used to collect the data from the sample. The pilot was set to determine whether the set objectives represented the concept of the study (Mugenda & Mugenda, 2003). The selected MSEs were independent of the sample size of 140.

3.7.1 Data Validity

Data Validity tests the goodness of measure (Zimund, 2000). Thietart (2001), claims that the key concerns should focus on the relevancy and preciseness of the measured data and whether a generalization can be drawn from the results. In this research, validity was concerned with correctness of measurement by the interviewer, the appropriateness of all the interview statements and the alignment to the research objective and purpose. Therefore, 10 questionnaires were given to respondents who helped in ascertaining whether the main aspect of desired information has been given by the respondents.

3.7.2 Data Reliability

Berg and Gall (1989) asserts that reliability measures consistency in research method. Silverman (1993) points out several ways of ensuring reliability in a research. These include pilot interview protocols and questions; use of fixed-choice responses; and systematic collection, transcription and reporting of field notes and transcripts for others to review. This study used sole observer to gain reliability. The pilot study was used to pre-test the research instruments for reliability. The understanding of the instrument items by the respondents was necessary in order to increase the instrument's reliability. The pilot aimed to correct any inconsistencies arising from the

questionnaire , so as to ensure that the instruments measured the intended. Reliability can also be increased in other various ways like: considering many similar items on a measure, testing a diverse sample of items and by using consistent testing procedures. This study used Crobach ($\alpha=0.7$) to test on the reliability.

3.7.3 Data Analysis and Presentation

Here, raw data is put in order, coded and organized so as to extract useful information from it. It helps one to understand the contents of the data. Summarized data is used to support the opinions made with that data, and summarization is done to present the data in a clear and understandable way. Data collected was analysed by descriptive analysis where percentages, frequencies, mean and standard deviation will be derived. The Likert rating scale was used to analyse the mean, mode and median scores while standard deviation was calculated to determine the extent of the growth of SMEs in Kitui town as a result of M-banking. The study used the Statistical Package for Social Sciences (SPSS) software (version 21) to analyse the data. The software was preferred due to its ability to analyse with ease management attitudes. The findings were used to compile this report.

3.7.4 Model Specification

A multiple linear regression and correlation analysis was done on the three aspects of the mobile banking services to test the degree of the influence of predictor variables on the dependent variables.. The regression model was of the form;

$$\gamma = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Where: γ = Dependent Variable (MSEs Growth)

B_1, \dots, B_3 = coefficient for independent Variables

β_0 = the constant X_1 = Security on mobile banking

X_2 =Cost of mobile banking

X_3 =Accessibility of mobile banking

e = error term.

To measure the independent variables, the a questionnaire was administered by the interviewers to the sampled respondent. The interview questions were structured questions designed to obtained information on MSEs growth, demographic characteristics, mobile banking accessibility, cost and security as perceived by the respondents. The growth of MSEs was measured with parameters sales turnover, number of employees, profitability levels. Mobile banking factor was measured using security, cost and accessibility.

3.7.5 Model evaluation

In order to assess the significance of the model and to rule out the presence of bias in the prediction, a diagnostic check up was done. The study used Pearson's coefficient of determination test to determine the correlation of various variables. Coefficient of determination (R^2),Beta weight F and T statics were used to get parameter that determine the variations and strength of ties between the variables input in order to measure the regression strength. The coefficient of determination (R^2) was calculated to determine explanatory power of mobile banking.

CHAPTER FOUR
DATA ANALYSIS, PRESENTATION AND DISCUSSION

4.0 Introduction

This chapter presents the findings of the study. The first section contains brief description of the respondents. This is followed by presentation of the analysis of the study. The third section presents the outcome of the regression analysis.

4.1 Respondents' Demographics

4.1.1 Response Rate

Respondents who took part in the study were those who: used or had regular access to mobile phones, had bank accounts and used mobile banking in business transactions. A total of 105 questionnaires were issued and 101 were properly filled giving a feedback rate of 96.2%. This feedback rate was adequate for the the analysis as pointed out by Mugenda and Mugenda (2003).

4.1.2 Respondents' Gender

The researcher sampled both male and female respondents involved with MSEs. Table 4.1 shows the proportion of respondents that were male and those that were female

Table 4.1
Respondents Gender

	F	%
Male	65	64.4
Female	36	35.6
Total	101	100.0

As Table 4.1 shows, there were more male respondents (64.4%) than female respondents (35.6%) indicating a gender difference in participation in MSEs in Kitui County.

4.1.2 Respondents' Level of Education

The participants indicated their levels of education as it is summarized in Table 4.2 below.

Table 4.2
Participants Level of Education

	Frequency	Percent
Secondary	51	50.5
Post Secondary	36	35.6
Primary	13	12.9
Not indicated	1	1.0
Total	101	100.0

The above Table 4.2, indicate that over half of the participants (50.5%) had attained a secondary level of education, 35.6% had post secondary education and only 12.9% had primary level of education.

4.1.3 Types of Businesses Respondents were involved in

Respondents indicated the types of businesses they were involved in as summarized in Figure 4.1

Figure 4.1
participants' Businesses

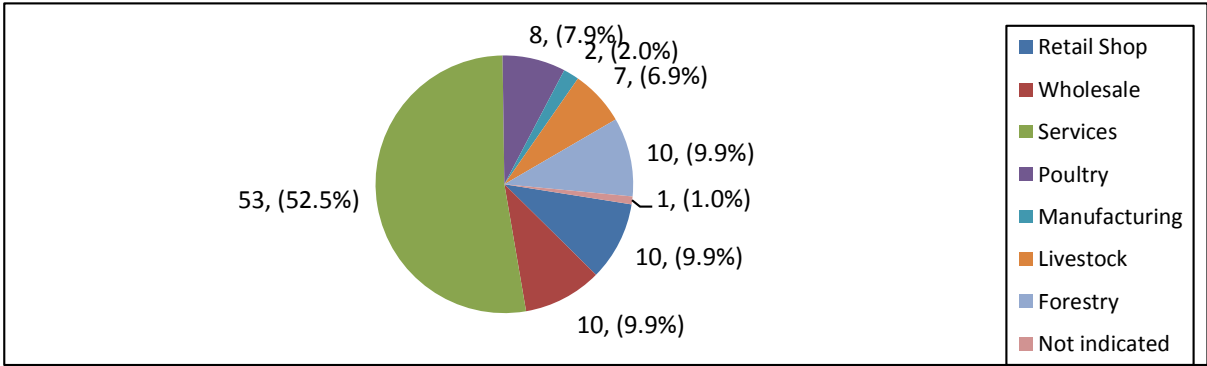


Figure 4.1, shows that over half of the participants (52.5%) engaged in services. Wholesaling, retail, forestry and poultry businesses accounted for 37.6% of the businesses. The rest engaged in manufacturing and livestock businesses. The information in Figure 4.1 indicates that different types of businesses were included in the study hence increasing the confidence of generalizing the results of the study. The study also sought to know the length of time each participant had been involved in business. Table 4.3 shows the duration of time respondents had been in business

Table 4.3
period Respondents have been in Business

	F	%
3 years or less	45	44.6
3 to 5 years	56	55.4
Total	101	100.0

According to Table 4.3, most of the participants (55.4%) had been operating their businesses for three to five years and the rest (44.6%) had been in business for less than three years.

4.2 Study Findings

4.2.1 Growth of MSEs

The interviewees were asked to indicate the perception of growth of their businesses since they started using mobile money. They were required to rate changes in net profits, sales volumes, number of employees and customer base. For each of the four, they could select ‘increased’, ‘shown no change’, ‘I do not know’ and ‘declined’. Figure 4.2 is a summary of their responses

Figure 4.2
Respondents Ratings of Growth of MSEs

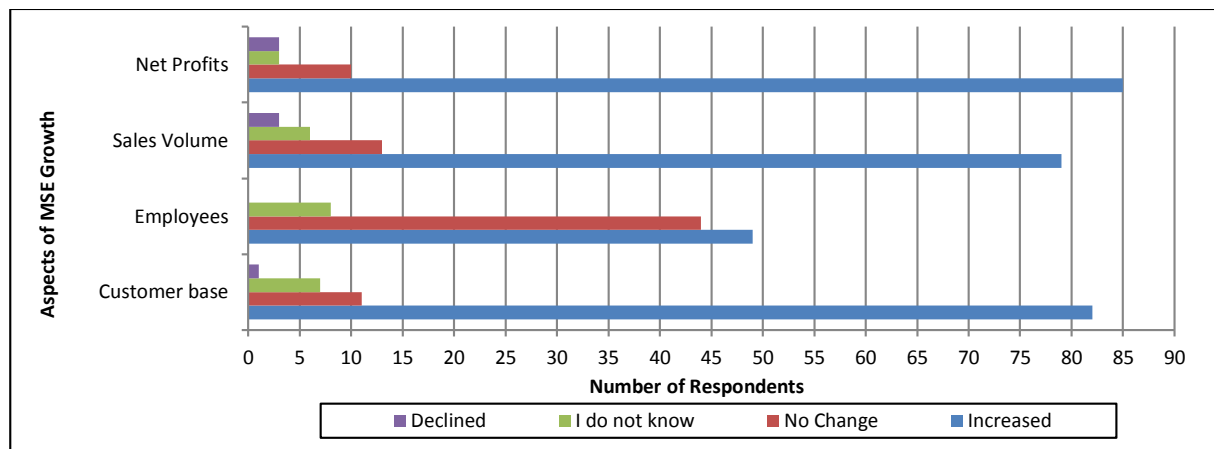


Figure 4.2 shows how the respondents rated four aspects of growth in their businesses. It is clear from the figure that most of the MSEs experienced growth. To start with, 85 respondents (84.2%) stated that their net profits had increased, 10 respondents (9.9%) reported no change and

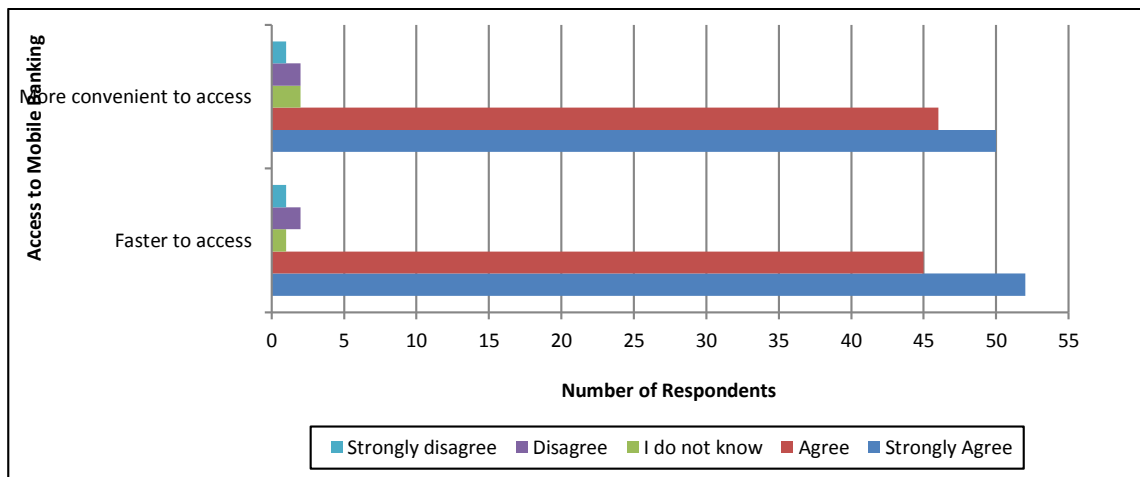
only three respondents (3%) reported a decline. In terms of sales volumes, 79 respondents (78.2%) reported an increase, 13 respondents (12.9%) reported no change and only three respondents (3%) reported a decline. Forty nine respondents (48.5%) reported an increase in the number of employees, 44 respondents (43.6%) reported no change. Finally, 82 respondents (81.2%) reported that their customer base had increased, 11 respondents (10.9%) stated that there was no change and only one respondent reported a decline in customer base.

Judging from the increase in net profits, sales volumes, number of employees and customer base, it is clear that the MSEs had experienced growth.

4.2.2 Accessibility of Mobile Banking

The study sought to know the ease of access to mobile banking. Respondents were asked to rate how convenient and how fast mobile money was in relation to other banking options by selecting ‘strongly agree’, ‘agree’, ‘I do not know’, ‘disagree’ or ‘strongly disagree’. From the ratings, it is clear that mobile banking was more convenient to access than any other banking option and that mobile banking is faster to access than any other banking options. Their ratings are summarized in Figure 4.

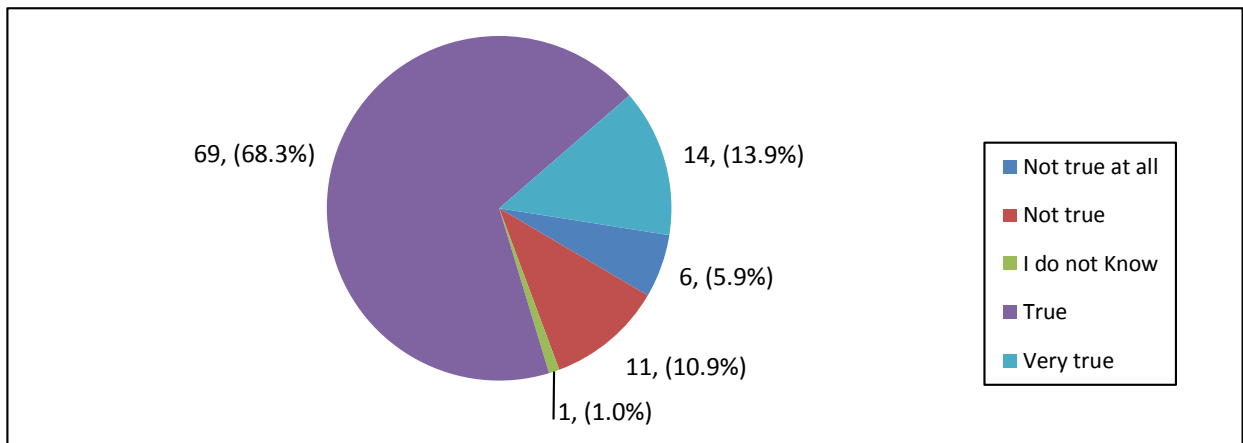
Respondents ratings of convenience and speed of accessing Mobile Banking



According to Figure 4.3, a total of 96 respondents (95.0%) either agreed or strongly agreed that mobile banking was more convenient to access than any other banking option and a total of 98 respondents (97.0%) either agreed or strongly agreed that mobile banking was faster to access than any other banking options.

The respondents also indicated whether they had ease accessing the mobile banking menu. They responded to the statement that mobile banking menu is easy to access by selecting ‘not true at all’, ‘not true’, ‘I do not know’, ‘true’ and ‘very true’. Figure 4.4 shows how they responded

Figure 4.4
Respondents Ratings of Ease of Accessing Mobile Banking Menu



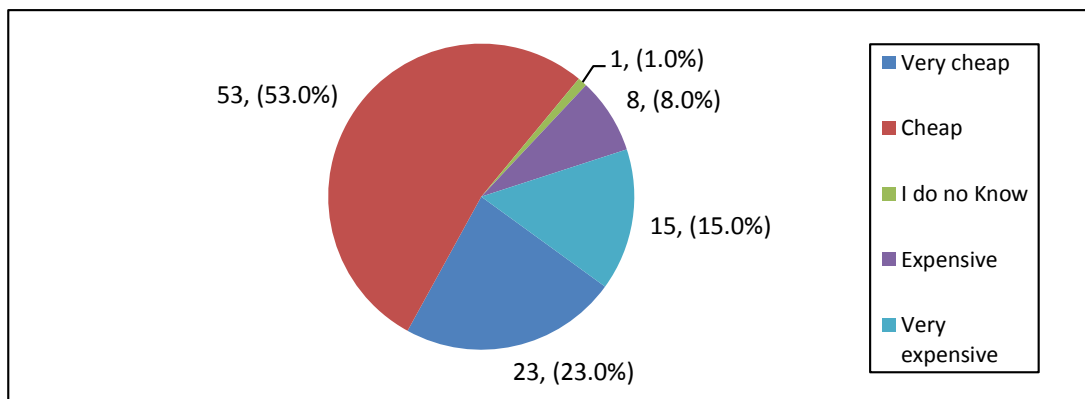
According to Figure 4.4, majority of respondents selected true or very true (68.3% and 13.9% respectively) which means that accessing the mobile banking menu is easy according to most of the respondents.

From examining how respondents rated convenience and speed of accessing mobile money in relation to other forms of banking (Figure 4.3) and ease of accessing the mobile banking menu (Figure 4.4) it is possible to conclude that mobile banking is easily accessible and easy to operate for the MSEs in the study

4.2.3 Cost of Mobile Banking

The researcher investigated whether MSEs found the cost of mobile banking to be higher than that of traditional banking. Respondents could indicate whether the cost of mobile banking was ‘very cheap’, ‘cheap’, ‘I do not know’, ‘expensive’ or ‘very expensive’ relative to cost of traditional banking services. Figure 4.5 summarizes their responses

Figure 4.5
Respondents’ Ratings of Cost of Mobile Banking

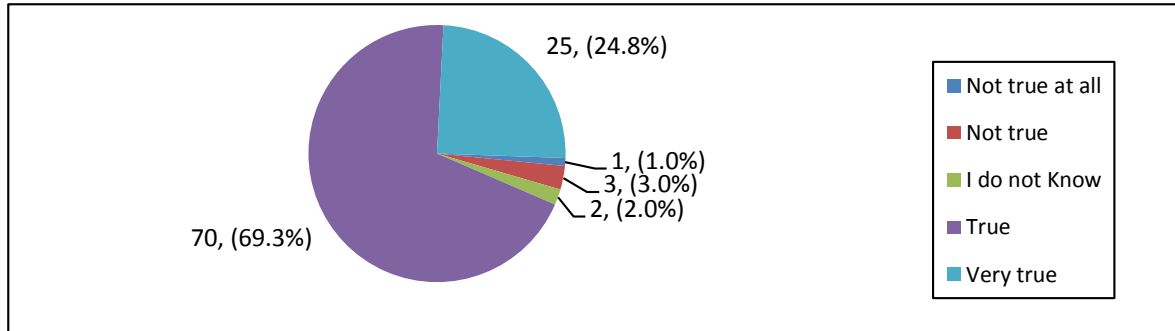


As shown in Figure 4.5, most of the respondents stated that mobile banking was cheap or very cheap (53.0% and 23.0%) respectively. On the other hand, 15.0% stated that it was very expensive and 8.0% that it was expensive. It is clear that majority of respondents consider the costs of mobile banking to be lower than the costs of traditional banking.

4.2.4 Security of Mobile Banking

The researcher sought to know whether the MSEs considered mobile banking to be secure. They were asked to indicate whether business owners using mobile banking had trusted the technology as a means of processing banking transactions. They could select ‘not true at all’, ‘not true’, ‘I do not know’, ‘true’ and ‘very true’. Figure 4.6 indicates the responses.

Figure 4.6
Respondents’ Ratings of Trust in Mobile Technology

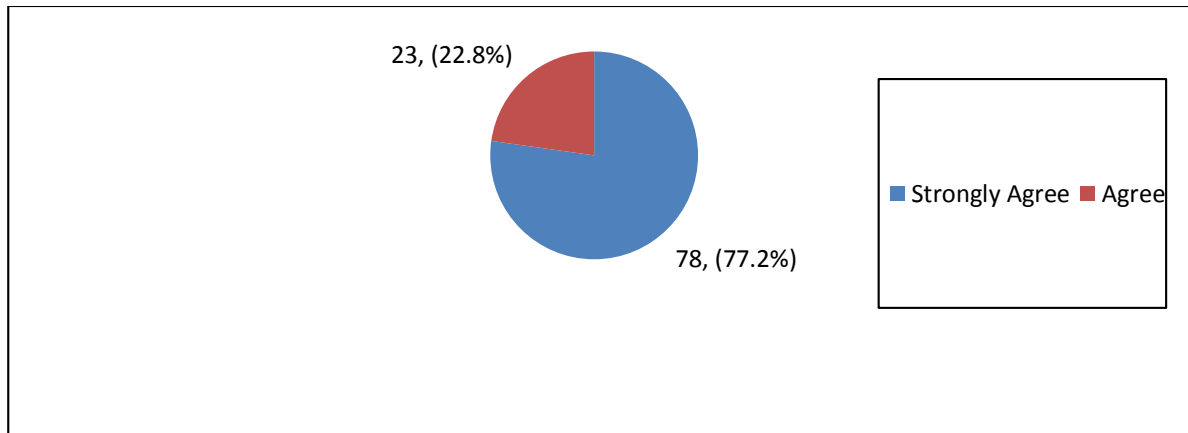


Ac
cor

ding to Figure 4.6, majority of the respondents selected true (69.3%) and very true (24.8%) which indicates that most respondents trust the mobile banking technology as a means of processing banking transactions.

The interviewees were asked to show their degree of agreement with the statement that mobile banking is secure and reliable as it protects customer information by means of PIN codes. They could select ‘strongly agree’, ‘agree’, ‘I do not know’, ‘disagree’ or ‘strongly disagree’. Figure 4.7 shows how they responded

Figure 4.7
Respondents’ Rating of Security and Reliability of Mobile Banking Technology



As Figure 4.7 shows, all the respondents either agreed (22.8%) or strongly agreed (77.2%) that mobile banking is secure and reliable as it keeps customer information secret by using PIN codes.

4.3 Regression Analysis

4.3.1 Model Specification

A linear multiple regression analysis was carried out to establish the linear relationship between growth of MSEs and mobile banking. Likert scales were used to measure the outcome variable which was growth of MSEs as well as the three predictor variables of mobile banking namely: cost , accessibility and security . A total score was computed for each variable from the likert scales. These total scores were used in the regression analysis. The researcher predicted that the following regression model would best describe the linear relationship between the four variables:

$$\gamma = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Where;

γ = Dependent Variable (MSEs Growth)

B_1, \dots, B_3 = coefficient for independent Variables

B_0 = the constant

X_1 = Security on mobile banking

X_2 = Cost of mobile banking

X_3 = Accessibility of mobile banking

e = error term.

4.3.2 Results of the Regression Analysis

a) Descriptive Statistics

The descriptive statistics for the variables in the model are presented in Table 4.4

Table 4.4

Descriptive Statistics for Dependent and Independent Variables

Variable	Mean	Std Dev	N
Total score for growth of MSEs	14.5446	1.91585	101
Total score for security of mobile banking	8.9109	.88430	101
Total score for cost of mobile banking	3.6100	1.33254	100
Total score for access of mobile banking	12.6465	1.63078	99

b) Correlations between Variables in the Model

To test the strength of correlation between the outcome variable and the predictor variables and also among the predictor variables themselves, Pearson’s moment correlation coefficient was used. Table 4.5 shows the results

Table 4.5
Correlations among Variables in the Regression Model

	Total score for growth of MSEs	Total scores for security of mobile banking	Total score for cost of mobile banking	Total score for access of mobile banking
Total score for growth of MSEs	1.000	.005	.070	.038
Total scores for security of mobile banking	.005	1.000	.038	.399**
Total score for cost of mobile banking	.070	.038	1.000	.113
Total score for access of mobile banking	.038	.399**	.113	1.000

**Sig P < .001

Table 4.5 shows that the total score for growth of MSEs was only weakly and not significantly correlated with the total scores for the predictor variables (security, cost and access of mobile banking). The predictor variables were also weakly and not significantly correlated with each other with the exception of total scores for security and total scores for access that were moderately correlated ($r = .399, P < .001$).

c) Summary of the Regression

The ANOVA for the regression model is presented in Table 4.6

Table 4.6
ANOVA of the Regression Model

Model	Sum of Squares	df	Mean Square	F	Sig
Regression	2.110	3	.703	.187	.905
Residual	353.928	94	3.765		
Total	356.038	97			

An examination of Table 4.6 shows that the regression model comprising of the total scores for growth of MSEs as outcome variable and total scores for security, cost and accessibility of

mobile banking as predictor variables was not significant ($F(3,94) = .187, P = .905$). Table 4.7 presents a summary of the regression model

Table 4.7
Regression Model Summary

Model	Unstandardized coefficients		Standardized coefficient	t	Sig
	B	Standard error	Beta		
Constant	13.893	2.183		6.365	.000
Total score for security	-.025	.243	-.011	-.102	.919
Total score for cost	.095	.149	.066	.640	.524
Total score for access	.042	.133	.036	.315	.753

Note: $R^2 = .006$ ($F(3, 94) = .187, P = .905$)

As Table 4.7 shows, none of the three predictor variables made significant contribution to the regression model. This is because all the standardized coefficient values were found to be non significant at $P < .05$

d) Analysis of the Regression Model

On examining the regression model specified in this study, it is possible to make several conclusions. To start with, the correlations between growth in MSEs and the predictor variables were all positive, very small and not significant at $P \leq .05$. Therefore, it is evident that no relationship exists between growth in MSEs and any of the predictors. At the same time, only total scores for access to mobile banking and security were significantly correlated ($r = .399, P < .001$). This finding can be interpreted to mean that as business owners utilize mobile banking due to its accessibility, they also develop more trust in the security of the technology.

Secondly, the overall model was not significant ($F(3, 94) = .187, P = .905$) indicating that a combination of the three predictor variables (cost of mobile banking, accessibility of mobile

banking and security of mobile banking)do not predict growth in MSEs in Kitui County. In addition, the R^2 was quite small for this model ($R^2 = .006$) indicating that the predictor variables in combination only accounted for 0.6% of the variability in growth of MSEs. It is possible to conclude that the growth in MSEs in Kitui County has not been occasioned by access, cost or security of mobile banking but other use of mobile banking by the MSEs owers

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter presents the summary of the findings made, conclusions and recommendations for further research

5.1 Summary of Findings

5.1.1 Growth of MSEs

Growth of MSEs was assessed by four criteria namely; increase in net profits, increase in sales volume, increase in number of employees and increase in client base. Over 78% of respondents indicated that their net profits, sales volumes and customer base had increased since they began using mobile banking. As for the number of employees, 49 respondents (48.5%) reported an increase and 44 respondents (43.6%) reported no change. It is clear that the number of employees has not increased in more than half of the MSEs. Nevertheless, the study has established that MSEs in Kitui County have grown since they began using mobile banking.

5.1.2 Accessibility of Mobile Banking

The study sought to know the ease of accessing mobile banking. More than 90% of the respondents stated that mobile money was more convenient and faster to access compared to traditional banking services. At the same time, more than 80% of the respondents felt that accessing mobile banking menu was easy. Going by these findings, the study has shown that mobile banking is accessible to the business owners in Kitui County

5.1.3 Cost of Mobile Banking

The study investigated whether the costs of mobile banking were higher than the costs of traditional banking services according to the respondents. In total, 76% of respondents felt that mobile banking was cheap or very cheap compared to traditional banking services. It is possible

to conclude that mobile banking is cheaper than traditional banking from the majority of the respondents' point of view.

5.1.4 Security of Mobile Banking

The study also investigated whether business owners felt mobile banking was secure. Ninety four percent indicated that the mobile banking technology was a trusted platform for processing banking transactions and all of them agreed or strongly agreed that mobile banking was secure enough to protect customer information using PIN codes. The study therefore finds that business owners consider mobile banking to be very secure

5.1.5 Regression Analysis

Linear regression analysis was done to determine the correlation between growth of MSEs as the outcome variable and the accessibility, cost and security of mobile banking as predictor variables. The model created was not significant ($F(3,94) = .187, P = .905$). There were no significant correlations between growth of MSEs and any of the predictors. The only significant correlation observed among the predictors was between security and access ($r = .399, P < .001$).

5.2 Conclusions

There were several conclusions that could be made from the findings in this study. To begin with, the study has shown that since respondents began using mobile banking there has been growth in their MSEs. The study has also shown that mobile banking is accessible, cheaper than traditional banking and secure. However, since the regression model was not significant and no significant correlations were observed between growth of MSEs and the predictors, the conclusion that accessibility, cost and security of mobile banking are not significant predictors of

growth of MSEs in Kitui County can be made. It is likely that the growth of MSEs results from other Mobile Banking factors that were not examined in this study.

5.3 Recommendations for Further Research

From the study, the researcher was able to identify certain areas that require additional research.

The areas of which necessitate further study are: similar studies to find out the effects of mobile banking on MSEs in other counties in Kenya; studies to investigate the other Mobile Banking aspects that have led to growth of MSEs in Kitui County.

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