EFFECTS OF MOBILE BANKING SERVICES ON THE PERFORMANCE OF SMALL AND MEDIUM MANUFACTURING ENTERPRISES IN THIKA TOWN, KENYA

BY

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MASTER OF BUSINESS ADMINISTRATION (CORPORATE MANAGEMENT)

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DECLARATION

I declare that this dissertation is my original work and has not been previously published or submitted elsewhere for award of a degree. I also declare that this contains no material written or published by other people except where due reference is made and author duly acknowledged.

Student Name:……..…… Reg. No. ……..

Sign:…… Date……

I do hereby confirm that I have examined the master's dissertation of

Lucy Kibui

And have certified that all revisions that the dissertation panel and examiners recommended have been adequately addressed.

Sign: _____ Date: _____

Dr. Duncan Elly Ochieng

Dissertation Supervisor

ABSTRACT

The general objective of this study was to investigate the effects of mobile banking services on the performance of SMEs in Kenya. The study applied a descriptive research design. The target population of this study was the 264 small business enterprises operating in the manufacturing sector in Thika Town. This research used stratified random sampling. A sample of 106 respondents was selected from a target population of 264 respondents (including owners or managers). This research used primary data that was collected by use of a self-administered questionnaire distributed through drop and pick later method. Data was analyzed using descriptive statistics, correlation analysis and multiple regression analysis. The study found that mobile banking affects the performance of SMEs in Thika Town to a great extent. SMEs in Thika Town mainly utilize mobile banking service for payment of goods by customers through 'Lipa na M-Pesa', for savings to financial institutions, money transfer, phone to bank operations, mini-statements enquiry, credits and airtime purchase and payment of firm bills; cost effectiveness of mobile banking affect the performance of SMEs in Thika Town to a significant extent. Mobile financial services affect efficiency of service delivery hence the performance of small businesses in Thika to a great extent. Mobile financial services enhanced customer satisfaction thereby enhancing the performance of the SMEs. The study recommends that business enterprises keep adopting and using mobile banking in their operations because the number of people with access to a mobile hand set is increasing every day. The study recommends that policy makers consider mobile banking in their formulation of policies because of the technological developments and the expected switch from cash transactions to technologically supported mobile banking services.

Keywords: Mobile Banking, Performance, SMEs, Thika Town

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DEDICATION

I dedicate this research project to my family who are my pillars and sources of great inspiration. My parents for their unceasing prayers for God's blessings upon me to be the best I can. May the Almighty God bless you all.

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OPERATIONAL DEFINITION OF TERMS

Cost Efficiency It is the extent to which the amount or value realized through the use of mobile banking is said to be less than the cost of doing the same transaction through the other conventional ways like paying cash or through the bank (Luarn & Lin 2005). The cost efficiency maybe realized as a result of exclusion of transactional cost in the form of bank charges and travelling costs.

Customer Satisfaction This is a measure of how products and services supplied by a company meet or surpass customer expectation and become happy with the customer service that has been provided by the use of mobile banking in the business operations of SMEs (Giese & Cote, 2002). It is seen as a key performance indicator within business and is part of the four perspectives of a balanced scorecard.

Mobile Banking This is a channel where the customer interacts with a bank via a mobile device such as a mobile phone or personal digital assistant (Barnes & Scornavacca, 2004). This study adopted this definition. The services offered via the mobile banking platforms include payment for goods and services to the SMEs.

Security Management This is the prevention of a potential loss due to fraud or a compromising security of a customers' property mobile banking user (Luarn and Lin, 2005). In this study, mobile banking is perceived to be a secure way of carrying money around without anybody suspecting or posing threat. Mobile banking platforms are also highly secure from hacking or theft of personal information and money.

Service Delivery This is the offering of services institutions with an aim of realizing the outcomes of interactions between organizations, related systems/processes, service employees and customers (Boyd & Jacob, 2007). In this study, the interaction between the SMEs and the customers through the use of mobile banking services is expected to realize satisfaction for the customers and better performance of the SMEs.

Small and Medium-Sized Enterprises Small and Medium-Sized Enterprises (SMEs) are non-subsidiary, independent firms/enterprises/entities that employ fewer than 50 employees and a low turnover (Kones, 2014). In this study, the SMEs are considered to consist of an average of two employees mainly the owner/manager and another one employee mainly performing the assisting roles like customer attendance and stock taking among other roles.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The collaboration between the telecommunication and banking industry has resulted to openings for rise of mobile banking service which works for both businesses and individuals. Within the most recent two decades, the mobile banking has developed in a flash across the globe leading to increase in markets for business organizations. According to GSM Association (GSMA, 2014), the subscribers to mobile phone hit 2.5 billion mark in year 2010 and 4.0billion in 2014. Mobile banking is most relevant in remote areas where financial institutions unreachable by customers with long distance to travel in order to get to the nearest banking institutions. Accordingly many people have turned to the technology of mobile banking to solve the problem of inaccessibility of physical banks.

Mobile phones have turned out to be very transformative devices for progress. Currently three quarters of the 4 billion mobile phones in use worldwide are in developing countries. It is projected that within the next ten years the mobile phone subscriptions will exceed the world population. Indeed, it is expected that on average, in every 100 people there will be an additional ten mobile phones in a developing country which will account for a 0.8% GDP growth (GSMA, 2014). In addition to making communication easier and boosting the economic growth mobile phones also make useful contributions where in third world countries people recognize the benefits of mobile money which is a cheaper, safer, and more convenient way to transfer funds, and reduces the costs associated with saving and lending (Elder & Rashid, 2009). Mobile money has increased access to financial services. According to Ziamou (2007), payments made via mobile phones are among the key drivers for growth in the financial services. The increase in the

number of mobile phones worldwide coupled with the liberalization of the financial sector results in new opportunities for trusted brand names. Mobile banking offers cost efficiency, time independence, convenience and promptness to customers. The coming of mobile phone banking has enabled people to bank easily and at their own convenience. According to the Price Waterhouse Coopers (2010) report, there is momentous increase in the application of mobile phones. The use of mobile banking makes the basic financial services easily accessible, minimizing time and distance to the nearest retail financial institutions branches (PWC, 2010). In the recent past, there has been increased partnering of financial institutions and mobile phone service providers to be able to provide the mobile phone banking services.

1.1.1 Mobile Phone Banking

The terms Mobile Phone banking and mobile banking (M-Banking) are used interchangeably. According to Brown, Cajee, Davies and Stroebel (2003), the term M-Banking stands for the access to banking services and facilities offered by financial institutions such as account-based savings, payment transactions and other products by use of an electronic mobile device. Much of the take-up of mobile banking in developing countries is determined by money transfer services that permit un-banked population to send and receive money faster and safely. This gives financial institutions grounds to form collaborations and alliances with mobile phone providers to offer banking services and products through cell phones with an aim of reaching as many customers as possible (Brown et al., 2003).

Porteous (2006) asserts that mobile banking has the latent to transform nations due to various reasons. First, it uses existing mobile communications infrastructure which already reaches unbanked persons. Secondly it may be driven by new players, such as mobile phone

industry operators, with different target markets from traditional banks who are able to harness the power of new distribution networks for cash transactions. These include airtime merchants, who extend the reach beyond the conventional tellers or ATM networks of financial institutions. In addition it may be cheaper than conventional banking, if the offering is competitive enough. The perceived difference between mobile service providers mainly lies on the quality and scope of services as well as the pricing strategy. The mobile banking services are available to mobile phone users on request and if one is a holder of a bank account. It is these agents who decide on the most strategic points to locate their service outlets.

1.1.2 Mobile Payment and Business Performance

As small and medium enterprises dominate the sub-Saharan region in Africa and liquidity and cash-flow management are key challenges for use SMEs constantly functions, the rapid proliferation of mobile banking is seen as a key tool for enhancing financial transactions. Majority (comprising about over 80%) of the small business owners have mobile phone handsets which contributes to the high usage of mobile banking in developing countries. The mobile phone technology is highly accessible to SMEs in many sub-Saharan countries, however little is known with regard to the scope, direction and impact on these businesses. Money transfer schemes have evolved to the next generation of electronic payments, the mobile channel (Tan & Teo, 2004). Some of the aspects that make mobile banking a major thing among the businesses nowadays include its cost effectiveness, customer satisfaction, service delivery and security management. Several mobile payment trend studies have revealed the potential of mobile network technologies for payment purposes (Pousttchi & Schurig, 2004). With most studies concentrating on the developing world, it is evident that this topic has ever increasing interest

with the ever increasing proliferation of ICT in the third world countries. However, there is dearth on how small and medium sized enterprises have adopted mobile banking and its effect on their performance. There exists a need therefore, for a substantive research on the impact of mobile payments on the success and growth of micro-business operators who are among those who employ mobile payments in Kenya. This implies that technology providers, government agencies and development partners may not address the required interventions and there is therefore a need to examine the contribution of mobile payment technology on small and medium enterprises and the impact on their success and growth.

1.1.3 Small and Medium Enterprises in Thika Town

Thika is a market town in Central Province, Kenya. The economic activities of the Thika include agriculture, particularly in the horticulture (exports mainly to Europe) and coffee industry (exports mainly to the USA and Europe). Other industries include textile (cotton), food processing (pineapples, macadamia nuts, and wheat), tannery, motor vehicle assemblies and cigarette manufacturing. It is in the northeast of Thika Town about 40kms away. Thika is rapidly growing, like the entire greater Thika Town area Thika is the capital town of Thika district, it is predominantly rural but that is changing with time. Thika is serviced by a dual carriage way to Thika Town, a highway to Garissa and also a railway line. About one hundred small scale industries and about twenty major factories exist in and around the town (Municipal Council of Thika- Strategic Plan 2008-2012). Thika was formerly a center for light industry. There are various factors that affect the growth of small enterprises in Thika Town and are a major concern to the individuals, entrepreneurs and the Government at large. Thika is a market town located in the central province of Kenya.

1.2 Statement of the Problem

SMEs in Kenya play a very significant part in economic and social advancement through contribution to GDP and employment creation. According to Boyd and Jacob (2007), the rise of mobile banking corresponds to an improvement of both intangible service and an innovative medium of service delivery are feasible through use of technology. According to Mallat (2007), mobile banking enhances probability for businesses to reach a large market. The mobile banking providers have made investments into the mobile banking infrastructure for effective stipulation of mobile banking service to the low-income population (Karnani, 2007). Because of their ubiquity, accessibility, and ever-increasing functionality, mobile phones promise to become a gateway to financial services far more complex than these small-scale payments. ICT is able to improve information and knowledge management inside the firm irrespective of size and increase the speed and reliability of transactions for both business-to-business and business-to-consumer transactions.

Mobile banking has been known as one of those business processes that are time-saving, secure, convenient and cheap. However, all these factors of m-banking should be of interest to SME's as they address their primary bottom line which is profit. Further, the trend in development has not been soft as the challenges posed by the technology and the rapidly changing trends in the SMEs. Okiro and Ndungu (2013) did a study on the impact of mobile and internet banking on performance of financial institutions in Kenya. The study investigated 30 financial institutions using descriptive and qualitative research designs. The study found out that the most prevalent internet banking service is balance inquiry while the least is online bill payment. Cash withdrawal was the most commonly used mobile banking service whereas purchasing commodities was the least commonly used. Maina and Gekara (2014) carried out a

study on the effects of mobile money transfer services on small and medium Enterprises financial performance where their focus was on SMEs in Nairobi County in Kenya. The study asopted a descriptive design and collected primary data using questionnaires. Their study found out that ICT knowledge and skills influence use of mobile banking services by SME's. Most SMEs perceive the barriers of implementing IT into their business operations as expensive, risky, complex procedure, lack of technical expatriate, and customer services. Kones (2014) did a study on factors influencing use of mobile banking among Small and Medium Enterprises in Nakuru Central Business District. The study was based on a cross-sectional survey conducted through administration of questionnaires. The data was collected from a sample of 206 SME's in Nakuru CBD, Kenya. The study identified that trust and security, perceived cost, perceived convenience and ICT knowledge and skills had a positive significance on use of mobile banking hence are the main factors influencing use of mobile banking among SMEs.

According to Thika Municipality Licensing Section, there are approximately 590 small business enterprises operating in Thika Town. It is also estimated that approximately 20 small business enterprises exit from the business as a result of various reasons in Thika Town. The exit rate is against entry of approximately 30 businesses into the town over the same period of one month. As a result of mobile banking, many SMEs are able to conduct their banking processes through its cost effectiveness, customer satisfaction, service delivery and security management. However, previous studies were done in different contexts, different timings and within different settings in terms of technological advancements and globalization hence their findings and conclusions may not be taken as representative of the current situation and in the context of SMEs in Thika Town. There is an evident research gap due to the extant knowledge insufficiency regarding the SMEs in Thika which is a unique and strategic location near the

Capital of Nairobi and well served with infrastructures that make it an equally vibrant town for SMEs to thrive. This study aimed to bridge this knowledge gap by investigating impact of mobile banking on the performance of SMEs in Kenya with specific focus on SMEs in Thika Town.

1.3 Objectives of the Study

1.3.1 General Objective

The general objective of this study was to investigate the impact of mobile banking services on the performance of SMEs in Kenya

1.3.2 Specific objectives

The study was guided by the following specific objectives:

i. To assess the cost effectiveness of mobile banking on the performance of SMEs in Kenya
ii. To establish the extent to which customer satisfaction of mobile banking affects the performance of SMEs in Kenya
iii. To determine the influence of security management of mobile banking on the performance of SMEs in Kenya

1.4 Research Questions

i. What are the effects of cost effectiveness of mobile banking on the performance of SMEs in Thika Town in Kenya?

ii. To what extent does customer satisfaction of mobile banking affect the performance of SMEs in Kenya?

iii. What is the influence of security management of mobile banking on the performance of SMEs in Kenya?

1.5 Significance of the Study

The findings of this study will be of significance to diverse groups of people. The main ones are:

1.5.1 SMEs and other Entrepreneurs

This study would be of great importance to SMEs and entrepreneurs in Thika Town since it would provide information regarding the effects of mobile banking services they encounter in their business and possible remedial strategies that can be employed in order to improve the performance.

1.5.2 Governments and Policy Makers

This study would be useful to the government in policy making regarding Small Scale Enterprises as they will better understand the impacts of mobile money services to the business performance. The government as a policy maker would get the information on the best mechanisms that should be adopted to increase penetration of mobile money transfers as it acts as a tool for economical growth. This study would therefore act as a blue print in designing

appropriate policies that will guide policy makers in making any decision on small and medium enterprises.

1.5.3 Scholars

In addition, the study would be of significance to scholars who would find it useful as it would provide information on the effects of mobile banking services on the performance of SMEs. It would also be of significance to future researchers as it would provide a basis upon which further studies would be carried out.

1.6 Scope of the Study

The focus of this study lay on investigating the effects of mobile banking services on the performance of SMEs in Kenya. The geographical context of the study was Thika Town. As such, the small and medium enterprises in Thika Town were involved in the study. The study involved collecting information from the management staff on the effects of mobile banking services on the performance of SMEs in Thika Town, Kenya. The study obtained information pertaining the effects of mobile banking services on the performance of SMEs in Thika Town from managers and owners. The target respondents were selected as they are responsible with day to day operations of the businesses. The study expected that respondents would have adequate knowledge and that they would give reliable information that the study sought. This was relevant in collecting the data required as finances and distances are the limiting factors that inhibit collecting the data from all the firms across the country.

1.7 Chapter Summary

The study focuses on the impact of mobile banking on the performance of SMEs in Kenya with specific focus on SMEs in Thika Town. This chapter gives a brief introduction of the research

study by looking into the relationship between mobile banking and performance of manufacturing SMEs in Thika Town. The chapter also states the problem at hand, explores the objectives of the study while stating the research questions which this study hopes to have answers to. The significance of the study and the key stakeholders that would benefit from the study are discussed. The chapter goes ahead to give the scope of the study and finally the limitations of study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of available literature regarding effects of mobile banking by giving theoretical framework, empirical review, knowledge gaps, conceptual framework and finally the chapter summary.

2.2 Theoretical Framework

This section discusses the theories on which this study will be anchored. Theories are used by scholars when performing research studies to form a foundation for the parameters, or boundaries, of a study. Once these themes are established, studies can seek answers to the topical questions they have developed on broad subjects. The theories of interest rate have been developed by numerous authors. These theories attempt to explain the interest rates and the reasons why mobile banking services affect the performance of enterprises. This study is grounded on Rogers Technology Acceptance Model, Unified Theory of Acceptance and Use of Technology and Modern Economics Theory.

2.2.1 Rogers Technology Acceptance Model

According to Beresford (2005), technology Acceptance Model (TAM) was developed by Fred Davis and Richard Bagozzi. It is based on the premises that the contracts, perceived usefulness and perceived ease of use are fundamental determinants of system adoption and use. The Technology Acceptance Model (TAM) is an information systems theory that replicates how users of technological diffusion come to accept and utilize a technology. This model has undergone relatively continuing advancement from its foundation (Beresford, 2005). TAM's

exclusive practicability in elucidation the suitable incorporation of different IT services in organizational situations is valuable to practitioners and scholars seeking to substantiate IT usage in their respective systems. The purpose of this model is to predict the acceptability of a tool and to identify the modifications which must be brought to the system in order to make it acceptable to users. This model suggests that the acceptability of an information system is determined by two main factors: perceived usefulness and perceived ease of use. The Technology Acceptance Model postulates that the use of an information system is determined by the behavioral intention, but on the other hand, that the behavioral intention is determined by the person's attitude towards the use of the system and also by his perception of its utility. According to Koufaris (2002), the attitude of an individual is not the only factor that determines his use of a system, but is also based on the impact which it may have on his performance.

Therefore, even if an employee does not welcome an information system, the probability that he will use it is high if he perceives that the system will improve his performance at work. Besides, the Technology Acceptance Model hypothesizes a direct link between perceived usefulness and perceived ease of use. The perceived usefulness and ease of use of an IT tend to determine one's (or an organization's) intention to utilize the respective IT technological system (McFarland & Hamilton, 2006). In addition, the idea of perceived usefulness is equally important to the individual or organization with respect to perceived ease of use; in other words, the assessment of practicality and viability the technology demonstrates in a respective environment is an estimate, or a reflection, of the IT perceived ease of use. If both perceived usefulness and perceived ease of use are satisfied criteria among those evaluating the compatibility of the IT, then attitudes are likely to change and be in favor of implementing the IT. As implementation is seriously considered, there lies a behavioral intention to embrace the IT. If embraced, actual use

is bound to follow. In this study, SMEs have considered perceived usefulness and ease of use of mobile banking hence adopted it in their operations. This theory is therefore relevant in assessing the effects of cost effectiveness of mobile banking on the performance of SMEs in Kenya.

2.2.2 Unified Theory of Acceptance and Use of Technology

Unified theory of adoption and use of technology (UTAUT) was established by Venkatesh et al. (2003). UTAUT is based on social cognitive theory with a combination of eight prominent information technology (IT) acceptance research models. The authors examined the predictive validity of eight models in determining the behavioural intention and usage to allow fair comparison of the models. The key element of UTAUT is the behaviour, i.e. use, of the new technology indicating a focus on behavioural acceptance. Venkatesh *et al.*, (2003) postulates two direct determinants of usage behaviour, intention to use and facilitating conditions. Intention to use is in turn influenced by performance expectancy, effort expectancy and social influence. Gender, age, experience and voluntariness of use act as moderators.

UTAUT proposes that performance expectancy, effort expectancy, and social influence predict behavioral intention towards the acceptance of information technology. The theory further proposes that facilitating conditions and behavioural intention predicts use behavior in the acceptance of information technology. Venkatesh et al. (2003) attempted to review and compare the existing user acceptance models with an ultimate goal to develop a unified theory of technology acceptance by integrating every major parallel aspect of user acceptance determinants from those models. In Kenya, SMEs are influenced to adopting new technology due to extrinsic motivation and intrinsic motivation as well as attitude, perceived usefulness, perceived ease of use, perceived behavioral control, long-term consequences of use, facilitating conditions, relative advantage, compatibility and performance outcome expectations. The

UTAUT model has also been revised to study mobile commerce acceptance, where additional determinants such as trust, privacy, convenience and cost were shown to affect the behavioural intention (Min, Ji & Qu, 2008). In this study, customer satisfaction and security management are major determinants of mobile banking on the performance of small and medium sized enterprises. Hence this objective is significant in determine the influence of security management and customer satisfaction on the performance of SMEs in Kenya.

2.2.3 Modern Economics Theory

Modern economics has gone far in discovering the various pathways through which millions of expectations of, and decisions by, individuals can give rise to emergent features of communities and societies like rate of inflation, productivity gains, and level of national income, prices, and stocks of various types of capital, cultural values, and social norms. Two factors make economic theory particularly difficult (Sohail & Shanmugham, 2003). First, individual decisions at any moment are themselves influenced by these emergent features, by past decisions learning, practice, and habit, and by future expectations. Second, the emergent features that can be well handled by existing economic theory and policy concern only fast-moving variables. The more slowly emergent properties that affect attitudes, culture, and institutional arrangements are recognized, but are poorly incorporated.

According to Tiwari, Buse and Herstatt (2006), economists know that success in achieving financial return from fast dynamics leads to slowly emergent, nearly hidden, changes in deeper and slower structures, changes that can ultimately trigger sudden crisis and surprise. But the complexities that arise are such that most modern economists are frustrated in their attempts to understand the interactions between fast- and slow-moving emergent features. In Kenya, SMEs that use more advanced forms of ICTs have on average higher labor productivity

and a higher growth rate. Payment providers are intermediaries which settle financial claims between certain types and scope of transaction counter-parties. Secondary characteristics of payment services include the kinds of transactions they support, the ease of use of their payment instruments and the costs, risks and speed associated with settlement arrangements. The value of the payment service depends on the way a provider combines these features.

2.3 Empirical Review

The advent of M-Banking may be stimulating local economies by reducing the cost of transactions and giving people access to their money in their neighborhoods. Because cash is available at rural locations and small towns, people tend to spend more of it locally, enhancing the local economy. Pagani (2004), states that accessibility (ability to reach the required services) is one of the main advantages of mobile payment services. SMEs are among the supreme beneficiaries of mobile banking service. As at 31st December, 2015, there were 94,000 active M-Pesa agents spread throughout the country offering the mobile payments service (Safaricom, 2016). The SME operators go to the bank less often and spend more time running their businesses. Equally, many unbanked Kenyans can now receive or send money wherever they are in the country (Omwansa, 2009).

According to Lee et al, (2003) the major advantage of a mobile phone for service consumption is its portability and access to the service whenever and wherever wanted. In mobile-bill payment, especially, the location-free access to the service and as a consequence the ability to react immediately to the service need, to use the service wherever wanted and to save time have been found to be the greatest contributors of the service (Laukkanen & Lauronen, 2005). Compared to developed markets, emerging markets have shown a tremendous ability to leap-frog those ahead in terms of technology adoption and regulatory reform in the financial

sector. Kenya is at the forefront of these with Safaricom's M-Pesa being one of the world's best models. The mobility restricts the technical features of the device and impairs the usability of the service. Tapping information using small keyboards of cell phones and information processing on a small display have been found to be inconvenient and to inhibit mobile-bill payment (Laukkanen & Lauronen, 2005).

2.3.1 Cost Efficiency and Performance of SMEs

Mobile banking offers a high technology platform onto which other services can be often provided at very low cost to deliver an effective result. Mobile data channels are often under-used and therefore may be offered at low cost by the network operator (Pousttchi & Schurig, 2004). The low cost of using existing infrastructure makes such channels more amenable to use by low income customers. The cost efficient provision of formal financial services (payments/ remittances, savings, credit or insurance) is predicated on customers having access at least to a basic transactional account, from which electronic transfers can be made (for loan installments, for example) and cash withdrawn (or deposited) as necessary. The most visible impact of technology is reflected in the way the banks respond strategically for making its effective use for efficient cost of service delivery.

According to Morawczynski (2008), M-Banking has a positive impact on transfers, payments, deposits and withdrawals in financial transactions of small businesses. It is a cost effective, reliable and simple way of conducting business and reduces the instances of human error that is characteristic during human interaction in traditional banking. One aspect of mobile phones is the introduction of mobile financial services and transactions. Most rural users have no access to financial services of any kind, and getting these "unbanked" citizens linked into the

formal banking sector is a priority for many institutions. Users are employing the mobile banking systems to make payments for things such as airtime and pre-paid electricity, and many are using them for sending remittances back to friends and relatives in their rural villages (Ivatury, 2006). Indeed, mobile banking has emerged as a wireless service delivery channel providing increased value for customers' banking transactions. According Coelho & Easingwood (2003), the mobile phone introduced a new channel for banks to reach customers. This is because bank branches are becoming increasingly expensive to operate, and customers demanding by wanting to do business when it is most convenient for them. For those on the move, between rushed appointments, it's a service available to the hurried entrepreneur. Mobile phone banking comes in as part of the bank's initiative to offer multiple channel banking and convenience for its customers. Customers have become less willing to visit traditional branches, less loyal, more receptive to new electronic channels and more sophisticated in demanding better service quality including 24 hour service availability (Coelho & Easingwood, 2003).

The simultaneous and increasing diffusion of mobile phones and especially WAP-enabled devices has made the transformation of banking applications to mobile devices a logical development in electronic banking (Pousttchi & Schurig, 2004). Connectivity for mobile device is not the part of banking service it is duty and part of business of telecommunication department and cellular service providers. Hence, banks should only lease the telecommunication lines provided by telecommunication department to provide access to the customers. According to Coelho and Easingwood (2003) mobile banking business models range from a bank providing additional mobile services to existing customers, to banks utilizing a network of banking and mobile agents in lieu of branches to reduce delivery costs, to telecommunication companies providing payment services without bank participation.

The potential of mobile banking to provide access to financial services is compounded by the exponential growth that mobile penetration rates have displayed in recent years across Africa. In the continent, four out of ten people have access to a mobile phone – double the number of Africans with access to finance. Banking technological developments in Kenya make it much easier and cheaper for customers to compare and contrast products and to establish multiple banking connections. Better communications technology will alter dynamics of purchase decisions. Several authors (Mathwick, Malhotra & Rigdon, 2001) have carried out research on customer requirements. As time, privacy, control and economy are among the important aspects that customers are concerned with. The role of effective internal and external communication has repeatedly been emphasized. Cost efficiency is perceived to necessitate the affordability of the service, economic value of m-banking services, customer perceived value and levels of income hence has a positive relationship with performance of SMEs.

2.3.2 Customer Satisfaction and Mobile Banking

The retention of devoted customers is key to organizational survival (Chung & Kwon, 2009). It is well established that satisfied customers are key to long-term business success. Companies that have a more satisfied customer base also experience higher economic returns. High consumer satisfaction leads to greater customer loyalty which, in turn, leads to future revenue. Organizations having superior service quality have been found to be market leaders in terms of sales and long-term customer loyalty and retention (Andersson & Hedman, 2007). Because of this, organizations competing in similar market niches are compelled to assess the quality of the services they provide in order to attract and retain their customers. Customers' expectations are derived from their own accumulation of contacts with services provided them in all walks of life. From such contacts customers accrue a generalized service expectation or standard based on

their day-to-day history as customers. It is from the accumulation of these service experiences that customers establish personal standards and use them to gauge service quality. One of the key objectives of developing new products and services is to attract new customers and to retain existing ones (Boyd & Jacob, 2007). In addition, customers are likely to trust in proven innovators. Mobile banking providers in Kenya have been trying hard to build this trust among the large population which is largely unbanked. This population is however utilizing mobile phone technology for communication and other services like mobile banking. Therefore it is important to build a reputation for innovation. This may make it easier to sell financial services, attract more customers, and retain existing customers.

Recent changes in the regulatory framework have enabled many banks to expand their services into non-traditional banking areas. For instance, many banks have already moved into, or are in the process of moving into, insurance and stock brokerage. Customers have become less willing to visit traditional branches, less loyal, more receptive to new electronic channels and more sophisticated in demanding better service quality including 24 hour service availability (Coelho & Easingwood, 2003). The simultaneous and increasing diffusion of mobile phones and especially internet-enabled devices has made the transformation of banking applications to mobile devices a logical development in electronic banking (Pousttchi & Schurig, 2004). The mobile phone has become the single most transformative tool for development. Money transfer schemes have evolved to the next generation of electronic payments, the mobile channel. A positive aspect of mobile phones is that mobile networks can reach remote areas at low cost. It thus represents a compelling new value proposition that both banks and carriers can use to attract new customers and retain existing ones. M-banking has business potential to reach the mass

market. Mobile banking has become the bank branch of the unbanked groups where mobile phones are re-used to perform numerous banking tasks.

2.3.3 Security Management and Mobile Banking

As institutions increase the capabilities of what mobile banking can do, consumers will continue to feel more comfortable about using their devices for financial transactions. Many financial institutions today are incorporating mobile banking and financial services as consumers increasingly turn to their mobile devices to conduct everyday tasks (Khodawandi, Pousttchi & Turowski, 2003). Despite the convenience of doing business this way, the majority of consumers are reluctant to try mobile banking because of perceived security threats. Mobile banking is considered to be one of the most value-added and important mobile services.

Therefore, banks and financial institutions play an extremely important role in the mobile commerce value chain. While, Mukherjee & Nath (2003) tested a model of trust in India in which "shared value', "communication" and "opportunistic behaviour" were antecedents of trust. They concluded that both shared value and communication played a significant positive role on trust and that trust had a significant positive influence on commitment. If mobile banking's success hinges on effective partnering, the design and delivery of compelling value-propositions to the customer will determine winners and losers. The role of trust is a crosscutting issue because multiple research traditions examine economic transactions in their social context not as discrete acts but as markers and reinforcements of a set of interrelated responsibilities, roles, and transactional networks in which trust plays a central role. No other payment system – credit cards, contactless cards, or checks – offers these capabilities or conveniences. Players who are able to introduce services that take advantage of a mobile platform's unique potential and pay heed to its limitations will be well-positioned to exploit this channel. Bhattacherjee (2002) found

that one's willingness to transact with an online firm may be predicted by additional variables above, and beyond trust, such as perceived usefulness and perceived ease of use of such transactions.

2.4 Mobile Banking Services and Performance of SMEs

Mobile money allows users to make most of the same transactions that they would be able to make with a savings account from a traditional bank. Users can deposit funds in their mobile money accounts, save them for later use, and withdraw or transfer them via an agent or an ATM. The cost of a payment transaction has a direct effect on consumer adoption if the cost is passed on to customers (Mallat 2007). Transaction costs should be low to make the total cost of the transaction competitive. The cost of the mobile payments should be affordable to most of the micro business operators and far below what the banks normally charge for their bank transactions. There are many different mobile handsets which are easy to operate and have the functionalities required for the mobile payment technology.

Business practices in Kenya have gone through many changes, the most important being the introduction of Information Communication and Technology (ICT). The mobile phones have been a key ICT product that has affected business practices. This is manifest in various areas including advertisements, marketing, emergence of new products, and new methods of payments (Porteous, 2006). The methods of payment through the use of mobile phones have been the most recent development in Kenya and have revolutionalized how business is conducted among the small-scale business holders. Small and medium businesses have embraced the use of mobile payment technology in their operations. They view this mode of payment as an easier form of cash delivery to their suppliers and business partners, a system which is relatively affordable, personal and can be used anywhere and at any time (Anurag, Tyagi & Raddi, 2009). There is

appeal and utility of mobile banking and mobile payment services across the country as there are probably more people with mobile handsets than with bank accounts.

2.5 Knowledge Gap

Mobile networks can reach remote areas at low cost thereby making it possible for financial transactions to be made in a simple and faster manner from any point insofar as there are mobile money service providers. It is easier to transact and at a lower cost. It has made financial transactions to be easy and faster and at the same time provided a saving avenue for those without bank accounts. However, Kanyi and Maharaj (2011) observe that despite the exponential growth in the use of mobile money in East Africa, only few studies have focused on its impact on the financial performance of SMEs. Donner and Escobari (2010) assessed the use of mobile phones by SMEs in developing countries. They used questionnaires to collect data from fourteen research studies that had examined mobile use by SMEs. According to their findings, mobile phones have helped SMEs to become more productive and to improve their sales thereby improving their financial performance. Wambari (2009) did a case study in Kenya to determine the impact of mobile banking in developing countries. He used a semi-structured questionnaire to collect data from a sample of 20 SMEs. The results of his study indicated that mobile banking had a positive impact on financial transactions of SMEs. Furthermore, the results of the study indicated that the adoption of mobile banking had enabled SMEs to increase their sales thereby leading to improved financial performance. Okiro and Ndungu (2013) did a study on the impact of mobile and internet banking on performance of financial institutions in Kenya. This study sought to determine the impact of mobile and internet-banking on performance of financial institutions in Kenya where the survey was conducted on financial institutions in Nairobi. The study also sought to identify the extent of use of mobile and internet banking in financial

institutions. Descriptive and qualitative research designs were used. The study investigated 30 financial institutions where 2 microfinance institutions, 11 SACCOS and 17 commercial banks were sampled. Open and close-ended questionnaires were administered to target respondents. Collected data was analyzed using both quantitative and qualitative measures. The study found that the most prevalent internet banking service is balance inquiry while the least is online bill payment. Cash withdrawal is most commonly used mobile banking service as compared to purchasing commodities.

Maina and Gekara (2014) carried out a study on the effects of mobile money transfer services on small and medium Enterprises financial performance where their focus was on SMEs in Nairobi County in Kenya. Using a descriptive survey research based on both secondary data and primary data collected using questionnaires, the researcher examined a sample of 460 respondents drawn from Nairobi County. The study found that money transfer services affected the market performance of business and development of Mobile money transfer services influences the development of markets. The study concluded that money transfer services affected the market performance of business; that development of Mobile money transfer services influences the development of markets. The study recommended a comprehensive technology-to-performance model that should include the characteristics of technology, tasks and individuals as explanatory variables for technology use and individual performance. Kones (2014) in her study on factors influencing use of mobile banking among Small And Medium Enterprises in Nakuru Central Business District found that found that trust and security, perceived cost, perceived convenience and ICT knowledge and skills had a positive significance on use of mobile banking. From her study security was one of the key factors when it came to use of mobile banking, followed by usefulness and trust. From the foregoing various gaps have

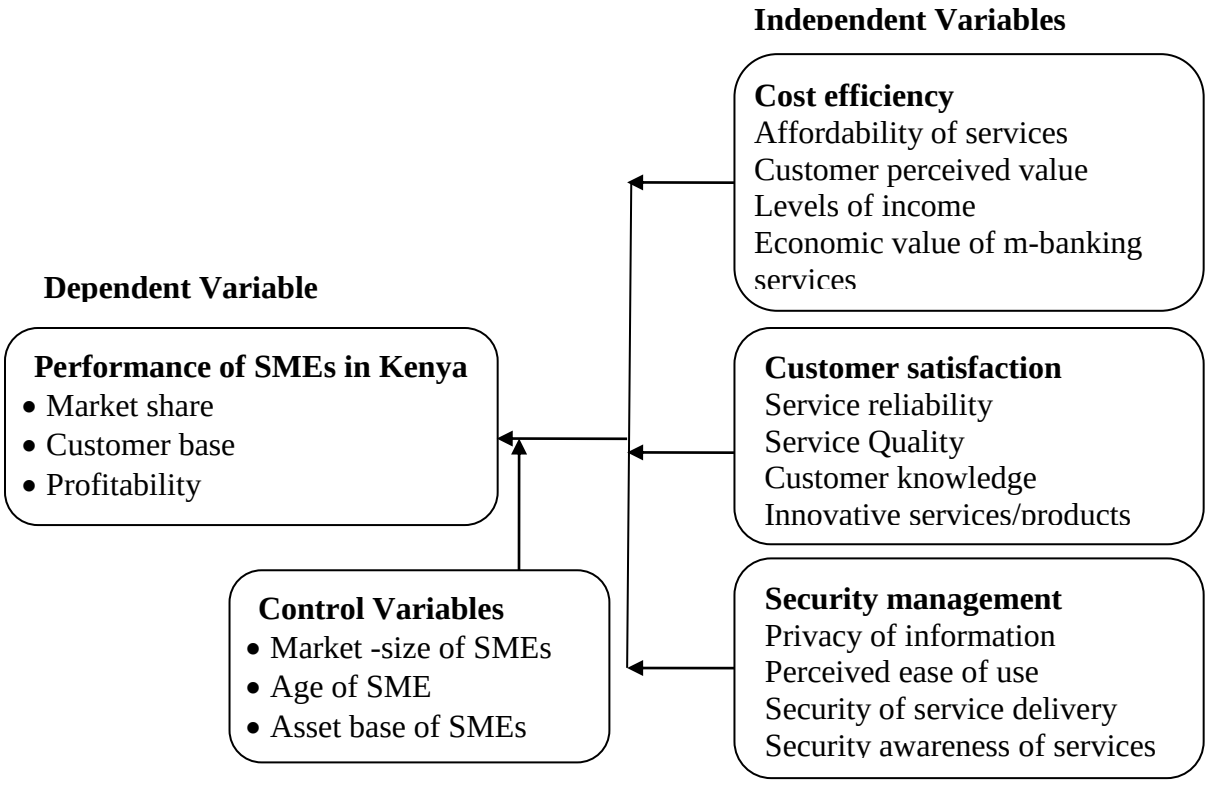
been identified with regard to the use of mobile banking services in Kenyan SMEs. This study concentrated on the effects of mobile banking services on the performance of SMEs in Kenya where the focus was the SMEs in Thika Town to fill these gaps.

2.6 Conceptual Framework

The various aspects of mobile banking that affect the performance of small and medium enterprises form the variables of the study. In this study, the independent variables are cost efficiency, efficient service delivery, customer satisfaction and security management while the dependent variable is performance of SMEs in Kenya (measured in terms of market share, customer base and profitability of the firms). These aspects form the undernoted diagram. As explained by Kibui (2015), mobile banking leads to cost efficiency that improves performance of SMEs as well as customer satisfaction and security management.

FIGURE 1

Conceptual Framework



Source: Author (2016)

2.7 Chapter Summary

The chapter provided a general discussion of the literature reviewed and this was necessary in order to see what had been done in this field and to assist in the answering the research questions. This chapter has presented a review of the relevant literature covering the effects of mobile banking services on the performance of SMEs. As such the chapter presented the theoretical framework and empirical review. The empirical review concentrates on cost efficiency, customer satisfaction and security management. The other section was devoted to

establishing the link between mobile banking services and performance of SMEs. The chapter also presents a knowledge gaps and conceptual framework. The next chapter looks at the methodology for the research. This methodology is based on the issues discussed in this chapter on the effects of mobile banking services on the performance of SMEs in Kenya with a specific reference to SMEs in Thika Town. The Chapter explains the methodology of the study covering the research design, population, sample, data collection methods, research procedures and data analysis methods.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodologies which were used to carry out the study. It further describes the type and source of data, the target population, sampling methods and techniques that were used to select a sample size. It also describes how data was collected and analyzed. This chapter also acts as a framework for specifying the relationship among the variables in terms of sample size to be used.

3.2 Study Design

The study applied a descriptive research design. According to Cooper and Schindler (2003), a descriptive study offers the opportunity for a logical structure of the inquiry into the problem of study. This research design has the ability to accommodate large sample sizes; ability to distinguish small differences between diverse samples groups; ease of administering and recording questions and answers; increased capabilities of using advanced statistical analysis; and abilities of tapping into latent factors and relationships. This study required an in-depth understanding of the impacts of mobile banking services on the performance of SMEs in Kenya where the context of focus was the SMEs in Thika Town.

3.3 Target Population

A population is a large group of individuals or people, or items under consideration for statistical purposes. Mugenda and Mugenda (2008) define a target population as a group of individuals to which the researcher would like to generalize his/her results from. Target population is the specific population about which information is desired. It is a well defined or set of people,

services, elements, events, group of things or households that are being investigated. According to Thika Municipality Licensing Section, there are 264 small business enterprises operating in the manufacturing sector as provided in table 1. The study focused more on the category of SMES and particularly on the manufacturing SMEs operating along the four major streets in Thika Town where one respondent was picked from the SMEs. As such the target respondents was 264 respondents. Mugenda and Mugenda (2008) explain that the target population should have some observable characteristics, to which the study intends to generalize the results of the study. This definition assumes that the population is not homogeneous. The population characteristic was as summarized in table 1.

TABLE 1

Target Population

Streets	**Population (Frequency)**	**Percentage**
Upper rd	62	23.5
Majengo Rd	50	18.9
Magoko Rd	36	13.6
Kenyatta Highway	116	43.9
Total	**264**	**100.0**

Source: Author (2016)

3.4 Sample Size and Sampling Procedure

The ability to generalize from a sample to the population depends critically on the representativeness of the sample. A representative sample is one that shares a wide range of attributes found among the wider population and a careful selection of a research sample allows a researcher to generalize findings from the sample to the population. Contacting everyone in a large population is often practically impossible and researchers usually select a subset of the population to represent the population. This study used stratified random sampling technique to select a sample of 106 respondents. Stratified random sampling technique was used since

population of interest is not homogeneous and could be subdivided into groups or strata to obtain a representative sample (Cooper & Schindler, 2006).

The technique produce estimates of overall population parameters with greater precision and ensures a more representative sample is derived from a relatively homogeneous population. Cooper and Schindler (2006) argue that if well chosen, samples of about 10% of a population can often give good reliability. Other literatures have shown that sample size selection to a great extent is judgmentally decided. The list for the sampling frame was made up of 264 owners or managers of the manufacturing SMEs in Thika. From the sampling technique, a sample of 40% was picked from each stratum. This gave a total of 106 cases to be selected for observation. The selection of a 40% sample is considered adequate based on Saunders et al (2003) view that, a sample should at a minimum consist of 30 elements for statistical analysis and meet the threshold of about 10% of a population. The cases were the representative sample studied. This made it easier to get adequate and accurate information necessary for the research. This is shown in table 2.

TABLE 2

Sample Size

Streets	**Population (Frequency)**	**Sample Ratio**	**Sample**
Upper rd	62	0.4	25
Majengo Rd	50	0.4	20
Magoko Rd	36	0.4	14
Kenyatta Highway	116	0.4	46
Total	**264**	**0.4**	**106**

Source: Author (2016)

3.5 Instrumentation

Structured questionnaire was used to collect primary data. The questionnaire had close-ended questions in order to provide more structured responses which then facilitated tangible

recommendations. The first section contained questions on demographic information of the respondents while section two contained questions to achieve the objectives of the study. The researcher developed question based on Likert scale. The structured questions were used in an effort to conserve time and money as well as to facilitate in easier analysis as they are in immediate usable form; while the unstructured questions were used so as to encourage the respondent to give an in-depth and felt response without feeling held back in revealing of any information. Each questionnaire was coded and only the researcher knew which person responded. The coding technique was only used for the purpose of matching returned, completed questionnaires with those delivered to the respondents.

3.6 Data Collection

This research utilized primary data that was collected by use of a self administered questionnaire distributed through drop and pick later method. This study collected quantitative data using a self-administered questionnaire. The researcher dropped the questionnaires physically at the respondents' place of work and picked immediately. Nevertheless, where it proves difficult for the respondents to complete the questionnaire immediately, the researcher left the questionnaires with the respondents and picked them up later. Primary data was collected and used in the study. The researcher, with the help of an assistant administered the questionnaires and collected the filled-in questionnaires after a period of one week. Data collection is the gathering of information to serve or prove some facts. An introductory letter was sought from KCA University.

3.7 Diagnostic Test

Diagnostic testing was undertaken by the use of self-administered questionnaires on 10 employee from SMEs not sampled for this study. In this study reliability test was carried out by pilot test and computing Cronbach's Alpha. The feedback of the pilot study was used to refine the questionnaire to make it reliable during the study. Cronbach's alpha was used to test the reliability of the measures of the questionnaire. Reliability refers to the consistency of the measure of concept. The reliability of an instrument is a measure of how consistent the results of a test are. Where Cronbach Alpha is used for reliability and test, a rule of thumb is also used that states that if the Cronbanch values of the items to be included in the study should not be lower than 0.7. To increase the reliability of the questionnaire, this study used Cronbach's Alpha for separate domains of the questionnaire rather than the entire questionnaire. To validate the questionnaire, the study adopted face validity which is a form of content validity. This involved human resource experts using review and comment on the content and quality of the questionnaire. The questionnaire was then adjusted from the results obtained from validation exercise to minimize errors and ambiguity.

3.8 Data Analysis

The questionnaires received were first checked for completeness, consistency and accuracy. They were coded and entered into a computer database ready for analysis. Data was analysed using descriptive statistics, correlation analysis and multiple regression analysis with the help of Statistical Package for Social Sciences (SPSS) and MS Excel. The multiple regression analysis model was specified as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon \quad \text{(i)}$$

Whereby Y represents performance of SMEs (measured in terms of market share, customer base and profitability of the firms), X_1 is the mobile phone cost effectiveness, X_2 is the customer satisfaction, X_3 is the security management. B_0 is the constant term, while β_1, β_2 and β_3 are the coefficients of the independent variables while ε was an error term. The results of the analysis were presented in tables, graphs and charts.

3.9 Ethical Issues

Ethical considerations such as confidentiality, anonymity and avoidance of deception are very important issues in social research. The principle of informed consent was applied in that the researcher explained what the research is about and how the results were to be used in a way that the stakeholders could understand and benefit. According to Mugenda & Mugenda (2003) the researcher should be careful to avoid causing physical or psychological harm to respondents by asking embarrassing and irrelevant questions, threatening language or making respondents nervous. For the purpose of this study, permission was first sought from relevant authorities and a letter was granted to allow the researcher to carry out the research. Furthermore, the researcher explained the purpose of the study to the respondents and assured them of confidentiality of their responses and identities.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents analysis and findings of the study as set out in the research methodology. The study findings are presented on the effects of mobile banking services on performance of small and medium enterprises in Thika Town, Kenya. The data was gathered from the questionnaire which was designed in line with the objectives of the study. The analysis of data was done using statistical package for social sciences (SPSS). The research instrument was designed in line with the objectives of the study. To enhance quality of data obtained, structured and unstructured types of questions were included. The data obtained was fed into SPSS version 21.0 and used to compute the proxies used to measure the effects of mobile banking services on performance of small and medium enterprises in Thika Town. The chapter is organized under sub-sections guided by the research questions.

4.2 Response Rate

Response rate refers to the extent to which the final data set includes all sample members and is calculated from the number of people with whom interviews were completed divided by total number of people in the entire sample. This includes those who declined to participate and the unavailable. The study involved 106 sampled respondents which included owners/managers and other staffs in the SMEs in collecting data on the effects of mobile banking services on performance of small and medium enterprises in Thika Town Kenya. Table 3 below shows the response rate.

TABLE 3

Response Rate

Response	Frequency	Percentage
Fully Filled questionnaires received	96	90.6
Unreturned and unfilled questionnaires	10	9.4
Total Number of instruments administered	**106**	**100.0**

Source: Author (2016)

This analysis is based on the 96 responses obtained from the field. The study obtained 96 fully filled questionnaires from the 106 sampled respondents which contribute to 90.6% response rate. This commendable response rate was made a reality after several personal calls were made and visits to remind the respondent to fill-in and return the questionnaires as well as explaining the importance of their participation in this study hence, kept reminding the respondents to fill in the questionnaires through frequent phone calls and picked the questionnaires once fully filled. This response rate is representative and conforms to Mugenda and Mugenda (2003) stipulation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent. The response rate demonstrates a willingness of the respondents to participate in the study.

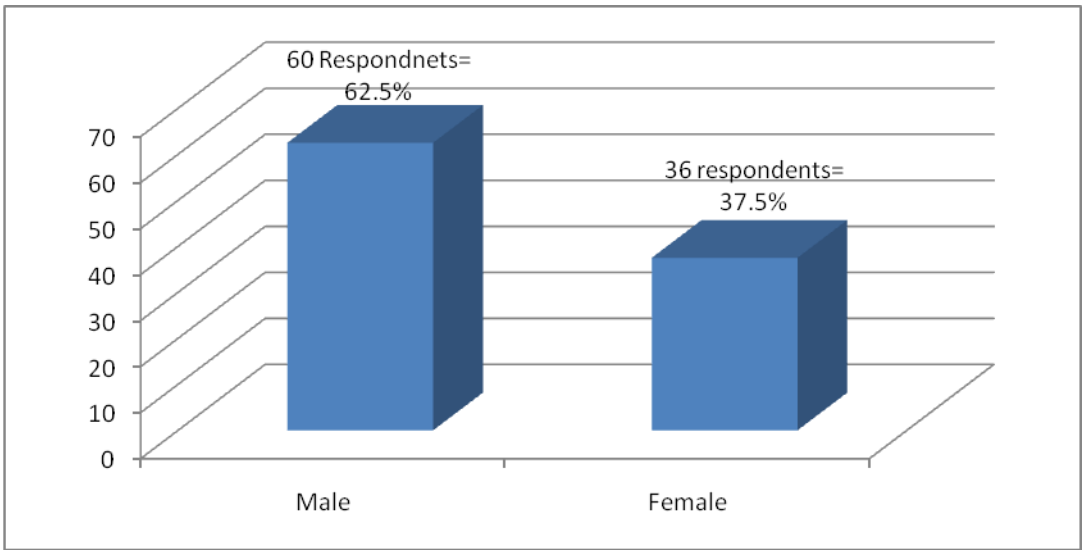
4.3 Background Information

In order to get the background information on the effects of mobile banking services on performance of small and medium enterprises in Thika Town, the demographic data of the respondents was investigated and are presented in this section.

4.3.1 Gender of the Respondents

FIGURE 2

Gender of the Respondents



Source: Author (2016)

The question of gender was considered important in the study primarily because it could help the researcher get a balanced view from both males and females. Figure 2 above shows the distribution of the respondents by gender. Sixty two percent (62.6%) of the respondents were male staffs while 37.4% of them were female staffs. This implies that the number of male managers was more than the female managers. The findings show that the SMEs studied have both male and female staffs and views expressed in these findings can be taken as representative of the opinions of both genders.

4.3.2 Age Brackets

The study sought to investigate the composition of the respondents in terms of age brackets to understand their familiarity with the effects of mobile banking services on the performance of small and medium enterprises in Thika Town.

TABLE 4

Age Brackets

Age Brackets	Frequency	Percentage
Between 20 to 29 Years	25	26
Between 30 and 39 Years	41	42
Between 40 and 49 Years	18	19
50 Years and above	12	13
Total	**96**	**100**

Source: Author (2016)

Majority (comprising 42%) of the respondents indicated that they were aged between 30 and 39 years, 26% of them were aged between 20 to 29 years, 19% of the respondents were between 40 and 49 years of age while 13% if the respondents reiterated that they were 50 years and above. The results depicted in table 4 above show that the respondents were distributed across various age brackets which implies that views expressed here can be put into consideration on the account that they reflect understanding of the technological advancements and particularly mobile banking which affects the performance of SMEs.

4.3.3 Positions Held by the Respondents in the SMEs

The study targeted to collect data from the staff comprising of the owners/ managers and employees of the SMEs in Thika Town. This was relevant to assess the distribution of the respondents across the stakeholders in the industry.

TABLE 5

Positions Held by the Respondents

Position	Frequency	Percentage
Owners	38	40
Manager	48	50
General staff/Employees	10	10
Total	**96**	**100**

Source: Author (2016)

The study findings in table 5 above show that all the respondents occupy significant positions in the enterprises therefore they are aware of the effects of mobile banking services on performance of small and medium enterprises in Thika Town. According to the results half of the respondents (50%) comprised of managers of the SMEs, 40% of them were owners of the enterprises operating in Thika town while 10% of the respondents were general staffs. These findings further imply that the respondents that participated in the study were mainly those involved in the formulation and implementation of the decisions concerned with mobile banking services and performance of small and medium enterprises in Thika.

4.3.4 Duration Served in the Organization

In the wake of technological advancements and globalization, there are likely to be many changes in institutional and operating environment that the respondents should know when responding to the issues sought by the study. The study therefore sought to establish the length of time that the respondents had been working in the small and medium enterprises in Thika Town. The results are presented in Table 6 below.

TABLE 6

Duration Worked in SMEs in Thika

Length of Service	Frequency	Percentage
Less than 1 year	14	15
1 - 5 Years	34	35
6 - 10 Years	36	38
11-15 Years	12	13
Total	**96**	**100**

Source: Author (2016)

From the study, 38% of the respondents unanimously indicated that they had worked with the SMEs in Thika for a period of 5 - 10 years, 35% of them had been working in the selected medium size manufacturing enterprises in Nairobi for 1-2 years, 15% of them had been working

in the SMEs in Thika for less than one year whereas 13% of them had worked in the SMEs for a period of 11 to 15 years. This implies that most of the staffs participating in this study had been operating for an ample time thus they were conversant of the information that the study sought pertaining to the effects of mobile banking services on the performance of small and medium enterprises in Thika Town.

4.3.5 Highest Formal Qualification

The selected SMEs in Thika employ staffs in different work stations hence different academic qualifications. The study thus sought to establish the highest academic qualifications attained by the respondents.

TABLE 7

Level of Education

Level of Education	**Frequency**	**Percent**
College Diploma	54	56
Masters degree	19	20
Bachelors/ graduate degree	19	20
Others	4	4
Total	**96**	**100**

Source: Author (2016)

Majority (56%) of the respondents indicated that they had acquired a Bachelor's degrees, 20% of them indicated that they had acquired Masters degrees, another 20% of the respondents had acquired college diplomas while 4% of the respondents indicated that they had acquired PhDs. These findings imply that all the respondents were academically qualified and also familiar with their duties and could dispense them effectively in terms of professional work ability and performance.

4.4 Mobile Banking and Performance of SMEs

The main focus of this study was to investigate the impact of mobile banking services on the performance of SMEs in Kenya. The study was inquisive of the extent to which the SMEs utilize various services offered through mobile phones in the running of the SMEs. Table 8 below shows the results.

TABLE 8

Services offered through Mobile Phones in the Running of the SMEs

Services offered through Mobile Phones	No extent	Little extent	Moderate extent	Large extent	Very large extent	Mean	Std. Dev.
Payment for goods by customers through 'Lipa na M-Pesa'	1.0	4.2	41.7	46.9	6.3	3.5313	0.7248
Phone to bank operations	0	0	49	47.9	3.1	3.5417	0.5604
Savings to financial institutions	0	3.1	34.4	55.2	7.3	3.6667	0.6596
Money transfer	0	1	44.8	50	4.2	3.5729	0.5937
Mini-statements enquiry	0	1	36.5	55.2	7.3	3.6875	0.6209
Payment of firm bills	0	3.1	45.8	46.9	4.2	3.5208	0.6321
Credits and airtime purchase	0	3.1	45.8	45.8	5.2	3.5313	0.6481

Source: Author (2016)

According to the results in Table 8 above, most of the SMEs in Thika Town mainly utilize mobile banking service for mini-statements enquiry to a great extent as shown by a mean score of 3.6875, savings to financial institutions to a great extent as shown by a mean score of 3.6667, money transfer to a great extent as shown by a mean score of 3.5729, phone to bank operations to a great extent as shown by a mean score of 3.5417, payment for goods by customers through 'Lipa na M-Pesa' to a great extent as shown by a mean score of 3.5313, credits and airtime purchase to a great extent as shown by a mean score of 3.5313 and payment of firm bills to a great extent as shown by a mean score of 3.5208. These results are a clear indication that the SMEs in Thika utilize the mobile banking services for various reasons which could influence their performance.

4.5 Cost Effectiveness of Mobile Banking

The study was interested in assessing the effects of cost effectiveness of mobile banking on performance of SMEs in Thika Town. The respondents were required to rate the extent to which

various aspects of cost effectiveness of mobile banking affect the performance of SMEs in Thika Town.

TABLE 9

Aspects of Cost Effectiveness of M-Banking affect Performance of SMEs

Aspects of cost advantages	**No extent**	**Little extent**	**Moderate extent**	**Large extent**	**Very large extent**	**Mean**	**Std. Dev.**
Affordability of services	0	5.2	37.5	47.9	9.4	3.6146	0.73082
Economic value of m-banking services	0	3.1	42.7	47.9	6.3	3.5729	0.66086
Customer perceived value	0	2.1	39.6	54.2	4.2	3.6042	0.60662
Levels of income	0	3.1	40.6	51	5.2	3.5833	0.64346

Source: Author (2016)

From the results depicted in Table 9, most of the responses reiterated that affordability of services affect the performance of SMEs in Thika Town to a great extent as shown by a mean score of 3.6146 as well as customer perceived value shown by a mean score of 3.6042, levels of income shown by a mean score of 3.5833 and economic value of m-banking services shown by a mean score of 3.5729. The study therefore established that the cost effectiveness of mobile banking affects the performance of SMEs in various ways.

The respondents were also required to indicate their level of agreement with the statements regarding influence of cost effectiveness of mobile banking and its effect on the performance of SMEs in Thika Town.

TABLE 10

Influence of Cost Effectiveness of M-Banking on Performance of SMEs

Aspects of cost effectiveness	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Dev.
Mobile banking has a positive impact on transfers, payments, deposits and withdrawals in financial transactions of small businesses	0	5.2	45.8	41.7	7.3	3.5104	0.7107
Mobile banking is a cost effective, reliable and simple way of conducting business and reduces the instances of human error	0	4.2	43.8	47.9	4.2	3.5208	0.6485
Mobile banking lowers the costs of serving low-income customers	0	5.2	38.5	50	6.3	3.5729	0.6920
Mobile banking provides increased value for customers' banking transactions	0	5.2	45.8	41.7	7.3	3.5104	0.7107

Source: Author (2016)

According to the results presented in Table 10 above, majority of the respondents agreed that Mobile banking lowers the costs of serving low-income customers as shown by a mean score of 3.5729, mobile banking is a cost effective, reliable and simple way of conducting business and reduces the instances of human error as shown by a mean score of 3.5208 and mobile banking has a positive impact on transfers, payments, deposits and withdrawals in financial transactions of small businesses and mobile banking provides increased value for customers' banking transactions shown by a mean score of 3.5104 in each case.

4.6 Customer Satisfaction

To establish the extent to which customer satisfaction of mobile banking affects performance of SMEs in Thika Town, the researcher sought to establish the extent to which mobile banking has

contributed to various aspects of customer satisfaction that enhance the performance of SMEs in Thika Town.

TABLE 11

Effects of M-Banking on Customer Satisfaction and Performance of SMEs

Aspects of customer satisfaction affected by mobile banking	**No extent**	**Little extent**	**Moderate extent**	**Large extent**	**Very large extent**	**Mean**	**Std. Dev.**
Service reliability	0	4.2	37.5	53.1	5.2	3.5937	0.6582
Service Quality	0	5.2	36.5	50	8.3	3.6146	0.7162
Convenience, accessibility of services	0	3.1	49	43.8	4.2	3.4896	0.6323
Customer knowledge	0	6.3	37.5	51	5.2	3.5521	0.6938
Innovative services/products	0	1	46.9	46.9	5.2	3.5625	0.6123

Source: Author (2016)

The results in Table 11 above show that mobile banking has contributed to service quality, service reliability, innovative services/products and customer knowledge that enhance the performance of SMEs in Thika Town to great extents as shown by mean scores of 3.6146, 3.5937, 3.5625 and 3.5521 in that order, while it has contributed to convenience, accessibility of services to a moderate extent as shown by a mean score of 3.4896. These results indicate that the enhanced performance of SMEs could be attributed to various aspects of customer satisfaction realized from the use of mobile banking services. The study was inquisive of the respondents' level of agreement with various statements with regard to customer satisfaction realized from the mobile banking that affect the performance of the SMEs in Thika.

TABLE 12

Customer Satisfaction From M-Banking Affecting Performance of SMEs

Statements on customer satisfaction realized from the mobile banking	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Std. Dev.
The SME has been able to satisfy its customers due to improved services via mobile banking	0	4.2	34.4	53.1	8.3	3.6563	0.6932
The quality of service offered through mobile banking at the Firm has maintained good level of customer satisfaction	0	3.1	50	42.7	4.2	3.4792	0.6321
Service recovery has enhanced improved customer satisfaction	0	5.2	34.4	55.2	5.2	3.6042	0.6724

Source: Author (2016)

According to Table 12 above, the respondents were in agreement that the SMEs have been able to satisfy its customers due to improved services via mobile banking as shown by a mean score of 3.6563 and that service recovery has enhanced improved customer satisfaction as shown by a mean score of 3.6042. However they neither agreed nor disagreed with that the quality of service offered through mobile banking at the firms have maintained good level of customer satisfaction as shown by a mean score of 3.4792. The study was able to establish that customer satisfaction realized from the mobile banking have diverse effects on the performance of the SMEs.

4.7 Security Management

Security issues affect the utilization of mobile banking. The study thus sought the respondents' views on the extent to which various aspects of customer security in mobile banking affect security management in enhancing the performance of small business enterprises.

TABLE 13

Effects of Security Management of M-Banking on Performance of SMEs

Aspects of customer security	No extent	Little extent	Moderate extent	Large extent	Very large	Mean	Std. Dev.
Perceived Privacy of information of mobile banking services	0	1	42.7	52.1	4.2	3.5938	0.5907
Perceived ease of use of mobile banking transactions	0	6.3	42.7	44.8	6.3	3.5104	0.7107
Improved levels of security of service delivery	0	2.1	47.9	45.8	4.2	3.5208	0.6152
Security awareness of services offered by firms	0	5.2	36.5	50	8.3	3.6146	0.7162

Source: Author (2016)

According to Table 13 above, security awareness of services offered by firms affects the performance of SMEs to a great extent as shown by a mean score of 3.6146, as well as perceived privacy of information of mobile banking services shown by a mean score of 3.5938 and improved levels of security of service delivery shown by a mean score of 3.5208, and that perceived ease of use of mobile banking transactions to a great extent as shown by a mean score of 3.5104.

TABLE 14

Effects of Customer Security on the Performance of SMEs

Statements on customer security that affect customer service	No extent	Little extent	Moderate extent	Large extent	Very large extent	Mean	Std. Dev.
Consumers to feel more comfortable about using their devices for financial transactions	0	6.3	45.8	43.8	4.2	3.4583	0.67927
Consumers are increasingly turning to mobile financial services to conduct everyday tasks	0	5.2	38.5	50	6.3	3.5729	0.69198
Security of financial transactions are addressed by mobile application developers, wireless network service providers and the banks' IT departments	0	5.2	43.8	46.9	4.2	3.5	0.66491
Perceived risks have a significant positive influence on commitment	0	6.3	33.3	51	9.4	3.6354	0.74155

Source: Author (2016)

Table 14 above shows responses on the extent to which customer security affects security management in enhancing the performance of the SMEs. Majority of the respondents agreed that perceived risks have a significant positive influence on commitment as shown by a mean score of 3.6354, consumers are increasingly turning to mobile financial services to conduct everyday tasks as shown by a mean score of 3.5729 and security of financial transactions are addressed by mobile application developers, wireless network service providers and the banks' IT departments as shown by a mean score of 3.5000, while there was neutrality on that consumers to feel more comfortable about using their devices for financial transactions as shown by a mean score of 3.4583. From these results, consumers of the SMEs do not feel at risk and exposed to insecurity and uncertainty which might make them anxious about adopting mobile services.

4.8 Regression Analysis

Data analysis was based on a multiple regression model, whereby the dependent variable in this study was performance of SMEs which was measured by market share, customer base and profitability, while the independent variables were cost effectiveness (affordability of services, economic value of m-banking services, customer perceived value and levels of income), efficient service delivery (measured in terms of Services delivery, service delivery process ad reduced loss of money through cash transactions), customer satisfaction (service reliability, convenience, accessibility of services, customer knowledge) and security management (perceived usefulness, perceived ease of use, levels of security of service delivery and security awareness of services). The "simultaneous" method was used whereby the researcher specified the set of predictor variables that made up the model. The success of this model in predicting the criterion variable was then assessed.

TABLE 15

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.299(a)	.090	.060	.62247

a Predictors: (Constant), Cost Effectiveness, Customer Satisfaction and Security Management

Source: Author (2016)

The model summary shown in Table 15 above indicates that the correlation coefficient (R) between the independent variables and performance of SMEs is 29.9% which is a positive strong relationship. The adjusted R Square value gives the most useful measure of the success of the model. Hence it is evident that the mobile banking accounted for 29.9% of the performance of SMEs in Thika Town. 29.9% of variations in performance is explained in by variations in mobile banking services.

TABLE 16

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.510	3	1.170	3.019	.034(a)
	Residual	35.647	92	.387		
	Total	39.156	95			

Predictors: (Constant), Cost Effectiveness, Customer Satisfaction and Security Management
Source: Author (2016)

ANOVA findings as explained by the P-value of 0.034 which is less than 0.05 (significance level of 5%) confirms the existence of correlation between the independent and dependent variables. The model shows the model fitness i.e. how well the variables fit the regression model. The sum of squares gives the model fit and hence the variables fit the regression model. From the results, the F ratio of 3.019 and the significance of 0.034 shows that there was not much difference in means between dependent and independent variables. Since F calculated is greater than the F critical (value = 3.019), this shows that the overall model was significant.

TABLE 17

Coefficients of Determination

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.110	.606		3.483	.001
Cost Effectiveness	.091	.106	.086	.858	.393
Customer Satisfaction	.023	.089	.026	.263	.793
Security Management	.295	.106	.279	2.793	.006

Source: Author (2016)

The data used for this regression analysis was collected from 96 respondents working with the manufacturing SMEs operating in Thika. The explanatory variables that were used in this study were cost efficiency, efficient service delivery, customer satisfaction and security management. Table 17 shows the coefficients on the influence of the individual independent variables on the dependent variable. The Beta coefficients indicate the extent to which bank income changes due to a unit change in the independent variable. The positive Beta coefficients indicate that a unit change in the independent variable leads to a positive change in performance of SMEs in Thika Town. Below is the regression equation used to predict the dependent variable from the independent variable as given in chapter three of the research project. Using the coefficients established in the regression model above, the regression equation becomes:

$$Y = 2.110 + 0.091X_1 + 0.23X_2 + 0.295X_3$$

Table 17 also presents the level of significance also called the p value. This is the coefficient that is used to test hypothesis and the significance of the independent variables. The findings as shown in Table 17 indicate that if all the independent variables are held constant at zero, the performance of SMEs recorded would be 2.110 units. The results also suggest that cost effectiveness contributes a increase of 0.091 units, customer satisfaction accounts for an increase of 023 units and security management contributes to a increase of 0.295 units of performance of SMEs each when the other factors are kept unchanged. The model results indicate that there is a significance relationship between cost effectiveness, customer satisfaction, security management and the performance of SMEs in Thika Town.

4.9 Interpretation and Discussion of Findings

The foregoing results are a clear indication that the SMEs in Thika utilize the mobile banking services for various reasons which could influence their performance. The study results revealed

that m-banking services have a role in influencing the aspects of firm performance in the small and medium enterprises operating in Thika Town. SMEs in Thika Town mainly utilize mobile banking service for Payment for goods by customers through 'Lipa na M-Pesa', for savings to financial institutions, money transfer, phone to bank operations, mini-statements enquiry, credits and airtime purchase and payment of firm bills. Mobile banking leads to increased duration of service delivery for 24 hours, reduction of congestion in the banking halls and services delivery.

From the results, the cost effectiveness of mobile banking affects the performance of SMEs in various ways. It is clear from these results that the major advantage of a mobile phone for service consumption is its portability and access to the service whenever and wherever wanted. Small and medium businesses have embraced the use of mobile payment technology in their operations. Mobile financial services have a positive impact on transfers, payments, deposits and withdrawals in financial transactions of customers and small businesses, mobile banking service providers are fair in their conduct of customer transactions and mobile banking is a cost effective, reliable and simple way of conducting business and reduces the instances of human error.

The study established that customer satisfaction realized from the mobile banking have diverse effects on the performance of the SMEs. Mobile banking is effective in terms of customer satisfaction as any person could access the service with availability of network, a mobile phone and a bank account. Accordingly, balance enquiry, automatic advices to clients on credits and airtime purchase affects customer satisfaction. Mobile banking leads to increased duration of service delivery for 24 hours, reduction of taken in the banking halls and hence enhances services delivery. As such, mobile banking affects service quality, creation of superior

customer value has been one of the prime interests of marketing and enlightening of customers on technological issues to easily make payments to small enterprises.

From the foregoing results, consumers of the SMEs do not feel at risk and exposed to insecurity and uncertainty which might make them anxious about adopting mobile services. the customers fear that mobile banking services may not process payments correctly, perceived risks have a significant positive influence on commitment and security of financial transactions are addressed by mobile application developers, wireless network service providers and the banks' IT departments. The customers worry that they cannot get compensation and that they may lose money when transferring in case they put the wrong account number/mobile number. This is a clear indication that security factors affect the utilization of mobile banking among the SMEs which would translate to better performance.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This is the final chapter in this study which gives the summary of the findings, the conclusions and recommendations of the study based on the objective of the study. It comes after identifying the background, problem at hand and the objectives in chapter one, literature review was done in chapter two, chapter three set out the methodology that the study used to collect data and chapter four analysed the data obtained from the study. The chapter finally presents the suggestions for further studies.

5.2 Summary of Findings

The general objective of this study was to investigate the impact of mobile banking services on the performance of SMEs in Kenya. The study found that mobile banking affects the performance of SMEs in Thika Town to a great extent. According to the results, SMEs in Thika Town mainly utilize mobile banking service for Payment for goods by customers through 'Lipa na M-Pesa', for savings to financial institutions, money transfer, phone to bank operations, mini-statements enquiry, credits and airtime purchase and payment of firm bills. The study found that mobile banking services affect market share and customer base to great extents and positively affects profitability of SMEs to a moderate extent. As such, mobile banking leads to increased duration of service delivery for 24 hours, reduction of congestion in the banking halls and services delivery. In addition, mobile banking affects service quality, creation of superior customer value has been one of the prime interests of marketing departments in the banking institutions and enlightening of customers on technological issues.

The SME sector in Kenya has inevitably found itself unable to resist technological indulgence with the continuously emerging wave of information driven economy. The objectives were to assess the effects of cost effectiveness of mobile banking on performance of SMEs in Thika Town; to find out the impact of service delivery of mobile banking on performance of SMEs in Thika Town; to establish the extent to which customer satisfaction of mobile banking affects performance of SMEs in Thika Town and to determine the influence of security management of mobile banking on performance of SMEs in Thika Town.

5.2.1 Cost Effectiveness of Mobile Banking

The study found that cost effectiveness of mobile banking affect performance of SMEs in Thika Town to a significant extent. From the study, customer perceived value and affordability of services affects performance of SMEs in Thika Town as well as economic value of m-banking services. Mobile banking offers a high technology platform onto which other services can be often provided at very low cost to deliver an effective result. Mobile banking lowers the costs of serving low-income customers, mobile banking is a cost effective, reliable and simple way of conducting business and reduces the instances of human error, m- banking has a positive impact on transfers, payments, deposits and withdrawals in financial transactions of small businesses and mobile banking provides increased value for customers' banking transactions.

The study also found that mobile banking has the potential to bring basic banking and electronic transactions services to unbanked consumers in developing markets and there are a number of options available to telecommunications regulators in responding to the emergence of m-banking platforms, and authorities should take a measured approach to achieve optimal societal and industry outcomes. M- Banking results in potentially more reliable information delivery, access to data and support services that may not have otherwise been available, mobile

banking ability to conduct transactions without necessarily the customer carrying cash amounts and ensures that customers enjoy greater convenience and control to great extents. Further, through mobile banking customers can be offered additional or extended services and mobile banking enhances faster service delivery in the SMEs to moderate extents.

5.2.2 Customer Satisfaction of Mobile Banking

The study established that mobile financial services affect customer satisfaction in enhancing the performance of the SMEs to a moderate extent. As such mobile banking is effective in terms of customer satisfaction as any person could access the service with availability of network provided by mobile phones and mobile banking services. From the study, mobile banking has contributed to service quality, service reliability, innovative services/products and customer knowledge that enhance the performance of SMEs in Thika Town to great extents. On the other hand it has contributed to convenience, accessibility of services to a moderate extent.

5.2.3 Security Management in Mobile Banking

The study found that security issues affect the utilization of mobile banking. According to the foregoing chapter, mobile banking services affect customer security in enhancing the performance of the SMEs to a moderate extent. The various aspects of customer security in mobile banking that affect security management in enhancing the performance of SMEs include security awareness of services offered by firms, perceived privacy of information of mobile banking services, improved levels of security of service delivery and perceived ease of use of mobile banking transactions to great extents. Mobile banking platform combines payments, banking, and real-time, two-way data transmission for on-the-move, ubiquitous access to financial information and services

5.3 Discussions of Findings

According to the study findings, mobile banking affects the performance of SMEs in Thika. Mobile banking leads to increased duration of service delivery for 24 hours, reduction of congestion in the banking halls and services delivery. In addition, it affects service quality, creation of superior customer value has been one of the prime interests of marketing departments in the banking institutions and enlightening of customers on technological issues. The study also found that cost effectiveness of mobile banking affect performance of SMEs in Thika Town. From the results, customer perceived value and affordability of services affects performance of SMEs in Thika Town as well as economic value of m-banking services. These findings concur with those of Lee et al, (2003) the major advantage of a mobile phone for service consumption is its portability and access to the service whenever and wherever wanted. According to Anurag, Tyagi and Raddi (2009) Small and medium businesses have embraced the use of mobile payment technology in their operations.

The study also found that mobile banking has the potential to bring basic banking and electronic transactions services to unbanked consumers in developing markets and there are a number of options available to telecommunications regulators in responding to the emergence of m-banking platforms, and authorities should take a measured approach to achieve optimal societal and industry outcomes. Previously Omwansa (2009) found that the benefits associated with M-Pesa are so enormous that those who try to place regulatory pressure on it might feel guilty if they appear to frustrate it. Laukkanen & Lauronen (2005) also indicated that mobile-bill payment, especially, the location-free access to the service and as a consequence the ability to react immediately to the service need, to use the service wherever wanted and to save time have been found to be the greatest contributors of the service. According to Morawczynski (2008) the

cost efficient provision of formal financial services (payments/ remittances, savings, credit or insurance) is predicated on customers having access at least to a basic transactional account, from which electronic transfers can be made (for loan installments, for example) and cash withdrawn (or deposited) as necessary.

From the findings, mobile financial services affect customer satisfaction in enhancing the performance of the SMEs. These results coincide with those of Porteous, (2007) that the SMEs have been able to satisfy its customers due to improved services via mobile banking and that service recovery has enhanced improved customer satisfaction while the quality of service offered through mobile banking at the firms have maintained good level of customer satisfaction moderately. In concurrence with these findings Coelho and Easingwood (2003) argues that mobile banking business models range from a bank providing additional mobile services to existing customers, to banks utilizing a network of banking and mobile agents in lieu of branches to reduce delivery costs, to telecommunication companies providing payment services without bank participation.

The results also reveal that security issues affect the utilization of mobile banking. In a previous study, Wambari (2009) also found that perceived risks have a significant positive influence on commitment, consumers are increasingly turning to mobile financial services to conduct everyday tasks and security of financial transactions are addressed by mobile application developers, wireless network service providers and, while consumers to feel moderately comfortable about using their devices for financial transactions. In accordance with Khodawandi et al., (2003) mobile banking platform combines payments, banking, and real-time, two-way data transmission for on-the-move, ubiquitous access to financial information and services.

5.4 Conclusions

The general conclusion of the study is that money transfer; automatic advices to clients on credits and airtime purchase, mini-statement and balance enquiry affect the performance of the SMEs. The following are the conclusions made from the findings as regards to the objectives set out in the study.

5.4.1 Cost Effectiveness

The study concludes that cost effectiveness of mobile banking affect performance of the SMEs. From the study, it was established that mobile banking offers a high technology platform onto which other services can be often provided at very low cost to deliver an effective result. The study deduces that mobile banking services affects the service delivery and hence the performance of small businesses in various ways such as increased service quality, reduction of loss of money through cash transactions, enlightening of customers on technological issues and increased duration of service delivery for 24 hours. In this regard efficiency of service delivery of mobile banking enhances aspects of performance of SMEs such as mobile banking enhances faster service delivery in the SMEs, customers can be offered additional or extended services, customers enjoy greater convenience and control, M- banking results in potentially more reliable information delivery, access to data and support services that may not have otherwise been available and ability to conduct transactions without necessarily the customer carrying cash amounts.

5.4.2 Customer Satisfaction

The study concludes that mobile banking is effective in terms of customer satisfaction as any person could access the service with availability of network provided by mobile phones and mobile banking services. The study established mobile banking has contributed to various

aspects of customer satisfaction that enhance the performance of SMEs in Thika Town. It was also clear that service reliability, service quality, convenience, accessibility of services, customer knowledge and innovative services/products enhance the performance of SMEs in Thika Town. From the findings the enhanced performance of SMEs could be attributed to various aspects of customer satisfaction realized from the use of mobile banking services. The SMEs have been able to satisfy its customers due to improved services via mobile banking, service recovery has enhanced improved customer satisfaction, the quality of service offered through mobile banking at the firms have maintained good level of customer satisfaction and customer satisfaction realized from the mobile banking have diverse effects on the performance of the SMEs.

5.4.3 Security Management

The study deduces that customer security of mobile banking affect performance of SMEs. Customer security in mobile banking leads to improved levels of service, security awareness of services offered by SMEs, perceived usefulness of mobile banking and perceived ease of use of such transactions. Consumers are increasingly turning to mobile banking services to conduct everyday tasks consumers to feel more comfortable about using their devices for mobile banking transactions and security of transactions are addressed by mobile application developers and wireless network service providers.

5.5 Recommendations

The following are the recommendations made in line with the study findings and conclusions from the foregoing results:

Mobile banking is being used to improve operations in small enterprises in Kenya. The SMEs have put in place measures to become more competitive by investing in IT development

of technology. In the long run, mobile banking is likely to have major impacts on the profitability of SMEs as it smoothens business operations. The study further recommends that business enterprises keep adopting and using mobile banking in their operations because the number of people with access to a mobile hand set is increasing every day. In addition, the convergence of mobile phones and business operations has revolutionized the business operations.

The study recommends that policy makers consider mobile banking in their formulation of policies because of the technological developments and the expected switch from cash transactions to technologically supported mobile banking services. In addition, the policy makers, ministry of industrialization and mobile service providers should educate the masses more about the benefits of integrating and using mobile technologies to enhance small businesses and also the need to enhance technical capabilities of entrepreneurs to allow widespread use of emerging technologies in SMEs.

5.6 Limitations of the Study

The main limitation of study was its inability to include more organizations in the Country. This was a study focusing on SMEs in Kenya with a specific focus on SMEs in Kiambu County. The study could have covered more organizations across country so as to provide a more broad based analysis. The study countered this problem by carrying a study in the SMEs in Thika Town to serve as the representative. However the researcher countered the limitation by carrying out the research across all the SMEs in Thika Town which enabled generalization of the study findings.

Another major challenge of the study was that though the study set out to do a measurements study to enable correlations of the effects of mobile banking services on the performance of SMEs in Thika, limitations such as lack of concrete data by respondents to allow for correlation analysis the study could not analyze the data beyond the perceptions level. The researcher

countered the limitation by considering the role of various aspects of mobile banking services perceived to affect the performance of SMEs in Thika and by extension the mindset in business. As such the results would help design interventions to address the failure rates of small businesses.

The respondents approached were likely to be reluctant in giving information fearing that the information sought might be used to intimidate them or print a negative image about them or the organization. The researcher handled the challenge by availing an introduction letter from the University and assuring the respondents that the information they gave would be treated with confidentiality and it would be used purely for academic purposes.

5.7 Suggestions for Further Studies

This study only concentrated on SMEs in Kenya yet mobile banking has been adopted by most enterprises in all urban areas/counties in Kenya. Further follow-up studies on the same topic could identify changes over time especially with the expectation that mobile money services may become the primary platform for cashless transactions especially with services like “Lipa-na-M-Pesa” rapidly gaining popularity. This study can be replicated in the same setting at a different time, or in other urban towns in Kenya. In addition, future research may examine the knowledge and understanding of SME’s on government enforcements on ICT laws thus, enrich the efforts that have been made in this study.

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APPENDICES

Appendix I: Introduction Letter

Dear Sir/Madam,

RE: REQUEST TO COLLECT DATA FOR MBA PROJECT

I am an post-graduate student at KCA University pursuing a Master of Business Administration (MBA) degree. Pursuant to the pre-requisite course work, I am currently conducting a research project on **EFFECTS OF MOBILE BANKING SERVICES ON PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN KENYA: A CASE OF SMALL AND MEDIUM ENTERPRISES IN THIKA TOWN**. The focus of my research will be on the SMEs operating in Thika Town and this will involve use of questionnaires administered to owners and managers of SMEs agriculture, manufacturing and services sectors in Thika.

I kindly request you to participate in this study by assisting in filling the questionnaires and providing with any other relevant information. The information collected will be treated with utmost confidentiality and is for academic purpose only. The findings and recommendations of the research will be availed to you upon completion of the research.

Thank you in advance.

Yours faithfully,

Lucy Kibui

KCA University

Appendix II: Research Questionnaire

This research is in partial fulfilment of requirements for a degree in Masters of Business Administration from KCA University; and I will be most grateful if you could kindly complete this questionnaire. This questionnaire consists of two parts; kindly answer all the questions by ticking in the appropriate box or filling in the spaces provided. The information given here will only be used for purposes of this study and will be treated with utmost confidentiality. Your cooperation will be highly appreciated.

PART I: BACKGROUND INFORMATION

Name of your organization : _____

1. Gender

Male	[ ]	Female	[ ]

2. Age Bracket

Below 20 Years	[ ]	20 – 29 years	[ ]
30 -39 Years	[ ]	40 -49 Years	[ ]
50 years and above	[ ]		

3. What is your designation?

Owner	[ ]	Manager	[ ]
General staff	[ ]	Other (Specify……)	[ ]

4. How long have you served in this Firm?

Less than 1 year	[ ]	1 – 5 Years	[ ]
5 – 10 Years	[ ]	10-15 Years	[ ]
15 to 20 years	[ ]	20 years and above	[ ]

5. What is your highest level of education?

Certificate	[ ]	Diploma	[ ]
Bachelor's Degree	[ ]	Masters	[ ]
PhD	[ ]	Others (Specify.....)	[ ]

PART II: MOBILE BANKING AND PERFORMANCE OF SMES

6. With regard to this SME, how would you rate the extent to which mobile banking affects the performance of SMEs in Thika Town?

To a very great extent	To a great extent	To a moderate extent	To a little extent	To no extent

7. To what extent do you utilize the following services offered through mobile phones in the running of this SME? Use a scale of 1 to 5 where 1= no extent, 2= little extent, 3= moderate extent, 4= great extent and 5 is to a very great extent.

Services offered through Mobile Phones	**1**	**2**	**3**	**4**	**5**
Payment for goods by customers through 'Lipa na M-Pesa'					
Phone to bank operations					
Savings to financial institutions					
Money transfer					
Mini-statements enquiry					
Payment of firm bills					
Credits and airtime purchase					
Others (Specify.....)					

COST EFFECTIVENESS OF MOBILE BANKING

8. Rate the extent to which the following aspects of cost effectiveness of mobile banking affect the performance of SMEs in Thika Town? Kindly rate on a scale of 1 to 5. 1= No extent, 2= little extent, 3= Moderate extent, 4= great extent, 5 = Very great.

Aspects of cost advantages	**1**	**2**	**3**	**4**	**5**
Affordability of services					
Economic value of m-banking services					
Customer perceived value					
Levels of income					
Others (specify……)					

9. To what extent do you agree with the following statements regarding influence of cost effectiveness of mobile banking and its effect on the performance of SMEs in Thika Town? Use a scale of 1 to 5 where 1- Strongly Disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly Agree.

Aspects of cost effectiveness	**1**	**2**	**3**	**4**	**5**
Mobile banking has a positive impact on transfers, payments, deposits and withdrawals in financial transactions of small businesses					
Mobile banking is a cost effective, reliable and simple way of conducting business and reduces the instances of human error					
Mobile banking lowers the costs of serving low-income customers					
Mobile banking provides increased value for customers' banking transactions					
Others (Specify.....)					

CUSTOMER SATISFACTION

10. To what extent do mobile financial services affect customer satisfaction in enhancing the performance of this SME?

Very great	Great	Moderate	Slight	Very little

11. To what extent has mobile banking contributed to the following aspects about customer satisfaction that enhance the performance of SMEs in Thika Town? Use a scale of 1 to 5 where 1= None, 2= Slight, 3= Moderate, 4= great, 5 = Very great.

Aspects of customer satisfaction affected by mobile banking	**1**	**2**	**3**	**4**	**5**
Service reliability					
Service Quality					
Convenience, accessibility of services					
Customer knowledge					
Innovative services/products					
Other (Specify……....)					

12. What is your level of agreement with the following statements with regard to customer satisfaction realized from the mobile banking that affect the performance of the SMEs in Thika? Use a scale of 1-5 where 1= strongly disagree and 5 = strongly agree.

Statements on customer satisfaction realized from the mobile banking	**1**	**2**	**3**	**4**	**5**
The SME has been able to satisfy its customers due to improved services via mobile banking					
The quality of service offered through mobile banking at the Firm has maintained good level of customer satisfaction					
Service recovery has enhanced improved customer satisfaction					
Other (Specify……....)					

SECURITY MANAGEMENT

13. To what extent do mobile banking services affect customer security in enhancing the performance of this SME?

Very great	Great	Moderate	Slight	Very little

14. To what extent do the following aspects of customer security in mobile banking affect security management in enhancing the performance of this small business enterprise? Use a scale of 1 to 5 where 1= no extent, 2= little extent, 3= moderate extent, 4= great extent and 5=very great extent.

Aspects of customer security	**1**	**2**	**3**	**4**	**5**
Perceived Privacy of information of mobile banking services					
Perceived ease of use of mobile banking transactions					
Improved levels of security of service delivery					
Security awareness of services offered by firms					
Others (Specify.....)					

15. To what extent do the following statements on customer security affect security management in enhancing the performance of this SME? Use a scale of 1 to 5 where 1= no extent, 2= little extent, 3= moderate extent, 4= great extent and 5 is to a very great extent.

Statements on customer security that affect customer service	**1**	**2**	**3**	**4**	**5**
Consumers to feel more comfortable about using their devices for financial transactions					
Consumers are increasingly turning to mobile financial services to conduct everyday tasks					
Security of financial transactions are addressed by mobile application developers, wireless network service providers and the banks' IT departments					
Perceived risks have a significant positive influence on commitment					
Others (Specify.....)					

16. What do you think should be done to enhance performance of the SMEs in Kenya through mobile banking?

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THANK YOU!!!

~The End~