EFFECTS OF MOBILE MONEY TRANSACTIONS ON FINANCIAL PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN NAKURU CENTRAL BUSINESS DISTRICT

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DECLARATION AND APPROVAL

DECLARATION

This research project is my original work and has not been submitted to any institution of higher learning for examination purposes.

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APPROVAL

This Research project has been submitted for examination with my approval as the University supervisor.

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DEDICATION

I dedicate this research project to my Mum Jecinta, my Friends Conor Molony, Lelia Heenan, Frank Kearney, Teresa young and my classmates for their moral support and encouragement.

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God bless you all.

ABSTRACT

The aim of this study was to determine effects of mobile money transactions on financial performance of Small and Medium enterprises in Nakuru Central business district. The objectives of the study were to determine, the frequency by which SMEs use mobile money transaction to carry out their business financial transactions financial; and the effects of mobile money transaction on sale revenue, debt collection, and cash management. The study employed descriptive survey research design. 120 out of 640 SMEs businesses were sampled using simple random sampling. The respondents were selected by use of purposive sampling technique. Questionnaire was used as data collection instrument. The data was analyzed using both descriptive and inferential statistics. For descriptive statistics the study used frequency, percentages and mean. Chi- square test was used to establish whether there was any relationship between the use of Mobile Money Transfer (MMT) and financial performance of SMEs. The results were presented using charts, frequency tables, and graphs. The findings of the study reveals that, the proportion of SMEs using mobile money transaction was significant compared to those which did not. In addition, the study established that the frequency by which SMEs use of mobile money transaction was statistically significant. The study also established that SMEs after adopting the use mobile money, performed better than they used to. However this usage of MMT had no statistical significant effect on sales revenue, debt collection and cash management of SMEs. On the basis of these findings the study recommends that SMEs should monitor the usage of mobile money transaction in order to realize its benefits on the financial performance of their businesses. Since most of SMEs use mobile money to carry out their financial transactions, the government should come up with a legislation that protect the usage of mobile money and make it an acceptable way of transacting business

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LIST OF ABBREVIATIONS AND ACRONYMNS

CBD- Central Business District

SMEs -Small and Medium Enterprises

MM -Mobile Money

MMT- Mobile Money Transaction

MCN - Municipal Council of Nakuru

MSE- Micro and Small enterprises

MSME- Micro, Small and Medium enterprises.

SSE- Small Scale enterprises

ICT- Information and Communication technology

IT - Information Technology

ID- Identification Card

MTN- Mobile Telephone Network

MM- Mobile Money

CHAPTER ONE

INTRODUCTION

1.1The background to the study

The term small and medium enterprises cover a wide range of definitions and reasons, varying from country to country and the source reporting SME's statistics. There is no universally agreed definition of small and medium enterprises because their classification into large or small is a subjective and qualitative judgment based on number of employees, values of assets, value of sales and size of capital and turnover. The most common definitional basis used is employees because of comparatively (Brilliant, 2008). In Kenya, according to the Sessional Paper No. 2 of 2005, SME's refers to the full range of enterprises employing between 1-50 workers in all sectors. The term embraces all businesses in the informal sector. Those working in this sector work in a manner which is not organized and thus unregulated. Their main target group is people whose income is low. It serves mostly people who are unbanked, which implies that the people working in this sector face a lot of challenges.

Chogi (2006) cited that according to Central Bureau Statistics 2005 Kenya has over 5,970,600 people employed in this informal sector, which is about 19% of the total Kenyan population. This is because to start a business in this sector requires less capital and it is not structured. This sector has continuously experienced growth; becoming a key sector in the economy of the country, creating most of the new jobs in Kenya. The sector constitutes 98% of all businesses in the country, absorbing a high population of school, college and university leavers (Malick ,2004).The Economic Survey (2006) showed that SMEs contributed over 50 percent of new jobs created in the year 2005. SME's therefore play fundamental part of the economic fabric in the country. They play a crucial role in increasing growth, innovation and prosperity (Dalberg, 2011). It is therefore an important sector that has positively contributed to the development of Kenyan economy; and thus can't be ignored.

Based on the World Bank study (2012), the inability of the SME's to access funds is still a major issue that limits the formation of new businesses and prevents others from expanding and growing. The sector also faces other challenges. Lennart (2010) noted that, liquidity and cash-

flow management are key bottlenecks for micro and small enterprises operations. This assertion tallies with what Bowen et al (2009) established that debt collection, lack of working capital are among the top five challenges facing micro and small businesses. These challenges make SMEs lack financial capacity to enlarge and develop. A World Bank's Investment Climate Assessment studies as quoted by Lennart (2011) showed that small firms are more credit constrained than large ones (41% vs. 11 %). This assertion confirms what Atieno (2009) established that most formal financial institutions consider micro as small enterprises uncreditworthy, thus denying them credit. This lack of access to financial resources has been seen as one of the reasons for the slow growth of SME's. This is coupled with negative perception towards them, which adversely affect their accessibility to the financial services provided by financial institutions; since they are considered not viable customers by the formal financial sectors as their transaction sizes are small. Their accessibility to financial institutions is therefore difficult due to low capital base, poor returns, lack of financial records and collateral property to secure loans from banks; thus becoming uncreditworth; which in turn affect their development (Wambani, 2009; Amyx 2005; Stern, 2002; Oketch, 2000; Tomecko & Dondo, 1992; Kiiru, 1991).

Business as well as society at large in Sub-Saharan Africa has a very strong cash-based heritage, and cash is the default means for carrying out small-scale transactions. Cash is also the key to doing business; it is a scarce resource, and any business success may very well depend on how to mobilize cash quickly; from savings, credit from suppliers, or to have customers that can pay upon delivery, or even better in the case of production and delivery being separate instances, upon the placing of an order. This insinuates that the performance of the SME's businesses depends on how fast cash receipt and payments are made since any delay affects operations of their business. The faster they get cash the better it is for their businesses. The biggest challenges they face in attaining this is how to reach their customers, mode of payment and accessibility to local receipts of money and payment of their credit.; Since in many developing countries 9 out of 10 people do not have a bank account or access to basic financial service. This implies that majority of the people who transact or either do businesses are unbanked (Lennart, 2011; Wambani, 2009).

The presence of the mobile money transaction has changed how business is conducted. This is because offering banking products through mobile phones has brought about great potential for reaching those who have no bank accounts. Moreover, accessibility to the mobile phone is to both the poor and the rich.

According to Lennart (2010) the fast diffusion of mobile money transfer was viewed as a potential key tool for facilitating financial transactions. This indicates that the rapid adoption of mobile phone was seen as means of uplift the financial functionality of this sector. A positive aspect of mobile phone is that mobile networks can reach remote areas at low cost; and has made financial transactions to be made in a simple and faster manner from any point insofar as there are mobile phones money service providers. It is easier to transact and at a lower cost. There was need therefore to find out whether SME's entrepreneurs (whose main target populations are unbanked), use mobile phones to transact their businesses. At the same time how the use of mobile money had affected financial performance of their businesses. That is, in terms of their sales revenue their debt collection and cash management. This was therefore a study to determine effects of mobile money transactions on financial performance of the SMEs in Nakuru Central Business District (CBD).

1.2 The statement of the problem

SMEs face unique challenges due to the nature of their operations. Their need for payment and transactional services are not always served by banks. This is due to lack of capacity to qualify them to access financial services from commercial banks since they experience low capital base and lack of collateral property to secure loans. They also do not find it very cost effective to embrace banking services because their target customers are mostly the unbanked. Additionally, they lack proper mode of receipts and payments, debt collection procedures and access to finance and this makes them face problems associated with liquidity and working capital management (Higgin at el, 2012). This scenario is likely to have an effect on the growth and performance of the SMEs. The inception of the mobile phone financial transactions has changed how business is being done. 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. Consequently, there was need to study how this financial innovation has affected the performance of SMEs. Therefore, this study sought to determine the effect of mobile money transactions on financial performance of SMEs in Nakuru CBD.

1.3 The Main Objective of the study

The purpose of this study was to determine the effect of mobile money transactions on financial performance of the SMEs in Nakuru CBD.

1.4 The Specific Objectives of the study

The specific objectives of the study were:

i. To determine the frequency by which SMEs use mobile money to carry out their business financial transaction in Nakuru Central Business District.
ii. To determine the effects of mobile money transactions on sales revenue of SMEs in Nakuru Central Business District.
iii. To determine the effects of mobile money transactions on debt collection of SMEs in Nakuru Central Business District.
iv. To determine the effects of mobile money transactions on cash management of SMEs in Nakuru Central Business District.

1.5 Research Hypotheses

The hypotheses of this study were as follows:

i. The frequency by which SMEs use mobile money to carry out their business financial transaction is not statistically significant.
ii. The effect of mobile money transactions on sales revenue of SMEs is not statistically significant.
iii. The effect of mobile money transactions on debt collection of SMEs is not statistically significant.
iv. The effect of mobile money transactions on cash management of SMEs is not statistically significant.

1.6 Significance of the study

Growth and development of SME's is crucial for economic development of the people and the country at large. This study is therefore crucial for the government agencies for it will assist them to provide the legal framework to regulate mobile phone financial transaction as an acceptable legal means of transacting business. The study will also help the banking sector to come up with ways of assisting the SME's to access loans through mobile phones and provide them with banking services which may in turn lead to improve their performance. The study is also significant since no study has been done on the effects of mobile money transactions on financial performance of SME's. The outcome of this study will help those who are in SME's businesses to embrace and adopt mobile money transaction as a means to improve their financial performance.

It will also benefit the financial service providers by giving them information relating the significance of MMT financial transactions of SMEs. This will enable them improve their services so that the transactions are done in a more effective and efficient manner. The phenomenon of SME usage of the mobile money had not well been documented or researched (Kendall, 2012). This study therefore aims at adding to the existing body of knowledge on the effects of mobile phone financial transactions on the performance of SME's.

1.7 Scope of the Study

The study was done in Nakuru Central Business District. It involved a survey of Small and Medium enterprise owners/managers around the central business district. The study dealt with finding out the effects of mobile money transactions on the financial performance of SME's in central business district. The study specifically dealt with the use of mobile money on making payments, receiving money, lending money, borrowing money and saving money. It also looked on performance in reference to sales turnover, debt collection and cash management

1.8 Assumptions of the Study

The assumptions of the study were as follows:

i. The respondents will provide honest information due to the nature of the questions that required the respondent to provide some business confidential information relating to their business.

ii. The respondents are knowledgeable to respond to the questions, because how they responded was critical to the findings of this study

1.9 Limitations and delimitations of the Study

The study used a structured questionnaire to collect the data. The study was limited by the unwillingness of some respondent to provide honest information due to the sensitivity of the required information. The respondent felt that the study was exposing the sensitive information relating to their businesses and thus left some questions unanswered. The study overcame this limitation by guaranteeing maximum confidentiality on the information provided by the respondent. The questionnaire also bore no name of the respondent as a way of keeping confidentiality on the identity of the respondent. The study was also limited by the fact that some questions within the questionnaire were not answered and some were half-way answered especially on issues relating to the number of employees since they thought that the study was aimed at informing relevant bodies that deal with taxation. These may have affected the results of analysis on that specific item by reducing the effective sample size. Thus in turn may have affected the generalization of the findings and consequently the objectivity of the study.

On sampling procedure, the study was limited by the fact that there were no records regarding the number of different type of businesses from the Nakuru Municipal records. The existing records only registered the business name or the name of the owner. The study overcame this limitation by carry out a pilot survey.

1.10 Operational Definition of Terms

Mobile Phone financial transactions: in this study refers to financial transaction carried out by use of mobile phone to do business transactions. Such transactions include; payment, receipt, savings, lending or borrowing carried out through mobile money transfer systems such as M-Pesa, Airtel money etc.

Mobile money transfer: in this study refers to the money transferred by use of mobile phone to another mobile phone. Thus mobile money transaction and mobile phone financial transactions mean one and the same thing.

Financial Performance: in this study Financial Performance refers to desired financial results which affect the operation of the business such as increase in sales turnover, reducing debt by collecting money owed to the business and able to pay what is due in time because of being able to manage cash in and out of the business.

Small and Medium enterprises: these are businesses in the informal sector employing between 1-50 employees. It therefore includes micro, small and medium enterprises

Sales turnover: in this context means amount of money collected as a result of selling commodities or by offering services.

Debt collection: this is amount of money collected from those who owe money to the business. It also refers to what the business expects from its debtors

Cash management: this refer to being able to balance cash payments and receipt in the business so as to make payments when due or buy more stock when required.

M-Pesa: Money transfer service owned by safaricom Ltd.

SIM: Subscriber Identity Module

LIPA NA M-PESA: A new safaricom product that promotes payment of utility bills by use of M-PESA

CHAPTER TWO

LITERATURE REVIEW

2.1 The origin and the nature of SMEs

The Small and Medium enterprises have a long history. The first piece of writing about the small business discovered was of about more than 4000 years ago. This writing is about loaning from a Bank for a small business with terms and conditions. Since then, the small business people have been the backbone of most economies providing products and services to the consumers. When Adam Smith published "Wealth of Nations" in 1776, he was describing an economy in which local small business was virtually being the only economic entities. Indeed, the era of local economy was the heydays of small business. Small and Medium Enterprises (SMEs) have been known to contribute greatly in economic growth of both developed and developing countries. According to a report published in the journal of Economic Literature in the year 2000 about the manufacturing firms in developing countries, the share of SMEs in employment tends to be higher in developing countries, which are typically more focused on small-scale production. As such, policy provisions remain fundamental in propelling these enterprises towards self-sustenance and realization of their full potentials in contributing towards economic growth.(SMEs management journal 2010)

Wanjohi (2010) indicate that in Kenya for instance, SME operation cut across almost all sectors of the economy and sustain majority of households. According to him, this was well recognized by the 2003, National Budget. David Mwriraria, the then Minister for Finance noted that "SME activities form a breeding ground for businesses and Employees, and provide one of the most prolific sources of employment. Their operations are more labour intensive than the larger manufacturers." As such, policy provisions would mean boosting not only the operations of these enterprises but the country's economy as well.

SMEs have the capacity to achieve rapid economic growth, while generating a considerable extent of employment opportunities). The importance of SMEs in Kenya was first recognized in

the International Labour Organisation report on 'Employment, Income and Equity in Kenya' in 1972.The report underscored SMEs as an engine for employment and income growth. SMEs create about 85 percent of Kenya's employment (African Economic Outlook, 2011 report).While the subsector constitutes close to 85 percent of employment, it only contributes about 20 percent of the total GDP. This implies dismal performance of the subsector. The development trajectory of the subsector thus requires a system which holistically fosters SME development. The current constitutional framework and the new Micro and Small Enterprise Act 2012 (MSE Act, 2012) provide a window of opportunity through which the evolution of SMEs can be realised through the devolution framework. However, the impact of devolution on SMEs development depends on the architecture of the regulatory and institutional framework inclined to support SMEs in an economy (Kiggundu, 2000; Reddy, 1991).

2.2 The concept of mobile financial Transactions

Guagraw (2007) defines Mobile Banking (or Mobile payment) as a term used for performing balance checks, account transactions, payments, etc. through a mobile device such as a mobile phone, PDA Mobile contactless or other such device. The objective of mobile banking is to improve the efficiency of microfinance by using mobile technology to make transactions faster, cheaper and more secure. He also retaliates that these services are primarily gaining popularity for micro payment scenarios. Mobile banking today is most often performed via SMS or the Mobile Internet but can also use special programs downloaded to the mobile device. About two billion people worldwide are using a mobile phone.

United Nations Economic and Social Council (2009), Posited that mobile phones are an important ICT for development in poor countries because of their ability to bypass the infrastructure barriers in remote rural areas in Africa. As the number of mobile phone increases there has been a pervasive impact on people's lives, brought about by the relatively high user-friendliness and affordability of mobile phones, which has made it possible for low income micro and small enterprise (MSE) traders to adopt and use them widely (Richardsbay, 2010; ITU, 2006).Mobile phones adoption and use has a positive and significant impact on economic growth, and this impact may be twice as large in developing countries as in developed countries.

This affirms what Plyter et al. (2010), argue that M-Pesa has enabled small businesses to expand and grow and has also increased the circulation of money (ITU, 2005, Salzaman et al, 2001).

In the words of Donner (2005), there has been relatively few studies focusing directly on the way mobile phones are used in enhancing productivity among the users in the developing world. Furthermore, Kanyi and Maharaj (2011) noted that despite the exponential growth in the use of mobile telephones in East Africa, the literature review indicates that only one research study on the impact of using mobile telephones in micro enterprise in East Africa has been done within the last five years. This means that the effect of using mobile money in the growth of SME's businesses has not been effectively assessed. According to Adeya (2003), some business even lacks the awareness regarding the potentials that exist in the use of mobile phones (Donner, 2007).

In Kenya mobile phone subscription has reached both rural and urban populations. The number of mobile subscribers in Kenya has risen to 8 million subscribers from 6.5 million subscribers in June 2006, from the country's two operators (Safaricom and Celtel) against 293,400 fixed lines. This increased accessibility to mobile phones have introduced changes in most sectors of the economy and particularly the urban informal sector consequently SMEs changing their business and operation environment, thereby creating an impact on Kenya's fastest growing sector and employer (Chogi, 2007; ITU, 2007).

In April 2007, following a donor-funded pilot project, Safaricom launched a new mobile phone based payment and money transfer service, known as M-PESA. The service allows users to deposit money into an account stored on their cell phones, to send balance using SMS technology to other users (including sellers of goods and services), and to redeem deposits for regular money. Charges, deducted from users' accounts, are levied when e-float is sent, and when cash is withdrawn. M-PESA has spread quickly and has become the most successful mobile phone-based financial service in the developing world. The reason being, the process of opening M-PESA account is not tedious and complicated. Registration simply requires an official form of identification for example an Identity card (ID card) or a Passport, without any other validation document, as required when opening a bank account. Safaricom accepts deposits

of cash from customers with cell phone SIM card and who have registered as M-PESA users. There is no charge or depositing funds, but a sliding tariff is levied on withdrawals (Jack and Suri 2010).

According to the report by Biztech Africa (2013) Safaricom's M-PESA has now set its sights on the medium and small enterprises with the launch of Lipa Na M-PESA... a campaign aimed at entrenching the use of its payment services as primary tool of transactions. Lipa Na M-PESA is umbrella service for the M-PESA payment services which include payment of salaries, utility payments, promotional payout dividends payments as well as payments within the transport industry.

2.3 The benefits of mobile money transfer

The relatively high user-friendliness and affordability of mobile phones have made it possible for low income micro and small enterprise (MSE) traders. The rapid adoption of mobile phones in the country has positive significant effects on the running of MSEs by saving time and money because they replace travel with telephone calls and facilitate instant feedback, thus speeding up the exchange of information and decision making. In addition, they can also be used to reach more customers for the selling of goods and services and for obtaining raw materials. Many MSE traders, such as taxi drivers, mechanics, carpenters, curio sellers, retail traders and other trades people, now rely on the mobile phone to run their businesses (Richardsbay 2010).

M-PESA provides the safe storage and transfer of money. It has a number of potential benefits to the user with economic effects. It facilitates trade, makes it easier for people to pay for, and receive payment for goods and services. Moreover, it safes time in that to transact any financial transaction does not require a person to move from one place to another since the payment can be done with a push of a few buttons. It also a safer means of handling money transfer instead of carrying cash and waiting in a long queue to deposit it. Mobile phones provide technological services that reduce costs; increase income and increases reach ability and mobility. They can help to extend social and business networks, and they clearly substitute for journeys and, for brokers, traders and other business intermediaries (Donner, 2005, Hughes,N & Lonie,S ,2007).

Mobile phones have also been used to speed up the financial transactions of Kenyans from all walks of life through the highly successful 'M-PESA' financial transaction medium, a mobile banking service which was introduced in Kenya by the mobile phone operator Safaricom in 2007, and which signed up over six million users in its first two years of operation. Lennart (2010) noted that, liquidity and cash-flow management are key bottlenecks for micro and small enterprises operations. This assertion tallies with what Bowen et al.(2009) who established that debt collection, lack of working capital were among the top five challenges facing micro and small businesses. The fast diffusion of mobile money transfer was viewed as a potential key tool for facilitating financial transactions. This indicates that the rapid adoption of mobile phone has accrued benefits to informal sector since financial transactions are vital for the operation of the SME's (Lennart, 2010; Mas and Morawczynski, 2009).

2.4 Mobile Money transactions globally

Kirsty**(**2013**),** indicated that 26 per cent of people across the world are now using some form of mobile financial services, according to a survey of 17,000 people in 22 markets conducted by BuzzCity. The findings of their study indicate that nearly a third of the mobile users surveyed do not have a bank account, reaching more than a half of people in Mexico and the Philippines. The so-called 'underbanked' are more likely to use mobile financial services, with 19 per cent paying bills using their phone compared to 13 per cent of those who have a traditional account. 12 per cent of the underbanked use mobile money transfer. Balance enquiry is the most regularly used function, by 30 per cent of mobile bank customers, followed by cash withdrawals at 28 per cent and balance transfer at 26 per cent. 13 per cent usually those without access to traditional banking services who now use their phones to receive their salaries, while 12 per cent use their phone to pay for goods. The study sampled markets using surveys sent by phone which included Bangladesh, Brazil, Nigeria, Spain and the US.

Three-quarters of the countries that use mobile money most frequently are in Africa, and mobile banking in some of them has reached extraordinary levels. A new survey of global financial habits by the Gates Foundation, the World Bank and Gallup World Poll found 20 countries in which more than 10% of adults say they used mobile money at some point in 2011. Of those, 15 are African. In Kenya, Sudan and Gabon half or more of adults used mobile money. In contrast,

in countries with more developed financial systems, the share of adults who use mobile money is tiny—1% in Brazil and Argentina. Most mobile-phone transactions are tiny. Market traders, for example, use mobile phones to pay peasant farmers for a single bag of cassava or maize-meal. Mobile phones are also used to bank remittances from family members abroad. This may explain why mobile money has done so well in Somalia, a country which barely has a government, but where a third of adults said they used mobile money last year. Somalia is one of the countries that most depends on remittances (The economist News paper 2014).

2.5 Working Capital Management

Nyabwanga (2012), in his study on effective management of the working capital established that, the existence of efficient working capital management practices can make a substantial difference between the success and failure of an enterprise and it is of particular importance to the managers of small scale enterprises, because it is they who strive for finances and the opportunity cost of finances, for them is usually on the higher side (Kwame, 2007). As established by Padachi (2006), efficient management of working capital is vital for the success and survival of the SSEs which needs to be embraced to enhance performance and contribution to economic growth.

According to Samson et al (2012), management of current assets and liabilities is particularly important in the case of small and medium-sized companies (SME's). Most of these companies' assets are in the form of current assets. Current liabilities are one of their main sources of external finance in view of their difficulties in obtaining funding in the long-term capital markets and the financing constraints that they face. He further states that Small and medium-sized firms use vendor financing when they have run out of capital. Thus, efficient working capital management is particularly important for smaller companies. By working capital we mean the difference between an organization's current assets and its current liabilities. Of more importance is its function which is primarily to support the day-to-day financial operations of an organization, including the purchase of stock, the payment of salaries, wages and other business expenses and the financing of credit sales.

Working capital can be defined as the capital available for conducting the day to day operations of an organization represented by its net current assets (Adeniji 2008). The working capital in the words of Samson (2012) is the life-blood and nerve center of a business firm. It refers to firms' investment in short-term assets. Current assets are the assets which can be converted into cash each within an accounting year. It could also be regarded as the current assets less liability of the firm. Akinsulire (2008) refers to working capital as the items that are required for the day-to-day production of goods to be sold by a company. It can be defined as the excess of current assets over current liabilities.

For an organization to meet its financial obligations, the management of working capital is paramount. Working capital management ensures a company has sufficient cash flow in order to meet its short-term debt obligations and operating expenses. Efficient working capital management is necessary for achieving both liquidity and profitability of a company. A poor and inefficient working capital management leads to tying up funds in idle assets and reduces the liquidity and profitability of a company (Reddy and Kameswari 2004). Efficient liquidity management involves planning and controlling current assets and current liabilities in such a manner that eliminates the risk of inability to meet due short-term obligations and avoids excessive investment in these assets. Working capital management could vitally affect the health of the firm (Sagan 1955). One aspect of working capital Management is cash management.

2.5.1 Cash management

Cash management is among many other factors that can lead to increase or decrease of performance of any enterprise. Cash management is the process of planning and controlling cash flows into and out of the business, cash flows within the business, and cash balances held by a business at a point in time. Efficient cash management involves the determination of the optimal cash to hold by considering the trade-off between the opportunity cost of holding too much cash and the trading cost of holding too little. There is need for careful planning and monitoring of cash flows over time so as to determine the optimal cash to hold (Nyabwanga, 2012; Ross et al., 2008; Atrill, 2006; Pandey, 2004).

Lennart (2011), noted that business, as well as society at large in Sub-Saharan Africa has a very strong cash-based heritage, and cash is the default means for carrying out small-scale

transactions. Cash is also the key to doing business; it is a scarce resource, and any business success may very well depend on how to mobilize cash quickly; from savings, credit from suppliers, or to have customers that can pay upon delivery, or even better in the case of production and delivery being separate instances, upon the placing of an order.

2.6 MMT and Financial Services

The ability to send and receive money is of major importance for any business in many developing countries, which is one of the main explanations to the immense uptake of mobile money transfer services by the public in general. The concept of mobile banking and payments has resonated in many developing countries where lack of a physical banking or payments infrastructure exists (Darin, 2011).The emergence of M-PESA service, a Text messaging (SMS) provide the solution to small businesses' banking needs for the majority of the Kenyan population, because the majority don't hold bank accounts but they do have the services of a mobile phone, hence they could settle bills by building up credit on the mobile phones and then sending a text (SMS) to make a payment (Chogi, 2007). This also tallies with what Mbogo (2010) established that many of the micro businesses operators do not have bank accounts while those who do, find the bank accounts cumbersome to operate as they have to leave their businesses unattended in order to conduct transactions in a bank.

Mbiti et al. (2011) observed that the qualitative studies on M-PESA such as Morawczynski and Pickens (2009) have suggested that M-PESA serves as a partial substitute for the formal banking system. Prior to the introduction of M-PESA, most Africans were excluded from modern financial services. Using data ranging between 2001 and 2005, Beck et al. (2007) show that African countries lagged in financial access. M-PESA the leading mobile service providers in Kenya have introduced some money transfer services whose objective is to enable Kenyans to make 'micro payments' using their mobile phones. These services are supposed to provide an e-commerce platform of choice in a country where credit cards have struggled to reach most the population without the bank accounts. M-PESA, is an innovative new mobile payment solution that enables customers to complete simple financial transactions by use of mobile phone (Hughes,N & Lonie,S ,2007; Chogi, 2005,).

Jack and Suri (2010) indicate that M-PESA is used for payment for trading between businesses, to secure money transfer for people journeying between the places, for sending airtime purchased by M-PESA directly to their relations up-country as a kind of informal remittance and sending money for various ad hoc reasons. This implies that mobile communication has become a part of daily life for millions of people as a result of enhanced wireless communication infrastructure and thus creating an avenue for transacting businesses using mobile phones.

Mbiti (2011) quoting Jack and Suri stated that three out of four M-PESA users indicate that they use it to save money. He further notes that recently, the potential for M-PESA to be a savings vehicle has received even more attention, as Safaricom and Equity Bank have introduced M-Kesho, an interest- bearing savings account that is directly linked to M-Pesa and recently launched M-Shwari with Commercial Bank of Africa. The use of mobile phone money services is of benefit to SME's. Because they benefit hugely from the mobile phones revolution as they are able to make savings and gain to access customers and new services (Mbogo,2010; Arunga and Kahora,2007).

2.7 Financial Performance

Business financial performance is measured by use of financial measured by checking on profits, revenues, returns on investment (ROI), returns on sales and returns on equity Profitability refers to the positive gain from an investment or business operation after subtracting for all expenses opposite of loss Profitability on a company is the difference between the income of the business and all its costs/expenses. It is normally measured over a period of time. Profits are an important source of investment funds Profit can be used to buy more stock, improve technology or expand the premises. A business than does not make a profit will fail, potentially affecting employees, suppliers and the local community because their overall operations depend on profits. The major reason for slow profits is wrong cash management policies or strategies. Performance of any organisation or business is assessed by the way they succeed or fail in the way they intend to achieve their objectives. Cash management offers huge cash opportunities that could be released with sustainability within a relative short period of time but organisations or companies which fail in their cash management policies face a challenge of reduction in their profitability levels(Külter and Demirgüneş, 2007).

2.8 Theoretical Framework

The study applies the theories of Technological acceptance model and contingency theory.

2.8.1 Technological acceptance model

The theory of technology acceptance model is a theoretical model that explains how users come to accept and use a technology (Davis 1989). The model suggests that when user are presented with a new technology a number of factors influences their decision about how and when they use it (Mbogo, 2010). These factors are perceived usefulness defined as the degree to which a person believes that using a particular system would enhance his/her job performance and perceived ease of use defined as the degree to which a person believes that using a particular system would be free effort (Davis 1989).

2.8.2 Contingency theory

Contingency theory claims that there is no optimum method of systematizing a firm and the organization structure of the company (fielder, 1964). It argues that the most appropriate, structure for an organization is the one that best fits a given operating contingency, such as technology (woodward1968 Penon 1970) or environment (Burns and Stalker, 1961; Lawrence & lorsch, 1967). Moorthy (2012) postulated that contingency theory has been widely used in researches on measuring the performance and effectiveness of an organization. Cacciolatti and McNeil (2011) indicated that SME's that make good use of their structural marketing information presented a higher probability of growth. This concurs with what Mahmoud (2011) established on SME's in Ghana that the higher the level of market orientation the greater the level of performance. This shows that there is a positive relationship between information utilization and the firm performance as noted by Keh, and Nguyen (2007).

2.9 Empirical Studies

Huang (2008) conducted a study to determine the impact of mobile phones on SMEs performance in Auckland, New Zealand. He used a questionnaire to collect primary data. The results of his study indicated that most SMEs in Auckland were using mobile technology to

conduct their business activities. Additionally, the results of the study indicated that the use of mobile devices had enabled SMEs to increase their annual turnover due to additional business networking opportunities.

Furthermore, Bangens and Soderberg (2008) assessed the role of mobile banking and its potential to provide basic banking services to the vast majority of people in Sub-Saharan Africa. The data for the study was collected from both the primary and secondary sources. According to their findings, mobile banking has facilitated financial transactions and remittance of funds. Additionally, the results of their study indicated that mobile banking has enhanced the operations and competitiveness of SMEs.

Chogi (2006) did a study to investigate the impact of mobile phone technologies on SMEs in Nairobi. The data for the study was collected using a self-structure questionnaire. The results of the study revealed that most SMEs perceived that mobile phones had a positive impact on their revenues. Additionally, the study results indicated that the majority of SMEs perceived that mobile banking enabled them to reduce their operating costs.

Similarly, 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. Therefore, there is significant potential for a mobile phone to increase productivity of MSEs; they further states that Mobile phone business has had a great impact on employment in the informal sector; however, documentation of this evidence in the literature is rare. For example, the Ugandan Communications Commission noted that while the formal ICT industry in the country employed a little over 6,000 people in 2007, informal sector employment in was estimated at 350,000 people (Warah, 2009), but the role of ICTs in creation of this remains largely unexplored.

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.

Likewise, Higgins, Jake and Lyon (2012) conducted a study to determine mobile money usage patterns of Kenyan SMEs. They used a questionnaire to collect data from 865 SMEs owners. The results of their study indicate that many small businesses use mobile money (MM) intensively in markets where it is available; however, the phenomenon is not well documented or researched. They established that whether Kenyan SME owners use MM to pay utility bills or salaries or suppliers; SMEs owners were driving higher volumes of both MM adoption and transactions. Their data showed that of the 865 SME owners who responded, 861 (99.5%) used MM in their personal or business dealings, and 67% used it for business. This implied that the SMEs are intensive users compared to consumers; 80% report using MM once per week or more, whereas the average usage in Kenya is closer to twice a month.

In addition they established out that SMEs also appear to promote viral adoption along the supply chain. The SMEs adoption of MM was because clients or suppliers asked them to. In their opinion, SMEs should be a critical market segment for mobile network operators who seek to make MM usage pervasive across the value chain from consumers, to merchants, to suppliers. Their study did not deal with the effects of these transactions on the performance of the SMEs. They dealt rather with the mobile money usage patterns of SMEs. This is quite critical because financial transactions are vital for the growth and development of any enterprise(Higgins et al 2012).

United Nations Economic and Social Council (2009) as quoted by Chogi (2007) posited that mobile phones are an important ICT for development in poor countries because of their ability to bypass the infrastructure barriers in remote rural areas in Africa. Further, the rapid advancements in technologies and the ease of usage in addition to falling prices of mobile handsets, present the mobile phone as an appropriate and adaptable tool to bridge the digital divide (Chogi 2007). He further states that the Information Economy Report 2007-2009 shows that in the past couple of

years, mobile telephony has emerged as the most important ICT for low-income countries, and its increased diffusion points to the mobile phone as a "digital bridge".

McCoy and Smith (2007) argue that people in developing countries are welcoming mobile phones as life changing devices. They cite examples of fishermen in India who use the mobile phone to call different markets to inquire about prices; and a hairstylist in Cote d'Ivoire whom the phone provides immediate contact with customers and simplifies the scheduling of customers. In both cases, sales went up and the customer base increased. They further noted that the main money flows are known to be from urban to rural areas; and from relatively well-off people to less fortunate friends and family. From the markets exposed to MMT services, and from a general point of view, there is evidence from several developing markets that there is a clearly articulated need, as well as a willingness and ability to pay for such services. Hence, the demand is growing steadily for MMT services, in particular among the poorer segments of society.

In a study carried out by Myhr (2006) on 'livelihood changes enabled by mobile phone' in Tanzania, it was demonstrated that increased access to information through the use of mobile phones by fishermen in Tanzania resulted in empowering them through increased bargaining power as well as on knowledge about market opportunities . He did a field study in Tanzania, interviewing fish boat captains investigating what impact mobile phone use has on the livelihood indicators empowerment, opportunity and vulnerability to risk. The research shows that increased access to information, enabled by mobile phones brings positive effects to all indicators. Mobile phone use empowers, both through increased bargaining power and increased control over external events. Mobile phones give increased knowledge about market opportunities and a possibility to work more efficiently. Furthermore, mobile phones give fishermen a possibility to take measures to decrease the risks they are exposed to, such as emergencies out at sea.

Banks (2008) argues that many books do not touch on informal sector development growth made possible by the use of mobile phones; however, the phone has made African entrepreneurs to start finding their way in the changing economy without having to rely on donor agencies. He

further states that as many people become connected, future studies of Sub-Saharan Africa and its economies will find it harder to ignore the growing influence of mobile technology and the power and spirit of African entrepreneurs to capitalize on it by growing an efficient economy.

In their study, Bowen et al (2008) indicated that debt collection, lack of working capital were among the top five challenges facing micro and small businesses. On debt collection half of those who face this problem according to their findings, resulted in collecting their debt at the end of the month and thus avoid giving it on credit, with others, demanding down payments. Debt collection process is one of the fundamental aspects of any enterprise. The SMES must ensure strategic cash flows against its needed cash outflow; this is a function of effective working capital management. In managing the working capital of a firm especially the small business, the acute shortage of fund needed for growth remain a subject of strategic financial management function.

Kehinde (2011) studying on the Effective Working Capital Management in Small and Medium Scale Enterprises (SMEs) in Nigeria found that the small business normally encounters problems in regard to their working capital management. Most SMES suffer from the problem of paying all bills/cash outflow from cash earnings which most time remain a poor means of settlement other means not being ostensibly available to small firms posing a technical insolvency of the firm. He further states that small business experience situation where the production and sales cycle is shorter than the average age of account payable, in this situation, trade debt can build up in an ever increasing manner until a point is reached when it cannot be paid off in due date. These problems are high rate and threat of insolvency in small business which most time lends itself to poor and ineffective working capital management. A further problem is the question of volume and level of current debt, which a firm can manage and afford (Geoffrey, 1969; Anyanwu, 1996 Levy, 1993).

On mobile technologies and financial transaction, Duncombe's (2009) analysis on mobile device-based payments in Africa indicated that use of mobile payments is conditioned by non-market factors related to financial and technical literacy. In their study Wamuyu and Maharaj (2011) states that most Kenyan poor and unbanked embraced the use of mobile phone money

transfer services to store money and make payments. This is based on the fact that mobile phone money transfer services offer cheap and secure alternatives to the existing informal money transfer channels. Arunga and Kahora (2007) established that the sole proprietors and small enterprise businesses reaped more benefits by using the mobile payment as they could make savings or access many customers and do more services than before.

Ndiwalana, Olga Morawczynski, and Oliver Popov (2009) conducted a study on the users of MTN Mobile money in and around Kampala, Uganda on the usage of MM, established that nearly 33% of transactions done were to purchase or sell goods or services, while the remaining two thirds were for money transfers. Anuradi, Tyagi and Raddi (2009), established that mobile payment services have made the small enterprises to make direct transactions with their customers without going to the banks and even leaving their service premises. They suggested that the services were beneficial since it only required one to posses a phone and have the basic of literacy in operating the phones. The popularity of the mobile phone money transfer is due to the fact that the cost associated with the sending of money is low compared to those from the commercial banks and other money transferring companies Furthermore, the accessibility of this mobile phone money services has been acquired by a very large portion of the population (Elder and Rashid 2009;Omwansa, 2009).

Daniels (2010) in his study showed that the rush by banks and mobile operators to offer financial services through mobile phones will lead to just over 612 million phone users generating over $587 million worth of financial transactions by 2011. According to the latest Fin Access National Survey 2013 as reported by Anyanzwa (2013) more than double the number of adult use mobile phone financial services (11.5 million) compared with banks (5.4million). The study indicated that the use of mobile phone financial services has doubled to 62% in 2013, up from 28% in 2009. The results of the survey also established that Nairobi and Central top the list of mobile phone users with usage fixed at 84% and 75% respectively. The survey also revealed that 60% of those without a primary education are financially excluded as the exclusion decreases with improved level of education. This indicates the magnitude of the importance of mobile phone money transfer in doing financial transaction

Higgins et al (2012) in their study on Mobile money usage patterns of Kenya Small and Medium enterprises established that SME's need to pay and be paid frequently, sometimes in quite large amounts or over long distances. Consequently, they could lower their costs and save time with a cheaper and more convenient way to pay electronically. They also needed to manage their working capital to get the most from it, which means turning it over as often as possible: speeding up the cycle from cash to inventory to receivables and back to cash, but replacing cash with electronic value. They further state that SMEs also find it useful to have a record of transactions, as they often do not keep formal records but do deal with many customers and suppliers. Thus they often hold many ledgers, receipts, and debts in their head.

This concurs with the assertion of Mbogo (2007) that many of the micro businesses operators do not have bank accounts while those who do, find the bank accounts cumbersome to operate as they have to leave their businesses unattended in order to conduct transactions in a bank. She did a research on the impact of mobile payments on the success and growth of micro-business: the case of M-Pesa in Kenya. She did the survey through administration of questionnaire sampling 409 micro-businesses entrepreneurs in Nairobi, Kenya. The findings of the study revealed the convenience of the money transfer technology plus its accessibility, cost support and security factors as related to behavioural intention to use and actual usage of the mobile payment services by micro business in enhancing their success and growth.

Omwansa (2009) observed that the publishing of the electronic transaction bill of 2007 to address electronic commerce issues as recognition of election transactions and electronic signature was a breakthrough in e-commerce. But due to lack of enacting the Kenya information and communication bill 2007 that involved the accuracy and inclusion of ICT to enhance trust in electronic transactions and more specifically mobile transactions, the mobile phone money transfer has not been recognised as a conventional way of doing business. This step could have made some gain on the usage of mobile phone money transfer services as an accepted and protected means of carrying out business. Despite the exponential growth in the use of mobile telephones in East Africa, the literature review indicates that only one research study on the impact of using mobile telephones in micro enterprise in East Africa has been done within the last five years (Kanyi & Maharaj, 2011; Donner, 2007).

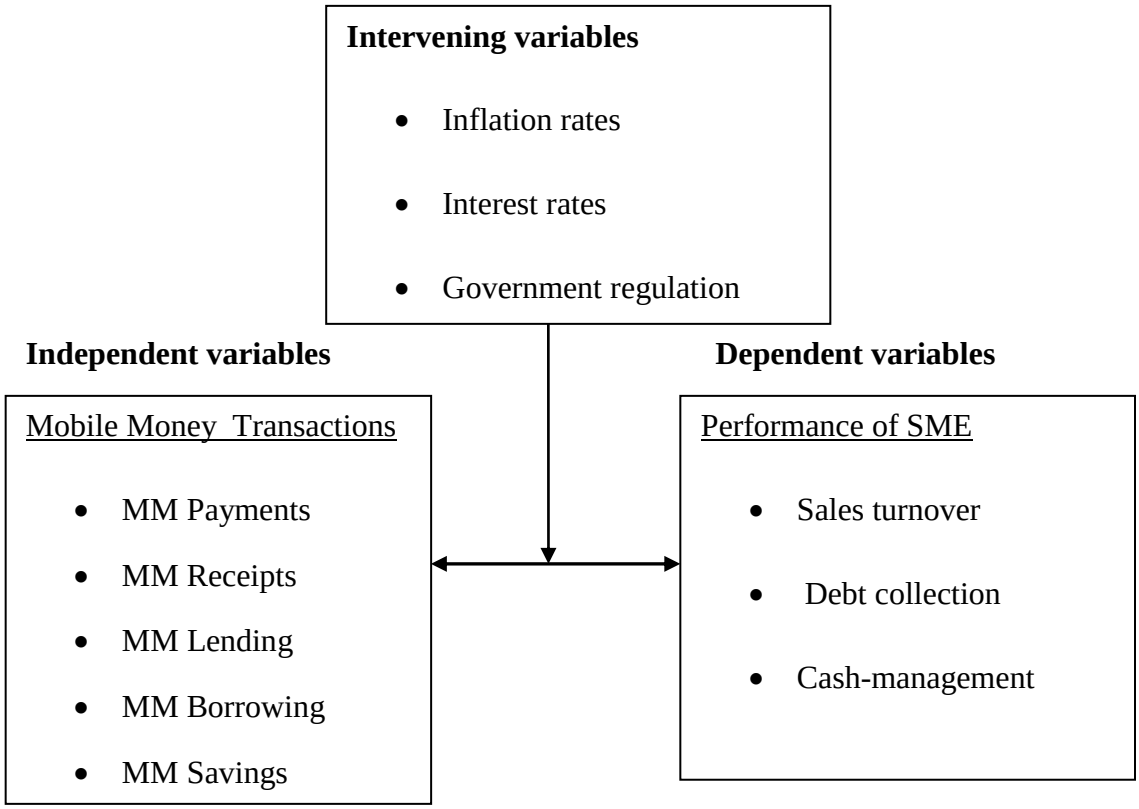
Donner (2005), in his study done in Kigali Rwanda, on Micro entrepreneurs and mobile : An exploration of the uses of mobile phones by small business owners established out that mobile telephones had an impact on micro enterprises since entrepreneurs developed new business contacts and expanded their social and business network. In their study Arunga and Kahora (2007) concluded that sole proprietors and small businesses in Kenya benefited hugely from the mobile phones revolution as they are able to make savings and gains to access customers and new services. Despite these findings their study lacked the extent to which the mobile phone financial transactions have impacted on financial performance of the SME's and what these gains translate into.

On the application of technology (IT) and performance of SME's in Malasyia, Subrahmanya et. al. (2011) summed up that those SME's which have technological innovation have a higher growth compared to the SME's which are not creative in the sale turnover, investment and job. Their study showed that there was a positive relationship between the application of information technology and performance of SME's in the manufacturing industry in Malasyia. Pasanen (2003) while studying the success of SME"s established that most successful SME's were characterized by qualities such as innovativeness, specialization and networking in their daily operations. Subrahmanya et al (2011) studies relates to application of technology in SME's in undertaking business.

On his study on the impact of working capital management on firm's performance, Azam (2011) retaliated that working capital management is considered to be a very important element to analyse the organization's performance while conducting day to day operations by which balance can be maintained between liquidity and profitability. It is quite crucial to maintain liquidity on daily base operation in order to make sure the business is able to meet its obligation. When there is an inequality of current assets and current liability it affects the growth and profitability of the business.

2.10 Conceptual Framework

The main aim of any business is to make profit and to discharges its operational functions. That is to say to pay, receive saves, lend or borrow money with prospects of growth. Payments are important because the business has to pay creditors who supply stocks. Balancing between payment and receipt are importance since it ensures that the business is liquid in terms of cash. Debt collection is very important aspect in working capital management. Many organizations are unable to discharge their obligations due lack of proper means of debt collection. Small and Medium enterprises faces a great challenge in debt collection. The inception of mobile money transaction has made business financial transactions such as mobile money payments, receipts, lending, borrowing and Savings to be possible. This study determines the effects of MMT on Financial performance of SMEs. This is conceptualized in the following figure.



Source: Own, (2013)

Figure 2.1: Conceptual Framework on the effect of MMT on Financial Performance of SMEs

Mobile Money Transactions refer to transactions which can be done through a mobile phone. From the above diagram, Payments, Receipts, Lending, borrowing, and savings are financial transactions that can be done by use of a mobile phone. They are the independent variables. Payments are made to creditors while receipts are made to as owner of the business. Payments are therefore made to the suppliers for the goods supplied and thus have an effect on the cash flow and at the same time increase the inventories. While receipts are money received for the goods or service offered. This increases the liquidity or the cash in operation. The balance between receipts and payments is quite crucial for the performance of any business. This is what is referred to working capital management. It directly affects the liquidity, profitability and growth of a business and is important to the financial health of businesses of all sizes as the amounts invested in working capital are often high in proportion to the total assets employed. Lending and borrowing also have an effect on the performance. This is because when lending money there is an interest rate charged as the cost of acquiring that money. This may lead to accumulated growth since it adds to the profitability of the business. Borrowing on the other hand increase liabilities and thus affects the cash flow since a given amount of money has to be paid to service the loan. However it increases the capital of the business and may have prospects of growth when properly utilized and thus affecting the performance. Savings are crucial for any business. This acts as a reserve for further business expansion and where payment and receipts are made. Without savings financial planning may be difficult and running a business may also be difficult. It may therefore represent the liquidity of business at a given time. That means payment, receipts, lending, borrowing and savings are independent variable that may affect dependent variables which are sales turnover, debt collection, and cash management. The intervening variables are those variables that affect the independent variables and thus may indirectly positively or negatively affect the dependent variables. In this case Government regulations, inflation and interest rates are intervening variables because they affect they affect the business environment. These May have effects on the performance in terms of profitability and liquidity of an enterprise.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1Research Design

The study used descriptive survey design. The design involved selecting a sample that was representative of the target population, study its characteristics and then draw conclusion about the population from which the sample was selected. It involved collection of information from individuals selected from the target population. This kind of design allows measuring of many variables without substantially increasing time and cost (Saleemi 1997) for it involves taking a sample which is representative of the target population. This kind of design was suitable for this study because data was collected and analysed to explain phenomena as it is.

3.2 Target Population of the Study

The population under study consisted of small and medium enterprises. This population was composed of manufacturing firms, agricultural firms, curio shops, boutiques, saloons, hardware shops, books sellers, electric appliances shops, mixed merchandise etc. The study was carried out in Nakuru Municipality within the Central Business District, in Nakuru Town; targeting Small and Medium enterprises. The nature of business was diversified in terms of the services and goods they offered. They included Curio shops, saloons, boutiques, kiosks, sale merchandise shops etc. The target population was 634 Small and Medium Enterprises (Municipal Council of Nakuru 2013).

3.3 Sample and Sampling Procedure

Out of the population of 634 small and medium enterprises the study sampled 120 businesses representing 18% of the total population of 634 businesses within the CBD, Nakuru Municipality. The sampling procedure was based on the fact that according to Mugenda & Mugenda(2003) a sample size of between 10 and 30 % is a good representation of the target population and hence the 18% was adequate for this study. The population was segregated into ten mutually exclusive sub populations or strata referred as business categories to easy data analysis. These were Curio shops, Boutique, saloons, electrical, electronic shops, hardware shops, bookshops, restaurant, Spare shops and others. Simple random sampling technique was used to choose six categories that were sampled; Curio shops, Boutique, saloons, electronic shops, hardware shops and others as shown in the appendix III. The six categories were based on

the sample size of 120 respondents; in which each business category was to receive 20 questionnaires. The study employed purposive sampling to identify the respondents because the businesses were registered either under owner's name or the type of business carried out. In addition, the pilot study done indicated that the businesses were scattered and mixed up without a specific order based on the type of business undertakings.

3.4 Research instruments

The study used questionnaire to collect primary data by way of interviewing the respondents. The questionnaire was structured divided into two sections; background information and research questions. It had closed–ended questions which were objective questions that the study would like to find out relating to the research topic. The objective questions were meant to reduce ambiguity and ensure that the respondents were more likely to answer the question as required by the study. The study used this mode of data collection because with closed-ended questions, they were easy to process due to uniformity in structure and being objective, the questions were easy to code them for data analysis.

3.5 Validity and Reliability of Research Instrument

In order to ensure validity of the instrument, the study subjected the instrument to the research supervisor and other lecturers within the department of Accounting, Finance and Management Science of Egerton University. Validity in this case means that quality of a data-gathering instrument or procedure that enables it to measure what it is supposed to measure (Best and Khan 2001). The study also ensured that the instrument was reliable in collecting the required information by pre-testing the instrument to ensure that the questions were well framed and lacked ambiguity. The questionnaire was pre-tested in a pilot study to find out whether it will be able to meet the objectives of the study. This was in order to provide insight on the kind of information that was to be collected as well as to know whether the instrument was administrable. The pre-test involved 18 respondents chosen randomly from the same target population. This was sufficient to check on the clarity of the questions and the general format of the survey so as to ascertain if all information needed was included. At the outcome of the pre-testing some questions were reframed in order to achieve the objective of the study. To ensure the reliability of the instrument, the study used the cronbach alpha realibilty test where the questionnaires were administered to 18 respondents from the same target population. The

calculated cronbach alpha from the pilot study was found to be 0.8 (within the acceptable reliability limits of at least 0.7).

3.6 Data Collection Procedures

The study used 24 research assistants under the supervision of the main researcher to administer the questionnaire. They were divided into six categories. This was in order to save on time and ensure all the categories were represented. The Research assistants took the owners or managers through the questions and filling in the choices made by the respondent. Where necessary the respondent was assisted in understanding the questions. The data collection took one day, in order to give in for data analysis.

3.7 Data Analysis and Presentation

Data collected was coded to facilitate data analysis. The data was analyzed by using computer program called statistical package for social sciences (SPSS) designed for data analysis. The Data was tabulated in the numerical code as a summary of the response in a matrix format; in which the rows represented the cases or the respondents, while the column represented the responses from the respondents on a particular variable. The study used descriptive statistics such as mean, frequencies, percentages and standard deviations to analyse the data. Computation of mean and standard deviation helped in conveying information about the average and make inference about the population. Standard deviation is defined as a measure of dispersion of a set of data from its mean. By use of standard deviation it easy to know the dispersion of a random variable from its expected value or mean and able to infer about its relationship to the mean (Kothari, 2011).

The data collected for objective one was analyzed using both descriptive and inferential statistics. Descriptive statistics that were used in this objective were percentages and frequencies. The information was presented by use of frequency table and graphs. The graphs identified pattern in the data. For objectives two, three and four the data collected was analyzed using both descriptive and inferential statistics. For inferential statistics a Chi-square test was used to test the hypotheses at 5% (0.05) significant level. The calculated chi-square from the analyzed data was compared to the critical chi-square value from the chi-square table at 0.05 significant levels at a given degree of freedom. Where the calculated chi-square was greater than the critical chi-

square value, the null hypothesis would be rejected and the alternative hypothesis accepted. P =0.05 was therefore the basis of either accepting or rejecting the null hypothesis. The study used Chi-square to test the hypotheses; one, two, three and four. Chi-square test is a statistical measure used in the context of sampling analysis for comparing an observed variance to a theoretical variance (Kothari, 2011), expressed as follows

$$\mathbf{X^2} = \frac{\boldsymbol{(O - E)^2}}{\mathbf{E}}$$

Where $\mathbf{X^2}$ represent calculate value of chi-square, **O** is the observed frequency of occurrence, and **E** is the expected frequency of the occurrence (Kothari, 2011).

The study used chi-square as a test of independence in order to explain whether or not two attributes are associated (Kothari, 2011), that is the independent variable and dependent variable. The analysis was to indicate whether there was any association between the independent variable and dependent variable. The independent variables were services rendered by use of mobile money such as payments, receipts, lending, borrowing and savings, while the dependent variables were sales revenues, debt collection and cash management. The information was presented by use of tables, and bar-chart.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND DISCUSSIONS

4.1 Introduction

This chapter presents results of data analysis, interpretation and discussions of the results. The chapter is organized on the basis of the objectives of the study.

4.2 Demographic analysis

The survey was done for 120 businesses which consisted of 113 small enterprises and 7 Medium enterprises. The category of their business activities were stratified into 6 categories; Boutiques, Curious, Saloons, Electronics, Hardware and Others respectively, for the purpose of data collection and easy analysis. All 120 questionnaires were filled and returned; representing 100% response. The findings of the study indicate that out of 120 persons who filled the questionnaires, 49.2% were owners while 50.0% managers (employees) with the capacity to make decision with exception of 0.8% respondents who did not indicate their position in the business. In terms of their gender, the following were the results.

Table 4.1: The gender of the respondents

Gender	Frequency	Percentage (%)
Male	58	48.3
Female	62	51.7
Total	**120**	**100**

Source: Field Data (2013)

The table above indicate that the respondents were composed of 48.3% male and 51.7% female. This indicates that the proportion of male to female was approximately 1:1. On the age of the respondents, the results of the findings are shown in table 4.2 below

Table 4.2: Age Group of the respondents

Age group	Frequency	Percent
18-24 years	31	25.8
25-34 years	52	43.3
35-44 years	23	19.2
45-54 years	12	10
Over 55 years	2	1.7
Total	**120**	**100**

Source: Field Data (2013)

The results indicate that the ages of the majority of the respondents were between 25-34 years which represent 42.8% of the total respondents; with those who were 35 years and above amounted to 30.9% of the total respondents. This indicates that 68.9% of the respondents were between the age of 18-34, which infers that majority of the people working in small and medium enterprises were young in age.

The findings of this study tallies with Bowen (2009), who found that majority of managers and business owners fell within 25-34 years age bracket clearly indicating that micro and small enterprises are owned or managed by people in their late 20's and 30's.

On education level, the study established that majority of the respondents had high formal education as shown in the following table.

Table 4.3: Highest Level of Education

Level	Frequency	Percent
Primary Level	20	16.7
Secondary Level	46	38.3
Post Sec Level	54	45
Total	**120**	**100.0**

Source: Field Data (2013)

According to the findings 16.7 % had primary education, 38.3% had secondary education and 45% had post secondary education. This concurs with the fact that majority of the respondent were young people who had formal education contrary to the findings of Bowen (2009) who found out that only small proportion of the respondents 4.5% had reached university level or above and that Small and Medium enterprises were dominated by people with relatively low education. This indicates that due to lack of formal employment majority of post secondary students are absorbed in the informal sector.

Most of the businesses surveyed were between 1 to 6 years of their establishment. The majority of the people owning or managing these businesses were young in age between 18-34 years of age. This tallies with the findings of Malick (2004), who established that this sector constitutes 98% of all businesses in the country, absorbing a high population of school, college and university leavers.

The level of business activities in terms of how busy the enterprise was, varied from one business to another. The results were as follows

Table 4.4:How busy the enterprises are in terms of business activity

Frequency	Frequency	Percent
Always Busy	33.0	27.5
Often busy	32.0	26.7
Sometimes Busy	50.0	41.7
Rarely Busy	5.0	4.2
Total	**120.0**	**100.0**

Source: Field Data (2013)

From the table above, 27.5% of the respondents indicated that they are always busy, 26.7% often busy, 41.7% indicating that they are sometimes busy while 4.2% indicated that they were rarely busy. This means that 54.2% of the respondents considered their businesses to be busier in terms of level of business activities.

On whether their businesses offer credit facility, results indicate that 55.8 % of the businesses offered a credit period compared to 44.2% who did not. Their credit period lasted between 30-60 days. 45.8% of these businesses indicated that their credit facility lasts only for 30 days. This would be the normal credit period for such small and medium enterprises. The proportion of those who offered credit to those who did not was almost 1:1, which indicate that credit facility was becoming common in small and medium enterprises. Lennart (2011) had noted that business, as well as society at large in Sub-Saharan Africa has a very strong cash-based heritage, and cash is the default means for carrying out small-scale transactions. Cash is also the key to doing business; it is a scarce resource, and any business success may very well depend on how to mobilize cash quickly; from savings, credit from suppliers, or to have customers that can pay upon delivery, or even better in the case of production and delivery being separate instances, upon the placing of an order but this study found that offering of credit facility was becoming common to small and medium enterprises.

On the proposition of SMEs that use mobile money transactions, the results are as shown in the table 4.5 below.

Table 4.5: Proportion of SMEs that Uses Mobile Money Transaction

Response	Frequency	Percent
Yes	91.0	75.8
No	29.0	24.2
Total	**120.0**	**100.0**

Source: Field Data (2013)

The analyzed data established that 75.8% of the SMEs in Nakuru town use mobile money transactions compared to 24.2%. This implies that 3 out of 4 Small and Medium enterprises used mobile money to carry out their business financial transactions; which further indicates that the use of mobile money is rampart in Small and Medium enterprises. This indicates that mobile money is greatly used as a means of doing financial transactions. The study established that the proportion of those who use mobile money was significant that is at 75.8% compared to 24.2% of those who did not. This finding tallies with what Richardsbay (2010), who established that the relatively high user-friendliness and affordability of mobile phones had made it possible for low income micro and small enterprise (MSE) traders, to adopt and use them widely. For those who did not use mobile money to do financial transactions the following were the results.

Table 4.6: Reasons for Not Using Mobile Money Transaction

Reason	Frequency	Percentage %
Illiteracy	1	3.4
Reliability	4	13.8
Insecurity	6	20.7
Lack of interest	8	27.6
Owner's decision	10	34.5
Total	**29**	**100.0**

Source: Field Data (2013)

Majority of the respondents who did not use mobile money, 34.5% cited owner's decision as the main reason why they were not using mobile money transaction services in their business. 27.6% citing lack of interest, 20.7% cited insecurity, 13.8% cited reliability and 3.4% cited illiteracy.

This implies that the decision not to use contributed significantly on those who were not using it either due to owner's decision or lack of interest to use. The study also established that majority of those who did not use mobile money perceived it to be a safe and reliable means though they did not use it either due to lack of interest or owners decision. This lack of use of mobile money transaction by some businesses indicated lacks of awareness regarding the potentials that exist in the use of mobile phones (Kanyi and Maharaj, 2011; Donner 2007; Adeya, 2003).

Those who used mobile money to do financial transactions indicated that they were using it to carry out the following financial transactions; payments, receipts, borrowing, lending and saving money. The manner in which these transactions were carried out differed from one enterprise to another as portrayed in table 4.7.

Table 4.7: Various transactions done by use of mobile money

	Respondent frequency		**Respondent percentage (%)**	
Variable	**Yes**	**No**	**Yes**	**No**
Payment	79	12	86.8	13.2
Receiving	5	86	5.5	94.5
Borrowing	4	87	4.4	95.6
Lending	8	83	8.8	91
Saving	20	71	22	78

Source: Field Data (2013)

From the results above the study established that SMEs generally use mobile money to carry out different financial transactions such as to pay, save, lend, receive and borrow money.

4.3 The Frequency by Which SMEs Used Mobile Money Transactions

The first objective was to determine the frequency by which SME's use mobile money transactions to carry out the following financial transactions; Receiving money, Payments,

Borrowing, Lending and Saving. The following results were established as shown in the table below

Table 4.8: Frequency of use of the MMT in carrying out various financial transactions

Use	Always	Often	Sometimes	Rarely	Never
Receiving	26.4	31.9	29.7	7.7	4.3
Payments	17.6	30.8	34.1	5.5	12.1
Borrowing	3.3	8.8	17.6	20.9	49.5
Lending	2.2	6.6	24.2	13.2	53.8
Saving	35.2	25.3	20.9	8.8	9.9

Source: Field Data (2013)

The analyzed data on the frequency of using mobile money to receive money for their businesses shows that majority 31.9% indicated that they often use the mobile money in receiving money, 29.7% sometimes, 26.4% always, 7.7% rarely use it and 4.4% never use it at all. The results thus indicated that 88% use mobile phone to receive money for their business transactions.

On use of mobile money to make payments, the results shows that majority 34.1% sometimes use it in payment transactions, While 30.8% often use it, 17.6% always use it, 12.1% never use it and 5.5% rarely use it at all when making payments. These results show that 82.5% used mobile money to make payments for their business transactions as compared to 17.5% who rarely or never used the service.

The study also established that Majority of SMEs 49.5% never use the technology in carrying out borrowing transactions, 20.9% rarely use it for borrowing transaction, 17.6% sometimes use it for borrowing, 8.8% often use it and 3.3% always use it for borrowing transactions. This indicate that majority of the service users do not regard the use of mobile phone money as an appropriate way of borrowing money, with 70.4% of the respondents indicating that they never or rarely use this service to borrow money.

The analyzed data revealed that SMEs rarely use mobile money to lend money. Majority 53.8% never use the technology in carrying out lending transactions, 24.2% sometimes use it for

lending transaction, 13.2% rarely use it for lending, 6.6% often use it and 2.2% always use it for lending transactions.

The study also determined that SMEs use mobile money as a means to save money. The analyzed data indicate that majority 35.2% always used mobile money in carrying out saving money, 25.3% often use it, 20.9% sometimes use it, 8.8% rarely use it and 9.9% never use it at all. This indicates that 81.4% use mobile money to save money. This finding is in line with what Mbiti (2011), quoting Jack and Suri stated that three out of four M-PESA users indicate that they used it to save money. He further notes that recently, the potential for M-PESA to be a savings vehicle has received even more attention, as Safaricom and Equity Bank have introduced M-Kesho, an interest-bearing savings account that is directly linked to M-Pesa and recently launched M-Shwari with Commercial Bank of Africa.

In summary, most of the SMEs use frequently mobile money to carry out financial transactions. They use it frequently to save money (60.5 %), 58.3% to receive and 48.4% to make payments. The study also established that majority 70.4% of the respondents did not use mobile money to borrow; while 60.7% indicated that they rarely or never use it for lending. This means that they mostly use this service to save, receive and make payments. These results are vividly illustrated in the graph below.

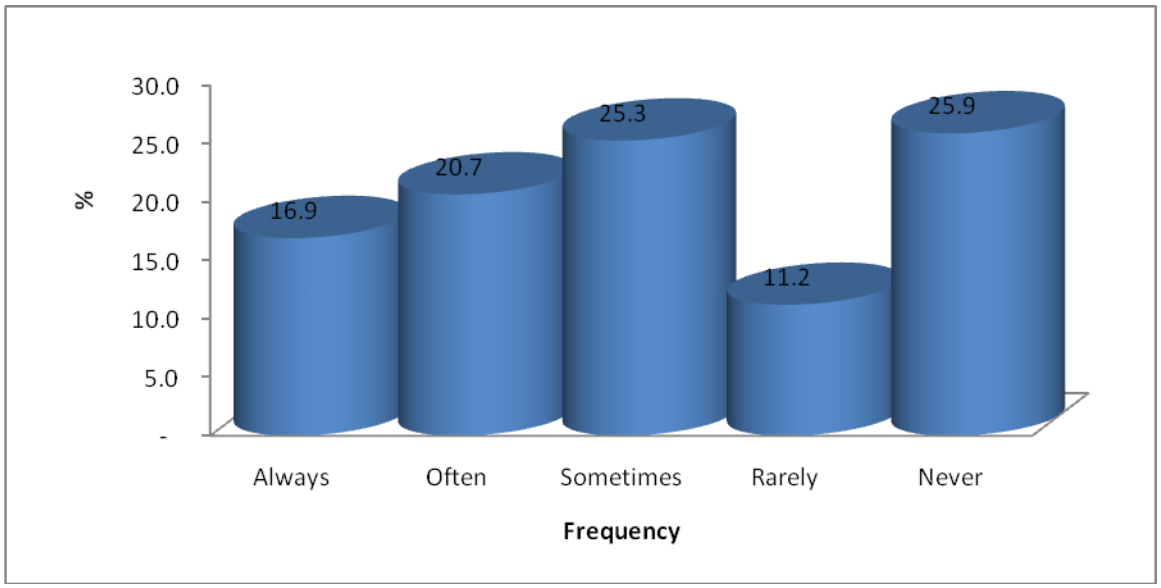


Figure 4.2: Frequency of Use of the MMT by SMEs

The study also wanted to find out the usage of the mobile money on a typical day in order to ascertain the frequency of use in a normal business day.

Table 4.9: Frequency of use of MMT on typical day for Financial Transactions

Frequency	**Frequency**	**Percent**
Once	16	17.6
Twice	22	24.2
Three Times	13	14.3
Four Times	6	6.6
More than four times	34	37.4
Total	**91**	**100.0**

Source: Field Data (2013)

The results of the findings indicate that majority of the respondents 37.4% observed that in a typical day, they used mobile phone more than four times to carry out financial transaction, 24.2% used it twice, 17.6% used it once in a day, 14.3% used it three times in a day and 6.6% used it four times in a day. The above statistics shows that mobile money is frequently in use by SMEs. Higgins et al. (2012) established that 82.4% of SMEs used mobile money more than once

in a typical working day. It can be inferred that there is a significant increment in mobile money usage in carrying out financial transactions. The study conducted in by Ndiwalana, Olga Morawczynski, and Oliver Popov (2009) on the users of MTN Mobile money in and around Kampala, Uganda on the usage of MM, established that nearly 33% of transactions done were to purchase or sell goods or services.

In order to determine whether the frequency of using MMT was significant, the study used Chi square for single variance (goodness of fit) to test the hypothesis. The study used Chi-square test at 5% significant level to accept or reject the null hypothesis at a given degree of freedom. The data for the test were generated from table 4.8. The following null hypothesis was tested

> $HO_{1:}$ The frequency by which SMEs use mobile money to carry out their business financial transaction is not statistically significant.

The Chi-square test results are as shown in the table below.

Table 4.10: Chi-Square Testing Statistical Significance of Frequency of Use of MMT

Chi-Square Test	Receipting	Payments	Savings
Chi-Square	29.89	29.89	20.89
Df	4.00	4.00	4.00
Assumed sig.	0.00	0.00	0.00

Source: Field Data (2013)

The calculated chi-square was 29.89 at 4 degree of freedom for frequency of using MMT in receipting and payment respectively while that for savings was 20.89 at 4 degree of freedom compared with critical chi-square which was 9.489 at 4 degrees 5% significant level for the three MMT. Since the calculated chi-square was far greater than the critical chi-square, there was evidence to reject null hypothesis that the frequency by which SMEs use mobile money to carry out their business financial transaction is not statistically significant and in turn accepting alternate hypothesis that the frequency by which SMEs use mobile money to carry out their business financial transaction was statistically significant.

The rapid adoption of mobile services by SMEs indicated that it had positive significant effects on their running by saving time and money because they replaced travel with telephone calls and facilitated instant feedback, thus speeding up the exchange of information and decision making.

In addition, they could also be used to reach more customers for the selling of goods and services and for obtaining raw materials. Mobile money service also allowed users to deposit money into an account stored on their cell phones, to send balance using SMS technology to other users (including sellers of goods and services), and to redeem deposits for regular money (Richardsbay 2010, Jack and suri 2010).

4.4 Effects of MMT on Sales Revenue, debt collection and cash management

The second, third and fourth objectives of the study were to determine the effects of mobile money transactions on sales revenue, debt collection and cash management of SMEs. The study first analyzed the performance of SMEs before and after, then, determined the effects of mobile money transactions on financial performance of SMEs.

4.4.1 The performance of SMEs before the use of the mobile money transaction

In order to determine the effects of the mobile money on various performance indicators, the study wanted to establish the status of the SMEs transaction before and after the usage of mobile money. On the status of receiving, payments, borrowing, lending and saving before the usage of mobile money transactions the following were the results.

Table 4.11: Status of various transactions before use of MMT System in percentages

Transaction	Very Good	Good	Indifference	Poor	Very Poor
Receipting	8.8	15.4	14.3	41.8	19.8
Payments	5.5	17.6	19.8	40.7	16.5
Borrowing	2.2	4.4	25.3	37.4	30.8
Lending	1.1	6.6	24.2	42.9	25.3
Saving	8.8	9.9	18.7	37.4	25.3
Average	**5.28**	**10.78**	**20.46**	**40.04**	**23.54**

Source: Field Data (2013)

According to the findings of the study, 61.6% (41.8% +19.8%) of the respondents observed that their business receipt transaction performed poorly in contrast to 24.2% (8.8%+15.4%) who observed that it was good before the use of MMT; while 14.3% were indifference. Those who were indifferent either was because they did not find any change or probably because their

businesses were established when mobile money was in use since majority of these businesses were between 1-6 years of their establishment. This in general indicated that before the usage of the mobile money majority of the respondents observed that their business receipts performed poorly.

On payments before the use of the mobile money transactions, the analyzed results indicate that the majority of the respondents 57.2% that is 40.7%+ 16.5% observed that their business payment transaction performed poorly, 23.1% (5.5%+17.6%) observed that their business payment transaction performance was good and 19.8% were indifference. The results on borrowing indicate that the majority of the respondents 68.2% observed that their business borrowing transaction performed poorly before the adoption of Mobile Phone Money Transaction. 6.6% observed that their business borrowing transaction status was good before the adoption of Mobile Phone Money Transaction and 25.3% were indifference.

On lending the analyzed results indicate that majority of the respondents 68.2% (42.9%+25.35) observed that their business lending transaction performed poorly before the adoption of MMT, 7.7% (1.1%+6.6%) observed that their business lending transaction performance was good and 24.2% were indifference. On savings majority of the respondents 62.7% (37.4%+25.3%) observed that their business savings transaction performed poorly before the adoption of Mobile Phone Money Transaction, while 18.7% (8.8%+9.9%) observed that their business savings transaction performance was good before the adoption of Mobile Phone Money Transaction. 18.7% were indifference.

In conclusion the results of the findings indicate that on average 63.58% (20.46%+23.54%) of SMEs perceived that receipts, payments, borrowing, lending and saving were poor before the usage of mobile money transaction. The graph below shows these results.

Figure 4.3: SMEs Status of different transactions before the use of MMT System

4.4.2 Status of different transactions after the usage of mobile money financial transactions

The study also wanted to find out the status of various transactions of Small and Medium enterprise after the usage of mobile money financial transactions. This was in order to make a comparison between before and affect in order to make a conclusive remark on the same. On the receipt, payments, borrowing, lending, and saving of money using mobile money, the following were the results.

Table 4.12: Status of various transactions after use of MMT

Transaction	Very Good	Good	Indifference	Poor	Very Poor
Receiving	64.8	23.1	8.8	1.1	2.2
Payments	59.3	28.6	8.8	-	3.3
Borrowing	27.5	37.4	26.4	5.5	3.3
Lending	30.8	24.2	26.4	11.0	7.7
Saving	62.6	16.5	16.5	0	4.4
Average	**49.0**	**26.0**	**17.4**	**4.4**	**4.2**

Source: Field Data (2013)

From the table above, majority of the respondents 87.9% observed that receiving transaction performance was good after the adoption of mobile phone transaction, 8.8% were indifference whereas 3.3% observed that receiving transaction performance continued to be poor after the adoption of mobile money transaction technology. On payments the majority of the respondents 87.9% observed that payments transaction performance was good after the use of mobile money transaction technology, with 8.8% being indifference whereas 3.3% observed that payments transaction performance continued to be poor after the usage of mobile money transaction services.

On borrowing the analyzed data indicate that majority of the respondents 64.9% observed that borrowing transaction was good after the adoption of mobile phone transaction technology, 26.4% were indifference whereas 8.8% observed that borrowing transaction continued to be poor after the adoption of mobile money transaction technology. Nonetheless majority of the respondents 55.0% observed that lending transaction performance was good after the adoption of mobile phone transaction technology, 26.4% were indifference whereas 18.7% observed that lending transaction performance continued to be poor after the adoption of mobile money transaction technology. On savings majority of the respondents 79.1% observed that savings transaction performance was good after the introduction of mobile phone transaction technology, 16.5% were indifference whereas 4.4% observed that savings transaction performance continued to be poor after the introduction of mobile money transaction technology.

In summary the results indicate that after the usage of mobile money transaction on average 75.0% of businesses performed very well in all the transactions compared to 8.6% who indicated that their businesses performed poorly. The findings of this study are in line with what Donner and Escabori (2009) established that, there is significant potential for a mobile phone to increase productivity of MSEs. The findings further established that 3 out 4 SMEs use mobile phone to transact their financial matters. The findings therefore shows that those SMEs that are using mobile money transactions performed better than those which did not as shown in the graphs below.

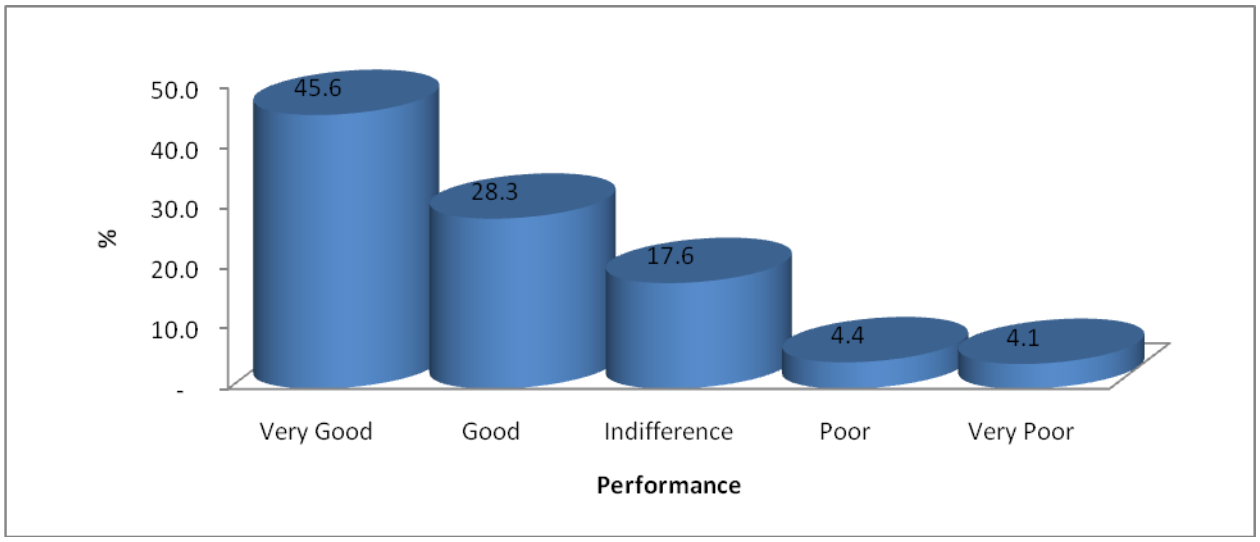


Figure 4.4: Summary of Performance after usage of MMT

Figure 4.5: Comparative of status of transactions before and after MMT System

The above line graph shows that there was a great improvement on the status of various financial transactions of the SMEs after embracing the usage of mobile money financial transactions.

The study further determined the perceptions of the respondents on the benefits of mobile money transactions on performance of their businesses. 91 respondents out of 120 sampled in this study used mobile money transaction services. The perceptions of the respondent were measured by use of likert scale. In which 1- represented strongly disagree, 2- disagree, 3 - uncertain, 4- agree and 5- strongly agree. The results of these findings are indicated in the table below.

Table 4.13: Rating of perceptions of Respondents on benefits of MMT

Effects of MMT	Level of agreement						Total
	1	2	3	4	5	Undecided	
Improved financial information	2	4	11	34	38	2	91
Improved financial records	1	8	10	49	21	2	91
Tracing receipt/payments	1	6	11	35	35	3	91
Making sound decision	3	4	11	46	22	5	91
Reducing debt	1	7	15	32	33	3	91
Improved sales turnover	4	5	9	34	36	3	91
Enabled cash management	0	3	10	40	35	3	91
Increased debt collection	2	6	9	39	30	5	91
Increased cash receipt	1	6	11	42	28	3	91
Made savings possible	3	8	3	27	47	3	91
Enable to know liquidity status(cash available)	1	5	10	33	39	3	91

Source: Field Data 2013

The above table was analyzed by use of descriptive statistics as indicated below.

Table 4.14: Respondents View on how MMT Enhanced Performance of SME Enterprises

Effect of Mobile Money Transfer	N	Min.	Max.	Mean	Std. Dev.
Made savings possible	91	1	5	4.2	1.1
Easy cash management	91	2	5	4.2	0.8
Easy tracing liquidity	91	1	5	4.2	0.9
Improved financial information	91	1	5	4.1	1.0
Easy tracing of receipts and payments	91	1	5	4.1	0.9
Improved sales turnover	91	1	5	4.1	1.1
Increased debt collection	91	1	5	4.0	1.0
Increased cash receipts	91	1	5	4.0	0.9
Lead to reduction of debts	91	1	5	4.0	1.0
Improved Financial Decisions	91	1	5	3.9	0.9
Improved financial records keeping	91	1	5	3.9	0.9

Source: Field Data (2013)

The results indicate that on average majority of the respondents scored had a score between 4 -5, with the highest a mean score of 4.2 and a lowest mean score of 3.9. This means that majority agreed that the use of mobile money has; made savings possible, enabled their cash management, enabled them to know liquidity of their business, improved their the quality of their financial information, improved their financial records tracing receipts and payments, Sales turnover, increased cash receipts, lead to reduction of debts, has enabled them to make sound financial decisions and improved financial records keeping.

4.4.3 Effects of Mobile Money Transactions on Sales Revenue

The Second objective of the study was to determine the effects of mobile money transactions on sales revenue of SMEs. This section analyzes the effects of mobile money transactions on sales revenue of SMEs. In order to determine the effects of MMT on the performance of SMEs, a comparison of sales before and after the usage of MMT was done. The following were the outcome of the findings.

Table 4.15: Sales Revenue before and after usage of Mobile Money Transaction

	Before the usage		After the usage	
Performance	**Frequency**	**Percent**	**Frequency**	**Percent**
Very Good	3.00	3.3	45	49.5
Good	31.00	34.1	38	41.8
Indifferent	19.00	20.9	8	8.8
Not Good	30.00	33.0	-	-
Very Bad	8.00	8.8	-	-
Total	**91.00**	**100.0**	**91.00**	**100.0**

Source: Field Data (2013)

According to the findings, majority of the respondents 41.8% observed that their sales revenue before the usage of mobile money transaction was not good, 37.4% observed that it was good and 20.9% were indifference. After the adoption of mobile money financial transactions, according to the findings, majority of the respondents 91.4% observed that their sales revenue after the usage of mobile money transaction was good and 8.8% were indifference.

In order to explain whether or not there was any association between use of mobile money and sales revenue, the study applied the Chi-square test of independence to test the following null hypothesis. The test was done at 5% significant level which was the basis for rejecting or accepting the null hypothesis at a given degree of freedom. The chi-square test for 2 independent attributes was used. The null hypothesis tested was as follows.

HO_2; the effect of mobile money transactions on sales revenue of SMEs is not statistically significant.

Table 4.16: Statistics Testing the Chi-Square of MMT and Sales Revenue

Transaction	Sales Turnover Pearson Chi	df	Sig
Receipting	6.341	8	0.609
Payments	6.821	6	0.338
Savings	9.816	6	0.135

Source: Field Data (2013)

From the above table, the calculated chi-square of independents between receipting and sales turnover was 6.341 at 8 degree of freedom 0.05Significant (sgf) level had a probability of occurrence of 0.609.While the critical chi-square value from the chi-square table was 15.507. This indicates that the probability of occurrence was greater than the significant level. That is P=0.609>0.05. In addition, the calculated chi-square independents between payments and sales turnover was 6.821 at 6 degree of freedom 0.05sgf level with a probability of occurrence of 0.338 while the critical chi-square was 12.592 at 6 df, 0.05sgf level and P=0.338 >0.05. That between saving and sales turnover was 9.816 at 6 degree of freedom and P=0.135>0.05 and critical chi-square of 12.592. Since the calculated chi-square was far less than the critical chi-square in each case where MMT was compared with sales turnover, there was evidence to accept the null hypothesis that the effect of mobile money transactions on sales revenue of SMEs was not statistically significant.

This finding tallies with what chogi (2006) noted, that Mobile phones are perceived as tools used to mediate the activities of the micro-entrepreneur, transforming his objectives into outcomes, which have an effect on profitability, social relations and productivity in the micro-enterprises. It is important to note that Chogi (2006) did not test statistical significance between MMT and sales turnover which this study successfully did and found that the relationship was based based on perception but not statistical significance. The results indicate that those SME's which have technological innovation have a higher growth compared to the SME's which are not creative in the sale turnover, investment and job (Subrahmanya 2011).

4.4.4 Effects of Mobile Money Transactions on Debt Collection

The third objective of the study was to determine the effects of mobile money transactions on debt collection of SMEs. The study analyzed debt collection before and after the adoption of the mobile money transactions. The following were the results.

Table 4.17: Debt Collection before and after the usage of Mobile Money Transaction

	Debt collection before		Debt collection after	
Performance	**Frequency**	**Percent**	**Frequency**	**Percent**
Very Good	5	5.5	42	46.2
Good	21	23.1	37	40.7
Different	21	23.1	6	6.6
Not Good	28	30.8	4	4.4
Very Bad	16	17.6	2	2.2
Total	**91**	**100.0**	**91.0**	**100.0**

Source: Field Data (2013)

Majority of the respondents 48.4% observed that debt collection before the adoption of mobile money transaction was bad, 28.7% observed it was good and 23.1% were indifference.

After the use of mobile money, majority of the respondents 86.9% observed that debt collection was good, 6.6% observed it was bad and 6.6% were indifference. In order to test whether there was any significant effect of mobile money transaction on debt collection the study employed chi-square test of independence to test the following null hypothesis at 0.05 significant level.

HO_3 was; the effect of mobile money transactions on debt collections of SMEs is no statistically significant. The results of the test were as follows

Table 4.18: Statistics Testing the Chi-Square of MMT and Debt Collection

Transaction	Debt collection Pearson Chi	df	Sig	Critical Chi-Square
Receipting	13.48	16	0.637	26.696
Payments	9.352	16	0.673	26.696
Savings	18.027	12	0.115	21.026

Source: Field Data (2013)

The results from the table above indicate that the calculated chi-square of independents between receipting and debt collection was 13.48 at 16 degree of freedom with a probability of occurrence of 0.637 which falls outside the accepted level of 0.05(P=0.637 >0.05).While the corresponding critical chi-square was 26.296 at 16 df,(0.05sfg level). Calculated chi-square of independents between payments and debt collection was 9.352 at 16 degree of freedom and P=0.673 >0.05and critical chi-square of 26.696 at 16 degrees of freedom, 0.05 sgf level. That between saving and debt collection the calculated Chi-square was 18.027 at 12 degree of freedom and P=0.115 >0.05and critical chi-square of 21.026 at 12 degrees of freedom at 0.05 sgf level. Since the calculated chi-square was far less than the critical chi-square in each case where MMT was compared with debt collection, there was evidence to accept the null hypothesis that the effect of mobile money transactions on debt collection of SMEs was not statistically significant.

4.4.5 Effects of Mobile Money Transactions on Cash Management

The fourth objective of this study was to determine the effects of mobile money transactions on cash management of SMEs. The table 4.42 below indicates situation of cash management before and after the usage of mobile money.

Table 4.19: Cash Management before and after the usage of Mobile Money Transaction

	Cash management before MMT		Cash management after MMT	
Performance	**Frequency**	**Percent**	**Frequency**	**Percent**
Very Good	8	8.8	53	58.2
Good	22	24.2	33	36.3
Indifference	16	17.6	2	2.2
Not Good	34	37.4	2	2.2
Very Bad	11	12.1	1	1.1
Total	**91**	**100.0**	**91.0**	**100.0**

Source: Field Data (2013)

Majority of the respondents 49.5% observed that cash management before the adoption of mobile money transaction was bad, 33% observed that it was good whereas 17.6% were indifference.

On Cash management after the adoption of mobile money transaction, majority of the respondents 94.5% observed that cash management was good, 3.3% observed that it was bad whereas 2.2% were indifference. In order to find out whether there was an association between use of mobile money and financial performance of SMEs on cash management, the following null hypothesis was tested.

HO_4 was; the effect of mobile money transactions on cash management of SMEs is no statistically significant.

The results of the test are shown below.

Table 4.20: Statistics Testing the Chi-Square of MMT and Cash Management

Transaction	Cash Management Pearson Chi	df	Sig	Critical Chi-Square
Recepting	6.53	16	0.981	26.696
Payments	5.71	16	0.952	26.696
Savings	7.88	12	0.794	21.026

Source: Field Data (2013)

The calculated chi-square of independents between receipting and cash management was 6.53 at 16 degree of freedom and P=0.981>0.05and critical chi-square of 26.296 at 16 degrees of freedom at 0.05sgf level. Calculated chi-square independents between payments and cash management was 5.71 at 16 degree of freedom and P=0.952>0.05 and critical chi-square of 26.696 at 16 degrees of freedom at 0.05 sgf. level. That between saving and cash management was 7.88 at 12 degree of freedom and P=0.794 >0.05and critical chi-square of 21.026 at 12 degrees of freedom at 0.05 sgf level. Since the calculated chi-square was far less than the critical chi-square in each case where MMT was compared with debt collection, there was evidence to accept the null hypothesis that the effect of mobile money transactions on cash management of SMEs was not statistically significant.

Cash management is the process of planning and controlling cash flows into and out of the business, cash flows within the business, and cash balances held by a business at a point in time. Cash management is one aspect of managing working capital. Working capital management is a very important component of corporate finance because it directly affects the liquidity, profitability and growth of a business and is important to the financial health of businesses of all sizes as the amounts invested in working capital are often high in proportion to the total assets employed (Atrill, 2006). The use of mobile phone according to Higgins et al. (2012) by the SMEs has been useful because it has enabled them to have a record of transactions, as they often do not keep formal records, though they do deal with many customers and suppliers. Thus they often hold many ledgers, receipts, and debts in their head.

The use of mobile financial transaction according to the findings of this study shows that it has no statistical significant effect on cash management. By use of a mobile phone, it is easy to track a transaction and even get a balance of the amount remaining in the mobile account. This kind of financial information is important for future financial transaction decisions of SMEs (Pandey,

2004; Bowen 2008). This implies that although the usage of mobile money transaction has a perceptive positive effect in the cash management of Small and Medium enterprises, the effect is not significant and thus more awareness of the use of MMT should be enhanced which in turn will enhance SMEs performance.

In order to find out the general effect of MMT on the financial performance of SMEs a combined relationship of MMT and SMEs' Financial Performance chi-square test was done. The results of the findings are in table 4.19

Table 4.21 Combined Relationship of MMT and SMEs' Financial Performance

Transaction	Performance		
	Pearson Chi Square	df	Sig
Receipting	19.104	28	0.895
Payments	17.318	21	0.692
Savings	26.444	21	0.19

Source: Field Data (2013)

The calculated chi-square between SMEs' financial performance and receipting was 19.104 at 28 degree of freedom with probability of occurrence of 0.895 (P=0.895>0.05), that of payments was 17.318 at degree of freedom of 21 with probability of occurrence of 0.692 (P=0.692>0.05) and that of savings was 26.444 at 21 degree of freedom with the probability of occurrence of 0.190 (P=0.190>0.05). Since the probability of occurrence for each item of mobile money transaction (receipting, payment and savings) was far greater than P=0.05, there was evidence to accept the null hypothesis that the effect of mobile money transactions on financial performance of SMEs was not statistically significant

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The study generally aimed at determining effects of mobile money transactions on the financial performance of small and medium enterprises. The first objective of the study was to determine the frequency by which small and medium enterprises used mobile money to carry out their financial transactions. The second to fourth objectives were to determine the effects of mobile money on sales revenue, debt collection and cash management respectively. This was in order to find out whether the use of mobile money transaction (MM receipts, MM payment and MM savings) had any effect on the performance of the SMEs. The performance indicators in this study were sales revenue, debt collection and cash management.

5.2 Summary of the findings

The study established that majority of the SMEs in Nakuru use mobile phone to carry out their financial transactions. That is 3 out of 4 SMEs use mobile phone to carry out their financial transaction. The study also established that for those who do not use this service, they cited owner's decision and lack of interest as the main reasons why they were not using the service. For those who were using the service, they were using it to pay, receive, borrow, lend and to save money. The highest proportion for mobile money financial transaction usage was in savings, receiving money and making payments. The study also established that in typical day SMEs use mobile money frequently to do their financial transactions and this usage had great impact on the performance of their businesses.

The study established that there was a great improvement on receipts, payments, borrowing, lending and savings after the adoption of mobile money financial transactions system. Majority of SMEs owners or Managers confirmed that after the adoption of usage of mobile money transactions, their businesses performed well in these financial transactions. It was also noted that the use of mobile money enabled the SMEs to benefit largely on the usage of this financial innovation through; Improved quality of their financial information, improved financial records, ability to trace various financial transactions, ability to make sound judgment relating to their business, improve debt collection, sales revenue and cash management. Majority of the

respondent agreed that mobile money transaction had great impact on the performance of their businesses in regard to financial matters. However, that effect was not statistically significant. The study therefore established that the association between MMT and financial performance of SMEs was not by reality but by chance.

5.2.1 Findings on the frequency by which SME's use mobile money transactions

The study established that SMEs uses frequently mobile money transaction to carry out financial transactions; save money, to receive, to make payments, to borrow and to lend. Majority of the SMEs use mobile money to do transactions more than four times in a day. It also established that majority of the respondents did not use mobile money to borrow; while some respondent indicated that they rarely or never use it for lending. The study established that the frequency of usage of MMT was statistical significant which means it frequency of use was by reality and not by chance.

5.2.2 Findings on the effects of mobile money transactions on sales revenue, debt collection and cash management

Majority of the respondents observed that their sales revenue increased after the usage of mobile money transaction. The study established that debt collection before the adoption of mobile money services was bad compared to after the adoption. The SMEs were found to have performance poorly before the adoption mobile money on cash management; compared with after the adoption of the service. On whether the use of MMT had any significant effect on sales, debt collection and cash management, the analyzed results revealed that the use of mobile money transaction had no statistical significant effect on sales revenue, debt collection and cash management but was only based on perception.

5.3 Conclusions

On the basis of the above findings the study came up with the following conclusions; the proportion of SMEs using mobile money transaction is significant, the adoption of mobile money transaction had no statistical significant effect on sales revenue, debt collection and cash management.

5.4 Recommendations

Based on the findings of this study, the following recommendations were important as far as the effects of mobile money transactions on the financial performance of Small and Medium enterprises; that those Small and Medium enterprises should continue using mobile money frequently in order to realize the benefits of its usage in the financial performance of their enterprises. The SMEs owners/ managers should be keen on to tracing their financial performance through use of mobile money. For those who did not use mobile money transactions, should adopt this service to enable them perform better. This is because those SMEs that were found using Mobile money indicated an improved performance on sales revenue, debt collection and cash management.

The study also recommends that the mobile money service providers should improve on innovative service improvement so as to enable the system to produce a receipt for audit trails and verification purposes. This recommendation is based on the fact that great proportions SMEs use this service to transact their business. A physical verification of any transaction is quite important in case of audit purpose and reconciliation of accounts. By having a system that produces receipt, this will improve the system and enable tracking of payments and receipt easier. In line with that the service providers should make the system more reliable and secure so that the users may have confident when using the system. This recommendation is based on the fact that sometimes a transaction may be done and the reversed at the detriment of the business. In addition, reliability is based on the fact that sometimes the service experiences delays. The service providers should differentiate individual usage of mobile money transaction and business usage so that once a transaction has been completed there should be no reversal or cancellation leading to loss of money to the business.

The government too should come up with a legislation that protect the usage of mobile money and make it an acceptable way of transacting business. This will ensure the promotion of electronic money being used and make it safe for trading using the mobile money. There is no legal frame work that protects this mode of payment. The passing of the electronic bill which is pending in parliament will enhance the use of mobile money.

5.5 Recommendations for Further studies

The aim of this study was to find out effects of mobile money transaction on financial performance of small and medium enterprises. The study did not concentrate on effects of mobile money on the profitability of small and medium enterprises. This calls for further research on the multiplier effect of mobile money on the profits of SMEs.

There are other new products that mobile money financial service providers have come up with. Such a M-shwari, M-Benki and Lipa Na Mpesa. The study did not look exhaustively on these other financial products. Further research on how small and medium enterprises are utilizing these financial innovations such as M-shwari, M-Benki, and Lipa Na M-PESA should be done.

REFERENCES

Adeniji, A.(2008). *Management Accounting*. 4th Edn., El-Toda Venture Limited, Lagos, Nigeria.

Adeya, C. N. (2003). Sources of Training in African Clusters and Awareness of ICTs: A Study of Kenya and Ghana. *INTECH Discussion Paper* No. 6, United Nations University: Maastricht.

Akinsulire, C. (2008). *Financial Management*. 5th Edn., Ceemol Nigeria Limited, Lagos, Nigeria.

Ali, Ndiwalana, et. al. (2008). *ICT usage and its Impact on profitability of SME's in 13 African Countries*. <http// scholar.mak.ac. Accessed on 13th December 2012

Ali, Ndiwalana, Olga Morawczynski, and Oliver Popov,(2009)*"Mobile Money Use in Uganda: A PreliminaryStudy*."< http://scholar.mak.ac.ug/andiwalana/files/m4dmo bilemoney.pdf.> accessed on 15th December, 2012.

Amyx, C. (2005). The Perception Problem: Size Doesn't Matter. *Washington Business Journal* 1, 1-15.

Anuradi, S, Tyagi, R, and Raddi S (2009). "Mobile Payment 2.0: The Next-Generation Model," *In HSBC"s Guide to cash, Supply Chain and Treasury Management in Asia Pacific.*Ed.178-183.

Anyanwu C.M. (1996). Efficient Administration of Credit for Small Scale Industrial Development in Nigeria. *Bullion,* Vol. 20, No. 3 Central Bank of Nigeria.

Anyanzwa, James.(2013,December 8). More Kenyans using mobile money transfer than banks. The Standard on Sunday, p. 51

Arunga, J.,& Kahora B.(2007). Cell phone Revolution in Kenya. *International Policy Network.*

Atieno, Rosemary (2009). Linkages, access to Finance and the Performance of Small-scale enterprises in Kenya. *Research Paper* No.2009/06. United Nations University

Atrill, P (2006). *Financial management for decision makers* (4th Ed).Prentice Hall.

Azam, M. and S. Haider, 2011. Impact of working capital management on firms'

performance:Evidence from non-financial institutions of KSE-30 index. *Interdisciplinary J. Contemporary Res.* Bus.,3: 943-947.

Banks, K. (2008, April 14). *"*Under the Radar*?* African's Informal Development". *Computerworld Kenya News*. Retrieved on 15th December 2012 from http://www.computerworld.co.ke/articles/2008/04/23/under-radar-africas-informal-development

Beck, T., A. Demirguc-Kunt, and R. Levine. 2007. Finance, Inequality, and the Poor. *Journal Of Economic Growth*12 (1): 27–49

Best, W.J.,& Kahn, V.J.,(2001). *Research in Education*. 7th ed. New Delhi: Prentice- Hall of India Ltd.

Bowen, M., Morara M., &Mureithi S. (2009). Management of business challenges among small and micro enterprises in Nairobi-Kenya .*KCA Journal of Business Management*, 2, 16-31

Brilliant, (2008) Definition of SMEs. SMEs Studymode.com accessed on 5th September 2013<http//www.study.com/essay

Burns, T., &Stalker ,G.M.(1961). *The management of innovation*. London: Tavistock

Cacciolatti, L.,Fearne,A.,&McNeil (2011). Empirical evidence for a relationship between business growth and the use of structured marketing information amongst food and drinks SME's . *Academy of Marketing Conference* 5-7th July,University of Kent, United Kingdom.

Chipchase, J. and I. Tulusan. (2006*). "Shared Phone Use.*" Retrieved September 27th, 2012, http://bit.ly/chipchase-shared-phoneuse

Cohen, L.,Manion L.,& Morrison, K., (2007). *Research Methods in Education.* New York: Roultedge Group.

Dalberg.(2011). *Report on Support to SMEs in Developing Countries Through Financial Intermediaries*. Copenhagen, Dalberg

Donner, J. (2005a). *Micro entrepreneurs and mobiles: An exploration of the uses of mobile phones by small business owners in Rwanda.* Information Technologies for International Development, 2(1), 1-21.

Donner, J. and C. A. Tellez (2008). "Mobile banking and economic development:Linking adoption, impact, and use." *Asian Journal of Communication* 18(4): 318-322

Duncombe, R. and R. Boateng (2009). "Mobile Phones and Financial Services in Developing Countries: a review of concepts, methods, issues, evidence and future research directions." *Third World Quarterly* 30(7): 1237 – 1258

Elder, L. and Rashid, A.T. (2009) "Mobile Phones and Development: An analysis of IDRC-Supported Projects". *The Electronic Journal on Information Systems in Developing Countries* 36, 2, <http://www.ejisdc.org.> Accessed on 12th Dec, 2012.

Fiedler, F. (1964). *A Contingency Model of Leadership Effectiveness in L.Berkowitz* (ed.)Advances in Experimental Social Psychology, 149–90.

Gaurar, Agarwal (2007) Financial inclusion through mobile phone banking: issues and challenges. Available at http//www.google. com

Geach, N. (2007).The Digital Divide, Financial exclusion and mobile phone technology: Two problems one solution? *British and Irish Low, Education and Technology Association 2007 Annual Conference*. Hertfordshire 16-17 April.

Geoffrey, at al. (1969). *Management of Money and Finance.* Grower Press, New York.

GoK (Government of Kenya). (2007). *Kenya Vision 2030*: A Globally Competitive and Prosperous Kenya. October 2007. Nairobi: Government Printer

Hassan, K. Abdallah & Dora Semkwiji (2011). The role of mobile phones on sustainable livelihood. *The economic and social research foundation (ESRF)*. Discussion paper No. 33. www.esrftz.org

Herzberg, A. (2003).*"Payments and banking with mobile personal devices."* Communications of the ACM (5): 53-58.

Higgins, D., & Kendall, J., & Lyon, B.(2012). Mobile Money Usage Patterns of Kenyan Small and Medium Enterprises. *Innovation, Technology, Governance and Globalization*, 7, 67-81

Hughes, Nick and Susie Lonie (2009). "M-PESA: Mobile Money for the Unbanked." Innovations, special edition for the Mobile World Congress 2009 (Boston, MA: MIT Press).

Ignacio, Mas & Amolo N'gweno,(2012). "Why Doesn't Every Kenya Business Have a Mobile Money Account?A Study of the Business Uses of Mobile Money in Kenya," paper presented at 8th Research Colloquium, hosted by FSDK, Nairobi. <http//www.fsdkenya.org/pdf.>

ITU (2005) World Telecommunication Indicators Database. Geneva : International Telecommunication union.

Jack,William and Suri (2010). The economic of M-PESA. Nairobi, Central Bank of Kenya.

Jake, Kendall(2011).Summarized two of these pieces in "Small Business Might Be Big Business for Mobile Money,"Next Billion blog. <http://www.nextbillion.net/blogpost. aspx?blogid=2216.

Jensen, M.C. (2007). Self-Interest, Altruism, Incentives, and agency theory".*Journal of Applied Corporate Finance,* Vol. 7.pp 40 – 45.

Jensen, Robert T. (2007). "The Digital Provide: Information (Technology), Market Performance and Welfare in the South Indian Fisheries Sector," *Quarterly Journal of Economics,* 122(3), p.879 – 924

Kahinde J. Sunday (2011), "Effective working capital management in Small and Medium Scale enterprises(SMEs)''. *International Journal of Business and Management.* Vol 6, No. 9 September 2011.

Kanyi, Patrick W., & Maharaj, M.(2011). "Factors influencing successful use of Mobile Technologies to facilitate E-commerce in small enterprises'': The case of Kenya. *The African journal of information system* Vol. 3 issues 2 No. 623

Kenya National Bureau of Statistics.(2005). *Basic Report on Well-Being in Kenya*. Nairobi. Ministry of Planning and National Development

Kenya National Bureau of Statistics (2007). *Micro and Small enterprise survey.* Nairobi, Kenya.

Keh, H.T, Nguyen, T.T.M., & Ng, H.P. (2007).The effects of entrepreneurial orientation and marketing information on the performance of SMEs.*Journal of Business Venturing* 22, 591-611

Kirsty, S. (2013), *A quarter of world uses mobile money services.* Marketing magazine.

Available at Http/marketing magazine.com Retrieved on 30/07/2014.

Kothari, C.R. (2011), *Research Methodology: methods and techniques*.2rd edition,New age International (p) limited, New Delhi.

Krishna moorthy, M. et al. (2012). A study on factors affecting the performance of SME's in Malasyia. *International Journal of Academic Research*.

Külter, B. and K. Demirgüneş, 2007. Determinants of profitability in retailing firms: An empirical study on ise listed retailing firms. J. Çukurova Univ. Inst. Soc. Sci., 16: 445-460

Kwame K. (2007). *Working capital management practices of small firms in the Ashanti region of Ghana*. Retrieved from http://www. ssrn.com on November 2012.

Lennart, B., & Björn S (2010). Mobile Money Transfers and Usage among Micro and Small Businesses in Tanzania. *Implications for Practice,* 1-29

Levy B. (1993). Obstacles to Developing Indigenous Small and Medium Enterprises: An Empirical Assessment.*World Economic Review,* Vol. 7, No. 1.

Longenecker, J. G., Petty, C. W., Moore, J. W. and Palich, L. E. (2006). Small Business Management, An entrepreneurial emphasis. London: Thomson South Western. Ghana. *International business Research,* vol. 4 pp 241-251

Mas, Ignacio and Olga Morawczynski (2009). *"Designing Mobile Money Services: Lessons from M-PESA."* Innovations, Vol. 4, Issue 2, Spring (Boston, MA: MIT Press).

Mbiti, Isaac and David N. Weil (2011). Mobile Banking : The impact of M-Pesa in Kenya. *Journal of Economic Perspectives*.

Mbogo, Marion (2011). Influence of Managerial Accounting Skills on SME'S on growth of Small and Medium enterprises in Kenya. *Journal of language, Technology and entrepreneurship in Africa,* Vol 3 No. 7.

McCoy, J. and Smith, G. (2007). Mobile End-user service adoption studies: A selective review.*Scandinavian Journal of Information Systems,* 14, 301-358[19]

Mobile money in Africa.(2012, 28 April). The Economist, p. 1

Morawczynski, Olga and Mark Pickens. (2009). *"Poor People Using Mobile Financial Services: Observations on Customer Usage and Impact from M-PESA*" CGAP Brief< http://www.cgap.org/gm>

Mugenda, M.O.,& Mugenda, G. A.,(2003) *Research Methods, Quantitative &Qualitative Approaches*. Nairobi: Acts Press

Municipal Council of Nakuru, (2013) Business Register. Nakuru

Mwangi, Chogi B.F.(2006). The impact of Mobile Phone technologies on medium and small enterprises.. *Paper Presented to Communication Policy Research South* on National Regional Innovation Systems, Nairobi. 1-20

Myhr, J. (2006). Livelihood changes enabled by mobile phones. The case of Tanzania Fishermen. *Bachelor Thesis, Department of Business,* Uppsala University, Uppsala.

Nyabwanga, Robert et. al. (2012). *Effect of Working Capital Management Practices on Financial Performance: A Study of Small Scale enterprises in Kisii South District, Kenya*. <http//www.academic journals.org/AJBM>

Nyagori, R.(2012). Factors Influencing Performance of Micro and Small Enterprises: A Case of Kisumu City Bus Park-Kenya. *Unpublished Masters in Planning and Management* Project, University of Nairobi.

Nick, Hughes and Susie Lonie (2007) *M-PESA: Mobile Money for the "Unbanked" Turning Cellphones into 24-Hour Tellers in Kenya*

Oketch, H. O. (2000). Gender Equity. In A. Mullei and A. Bokea (Eds). *Micro and small Enterprises in Kenya: Agenda for improving the Policy Environment.* Nairobi: ICEG

Omwansa, Tommy (2009). *M-Pesa :Progress and Prospects Mobile world Congress*.

Padachi K (2006). "*Trends in Working Capital Management and its Effect on Firms' Performance: An Analysis of Mauritian Small Manufacturing Firms"*. Int. Rev. Bus. Res., 2(2): 45-58

Pandey, IM (2004). *Financial Management 9th Edition,* Vikas Publishing House PVT Ltd.

Plyler, Megan, Sherri Hass and Geetha Nagarajan. 2010 *"Community-Level Economic Effects of M-PESA in Kenya: Initial Findings"* IRIS Center Report, University of Maryland. http://www.fsassessment.umd.edu/publications/pdfs

Reddy, D.R. and P. Kameswari, (2004). *Working capital management practices in*

pharma industry: A case study of Cipla Limited. Management Accountant, Aug. 2004, pp. 638-644.

Reddy, R.J.P.(1991). *Problems and Development of Small Scale Industries In India*, New Delhi: Discovery Publishing House.

Sagan, J. (1955). *Toward a theory of working capital management*. J. Finance, 10: 121-129.

Saleemi , N A (1997) *Quantitative Techniques simplified*, Nairobi , N A Saleemi Publishers.

Salzaman, M.,Palen L.,&Harper R. 2001Mobile Communication:Understanding Users, Adoption and Design. (Lecture) *Paper presented in CHI workshop.*

Samson, A. Adedran et. al(2012) *'The impact of working capital Management on the Profitability.' of SMEs in Nigeria*. Retrieved on 20th April 2013.

Sessional paper no.2 of (2005) Development of micro-enterprises and small enterprise for wealth and employment creation for poverty reduction.Government printers, Nairobi

Subrahmanya, M.H.B., Mathirajan, M., & Krishnaswamy, K.N.(2011).Importance of technological innovation for SME growth: Evidence from India. *World Institute for development economic Research.*

The Economist Newspaper limited (2014), *Mobile Money in Africa.*Available at Http/www.economist.com. Retrieved on 30/07/2014

Tomecko, J. and Dondo, A. (1992). *Improving the potential of small scale and informal sector*. Nairobi: K-REP and GTZ.

Wakari, Gikenye (2010). *The diffusion and Impact of Mobile Phones on the informal Sector in Kenya.*

Wambari, A.(2009). Mobile Banking In Developing Countries-A Case Study on Kenya. *Information Technology*, University of Applied Sciences

Wanjohi M. A.(2010) *SME Policy in Kenya issues and effects in progress*. Available at www.cuts.international

Warah, R. (2009, November, 9). "*Mobile Telephony: Kenya No-So-Silent Revolution".* Daily Nation, pp. 12

Woodward, J. (1965).*Industrial organization -theory and practice*. London, U.K.: Oxford University Press.

World Bank, (2006). The role of ICT in doing business. In Information and Communications for Development*: Global Trends and Policies*. Washington, DC: World Bank. 100 Information Technologies and International Development.

World Bank, (2012). "World Bank Group Innovations in Leveraging the private sector for development: A Discussion note prepared by the staff of the World Bank Group.

APPENDICES

Appendix I: Letter to the Respondent

Bernard Ngaruiya,
P.O.Box 938, 20100,
Nakuru
Dear Respondent,

I am Bernard Ngaruiya, a student pursuing Master degree of business administration, (finance option) of Egerton University. As part of the requirement, I am undertaking a research study on the effects of mobile money transactions on financial performance of Small and Medium enterprises. The research study will be done within the Central Business District. Please assist me by completing the following questionnaire. The content will be treated with a lot of confidentiality. Please answer by ticking or fill the blank.

Appendix II: Questionnaire

Instructions: please answer the following questions by crossing (X) in the space provided where applicable.

Section A: Background information

1. Your gender? Male ( ) Female ( )

2. Your age group? 18-24 ( ) 25-34 ( ) 35-44 ( ) 45-54 ( ) Over 55`( )

3Your highest educational qualifications

No Formal education ( ) Primary level ( ) Secondary level ( ) Post-secondary level ( )

4 What kind of business do you do? …….....

5 Your current position in the business? Owner ( ) Manager ( )

6. How old is your business? Less than 1 year ( ) 1 to 3 years ( ) 3 to 6 years ( ) 6 to 9 years ( ) More than 9 years ( )

7. How many employees do you have? Less than 10 Employee ( ) Between10and50 employee ( )

8. How busy is your enterprise?

Always busy ( ) Often busy ( ) Sometimes busy ( ) Rarely busy ( ) Never busy at all ( )

9. Do you offer credit Facility? Yes ( ) No ( )

If No, go to question 10, and if Yes, how long is the credit period?

3O days ( ) 30-60 days ( ) 60- 90 days ( )

Section B:

This section of questionnaire explores on the effects of mobile money on the financial performance of your enterprise. Please answer the following questions.

i. Proportion of SMEs that use mobile money transaction

10. Do you use mobile phone to carry out financial transactions? Yes ( ) No ( )

If your answer is No to question 10, please answer the next question only and if Yes to question 10, please skip question 11 and continue from question 12.

11. The following are some of the reasons why mobile money transaction is not used. Please indicate the one(s) that applies to you.

1. Illiteracy ( ) 2.reliability ( ) 3.Insecurity ( ) 4.Lack of interest to use ( ) 5. Owner's Decision ( )

12. What kind of financial transactions do you do using your mobile phone? Tick whichever is applicable. Payments ( ) Receipts ( ) borrowing ( ) lending ( ) saving money ( )

ii. The frequency of use of mobile money transactions

13. How frequent do you to carry out the following financial transactions using your mobile phone?

	Always	Often	Sometimes	Rarely	Never
To receive money					
To make Payments					
To borrow Money					
To lend money					
To save money					

14. In a typical day, how often would you use mobile phone to carry out financial transactions?

Once ( ) Twice ( ) Thrice ( ) Four times ( ) More than Four times ( )

Iii.The effects of mobile money on sales revenue, debt collection and cash management

15. Before the usage of mobile phone financial system, how would you rate the performance of your business in relation to the following, using the scale 1-5 with 1 representing -Very good, 2. Good, 3. Indifferent 4.Poor and 5. Very Poor?

	Before the use of mobile financial transactions					After the use of mobile financial transactions				
	1	2	3	4	5	1	2	3	4	5
a) Receipts										
b) Payments										
c) Borrowing										
d) Lending										
e) Savings										

16. Please indicate your level of agreement with 1 indicating Strongly disagree, 2 disagree, 3 uncertain, 4 agree and 5 strongly agree by marking the most appropriate number on each statement which corresponds to your desired respond on the use of mobile money transaction on the performance of your enterprise.

	1	2	3	4	5
The use of mobile money transaction has improved the quality of my financial information.					
The use of mobile money has improved my financial records keeping.					
The use of mobile money has enabled me to trace receipts and payments in my enterprise.					
The use of mobile money has enable me to make sound financial decisions relating to my enterprise					
The use of mobile money has enabled me to reduce my debtors					
The use of mobile money has improved my sales turnover.					
The use of mobile money has made cash management possible.					
The use of mobile money has increase debt collection					
The use of mobile money has increase my cash receipts					
The use of mobile money has made savings to be possible.					
By the use of mobile money it is possible to know the liquidity of my business.i.e what cash is available in my savings.					

17. How would you rate the performance of your business before the use of mobile money transactions on the following performance indicators?

	Very Good	Good	Indifferent	Not Good	Very Bad
a) Sales turnover					
c) Debt collection					
e) Cash Management					

18. How has the use of mobile phone financial transactions improved your business on the following performance indicators?

	Very Good	Good	Indifferent	Not Good	Very Bad
a) Sales turnover					
c) Debt collection					
e) Cash Management					

Thank you for answering my questions

Appendix III: List of Sampled SMEs

Category	**Number of Business**
Boutique	20
Curio shops	20
Saloons	20
Electronic shops	20
Hard ware shops	20
Others	20
Total	120 businesses