IJRD International Journal of Research & Development Organisation

ISSN: 2455-9229

Journal of Applied Management Science

Influence of Electronic Money Transfer Services on Performance of Small and Medium Enterprises in Kenya

(A CASE OF BUNGOMA COUNTY)

Marvin Akwanyi

Student' Masters of Sciences in Procurement and Logistic of Jomo Kenyatta University of Agriculture and Technology

Dr. David Kiarie Mburu

Lecturer' Jomo Kenyatta University of Agriculture and Technology

Key Terms; Mobile money, Mobile Banking, Risk, Security, Perceived cost, Perceived Trust

ABSTRACT

According to the 2013 Economic Survey, the SME sector, contributed 18.4% of the country's Gross Domestic Product (GDP). This shows the importance of SMEs to the Kenyan economy mainly as a source of employment to an ever increasing populationhe use of mobile banking services has continued to grow over time as aapplication of the mobile phones for mobile banking has marked a new frontier in mobile phone technology with an ever increasing number of small and medium enterprises using it in their transactions to enhance their performance. The role of electronic money transfer services has been viewed as a critical element for the performance of small and medium-sized enterprises. Typically, smaller enterprises face higher transactions costs than larger enterprises in obtaining credit Insufficient funding has been made available to finance working capital for the SMEs (Poor efficiency and consumer convenience practices have hampered the ability of smaller and medium enterprises and Entrepreneur ICT Competency such as Information asymmetries associated with lending to small scale borrowers have restricted the flow of finance to smaller and medium enterprises. In spite of these claims however, some studies show a large number of small and medium enterprises fail because of perceived value of m-banking and transaction costs due to poor record keeping and lack of basic business management experience and skills are major contributors to failure of small business. The number of uses to which mobile banking services can be put keeps increasing with time. Small and medium enterprises in Kenya have adopted the use of the mobile payments as a way of transacting their business because of the relative affordability of mobile phones and the mobile banking services they offer. However, it is not clear how mobile banking service use influences the performance of small and medium enterprises. The study sought to determine if its use in Bungoma County, a rural setting, has resulted in improvement on performance of small and medium enterprises. The study will be based on a survey of 3680 small and medium enterprises, from three major sectors of the Kenyan economy, agriculture, service and processing sectors. Small and medium enterprises that will be studied are those that have been in existence for more than 5 years and have experienced business without mobile banking services before 2008, and thereafter with it. The study was built on the theories of diffusion of innovation theory, technology acceptance model and Schumpeter's theory. The main purpose of this study is to establish influence of mobile banking services on performance of small and medium enterprises in Kenya. The study was guided by the following specific objectives: To find out the influence of mobile transfer services on performance of small and medium enterprises in Kenya; To investigate the influence of internet banking services on performance of small and medium enterprises in Kenya; To examine the influence of access to finance on performance of small and medium enterprises in Kenya; To study the influence of e-commerce on performance of small and medium enterprises in Kenya and to establish the influence of perceived value m-banking on performance of small and medium enterprises in Kenya The study adopted a descriptive survey and a stratified sampling technique method was used and data was collected through the use of questionnaires. The correlation and regression analysis was used to establish the direction and strength of the relationship of the variables at 5% level of significance. The analysis showed that access to finance services had the strongest positive (Pearson correlation coefficient =.852) performance of SMEs. In addition, mobile banking services, internet banking services and e-commerce services were positively correlated to performance

of SMEs (Pearson correlation coefficient =.801, .755 and .739).The study recommends that there is need to promote electronic money transfer services boost performance of SMEs in the study area.. Finally, the study recommends for similar studies to be undertaken in other areas of Kenya for generalization of the findings of this study.

Background of Study

The telecommunications industry worldwide has scrambled to bring what is available to networked computers to mobile devices (Schofield & Kubin 2002). Presently, the use of electronic banking is considerably high and as more and more users sign up for electronic-banking, the maturity as regards remote banking (banking outside the banking hall) is on the increase. Mobile banking (m-banking) is a term used for performing banking transactions via mobile device such as mobile phones (Anyasi and Otubu, 2009).

Tiwari, Buse and Herstatt (2006) define mobile banking as any transaction, involving the transfer of ownership or rights to use goods and services, which is initiated and/or completed by using mobile access to computer- mediated networks with the help of an electronic device. They further indicate that mobile banking refers to provision and availment of bank-related financial services with the help of mobile telecommunication devices. The scope of offered services may include facilities to conduct bank and stock market transactions, to administer accounts and to access customized information from the bank. Mobile banking is most often performed via short message services (SMS) or mobile internet, but can also be used by special programs called clients downloaded to the mobile device.

Small and Medium Enterprises (SMEs) play a major role in developing and developed economies in job creation and diversification of economic activities. The SME sector is the sector in which most of the world's poor people are working (Stern, 2002). It has an important role to play in economic development, poverty reduction and employment creation in developing economies (Hallberg, 2000). The sectors' growth rate largely exceeds the

average economic growth of national economies in many countries and contributes significantly to employment creation. Governments and donors alike have recognized the important role of the SME sector for overall development and as a result, many government policies are geared toward supporting SME sector growth through a variety of programs that range from tax incentives to technical assistance, regulatory provisions to policy interventions, training and other types of business development services (O'Shea & Stevens, 1998). The inception of mobile phone financial transaction has brought a lot of benefits to SMEs. It has made money transfer to be available at a low cost compared to the traditional banking system where some transactions would be done within the premises of the bank.

Mobile banking (m-banking) is a term used for performing banking transactions via mobile device such as mobile phones (Anyasi and Otubu, 2009). Tiwari, Buse and Herstatt (2006) define mobile banking as any transaction, involving the transfer of ownership or rights to use goods and services, which is initiated and/or completed by using mobile access to computer- mediated networks with the help of an electronic device. They further indicate that mobile banking refers to provision and availment of bank-related financial services with the help of mobile telecommunication devices. The scope of offered services may include facilities to conduct bank and stock market transactions, to administer accounts and to access customized information from the bank. Mobile banking is most often performed via short message services (SMS) or mobile internet, but can also be used by special programs called clients downloaded to the mobile device.

Over the last few years, small and micro enterprise owners have innovatively responded to changing market dynamics by adopting innovations in their firms aimed at maximizing on their returns as they minimize costs. Mobile-phone banking, Mobile payments commonly known as "Lipa na M-pesa" and Agent banking for instance are common aspects

of these firms. However, the effect this adoption has had on their performance has remained unclear. Over the past few years, advancement in information technology has changed the way SMEs operate and conduct their business (Al-Jabri, 2012). Technological advancement has brought about the evolution of m-banking and online banking in the SME sector which has revolutionized the manner in which SMEs conduct their business. Internet and m-banking has not only made financial SMEs provide banking services online and via mobile but has also provided SMEs with easy access to financial services and other benefits.Mobile banking refers to provision and availment of banking and financial services with the help of mobile telecommunication devices. The scope of offered services may include facilities to conduct bank and stock market transactions, to administer accounts and to access customized information.

According to Vaidya (2011), the earliest mobile banking services were offered over SMS, a service known as SMS banking. With the introduction of the first primitive smart phones with WAP support enabling the use of the mobile web in 1999, the first European banks started to offer mobile banking on this platform to their customers. Mobile banking relies on the three elements namely an electronic stored-value account (M- wallet) linked to each users' mobile phone; a mobile application that allows users to manage their accounts and undertake transactions and a network of retails where users can deposit and withdraw money from their accounts. This kind of banking does not require one to have a bank account.

Mobile is the only channel available today that provides immediate banking services, and usage of the mobile phone is high across all demographic and socioeconomic levels. Mobile technology is driving both advanced services for sophisticated users and access to banking services for a large population without current access to banks or desktop applications. (Vanscoy 2010). It is seen as the quickest way of transferring and receiving money today

without having to go and queue at the bank counter to be served and it can be done anytime and anywhere. This means that people can work all round the clock. Services offered on mobile phones include the following; account balances and mini statements, transfer of funds and transactions and password administration among other new revolutions.

According to Howard & Maili (2008), trust and fidelity from banking under the mattress to resting on the mobile phone is emerging fast. SMEs have realized that traditional banking methods have proved insecure, inadequate, costly and inaccessible in many emerging markets as compared to mobile banking which is more reliable, less costly, accessible and almost adequate. Success of mobile transactions is based on the ease of use, the low cost of services, 24/7 access in all locations and the high levels of security. All this can dramatically improve users' quality of life. Money can be transferred quickly and easily without the hustle of lengthy post office queues. Electricity meters can be topped up at the user's convenience and funds can be transferred to allow the needy to pay doctors' fees or purchase medicines. There are countless examples, all of which point to the imaginative use made of mobile transactions and the intrinsically high level of demand from lower-income families for financial services.

Global mobile banking subscribers have doubled in each of the past three years, with strong growth predicted as far out as 2015. The telecommunications industry worldwide has scrambled to bring what is available to networked computers to mobile devices (Schofield & Kubin 2002). Lennart and Bjorn (2011) note 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 and the success of any business may very well depend on how to mobilize cash quickly from savings, credit from suppliers, or to have customers that can pay upon delivery. This insinuates that the performance of the SMEs businesses depends on how fast cash receipt and payments are made since any delay and affects operations of their business. However, the biggest challenges that they face in attaining this is how to reach their customers, the 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 (Wambari, 2009). This implies that majority of the people who transact or either do businesses are unbanked.

The advent of the Internet has revolutionized the way the financial services industry conducts business, empowering organizations with new business models and new ways to offer 24-

hour accessibility to their customer. According to a study by financial consultancy Celent, over the last few years, the mobile and wireless market has been one of the fastest growing markets in the world and it is still growing at a rapid pace. According to the GSM Association and Ovum, the number of mobile subscribers exceeded 2 billion in September 2005, and now exceeds 2.5 billion. Mobile devices, especially smart phones, are the most promising way to reach the masses and to create "stickiness" among current customers, due to their ability to provide services anytime, anywhere, high rate of penetration and potential to grow. According to Gartner, shipment of smart phones is growing fast, and should top 20 million units (of over 800 million sold) in 2006 alone.

In Pakistan ATM banking has taken off by two interlinked switches. Many banks also offer limited banking services like balance enquiry, mini-statement among others over mobile phone and restricted fund-transfer over internet. In Brazil, private and state-owned banks deliver financial services through retail agents including small supermarkets and pharmacies, post offices, and lottery kiosks (Kumar et al. 2006).

In Southern Africa, South Africa dominates with high penetration of 40 million mobile subscribers (www.vodacom.co.za and www.mtn.co.za), mostly pre-paid. MTN Banking of South Africa is joint venture between Standard Bank and MTN Mobile offering the Mobile Money account that gives customer access to limited banking facilities, using Wap enabled cell phone. The use of cell phone banking enables the bank, as part of self-service banking, to provide convenient, safe and cost effective services to their customers (Standard Bank, 2010).

In Kenya there has been a rapidly increasing trend in mobile phone subscription by the rural and urban populations. This increased accessibility to mobile phones has introduced changes in most sectors of the economy and particularly the urban informal sector with Micro and Small Enterprises changing their business and operation environment, thereby creating an

impact on Kenya's fastest growing sector and employer (GoK, 2012). Mobile Phone Technologies have the potential to improve the economic performance of MSE's affecting almost every structural characteristic of these organizations. With the adoption of this new technological dynamo, its usage has gained prominence by virtually all MSE's in Kenya.

In Kenya there has been a sporadic mobile phone subscription by the 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 Zain) against 293,400 fixed lines (ITU 2007) This increased accessibility to mobile phones have introduced changes in most sectors of the economy and particularly the urban informal sector consequently Jua Kali Business (SMEs) changing their business and operation environment, thereby creating an impact on Kenya"s fastest growing sector and employer. According to the Kenya National Bureau Statistics (2005), Kenya has over 5,970,600 people employed in this informal sector, which is about 19% of the total Kenyan population (Chogi, 2006).This is because to start a business in this sector requires less capital and it is not structured. Nyangori (2012) observe that the SMEs sector has continuously experienced growth thereby becoming a key sector in the economy of the country as well as creating most of the new jobs. The sector constitutes 98% of all businesses in the country, absorbing a high population of school, college and university leavers (Malick ,2004). Bowen at el (2009) notes that SMEs contributed over 50 percent of new jobs created in the year 2005. For that reason, SMEs play a crucial role in increasing growth, innovation and prosperity (Dalberg, 2011).Therefore, this sector is important because it plays a crucial role in the development of the Kenyan economy and thus it cannot be ignored.

In 2007 Kenya pioneered the mobile banking business with the introduction of M-Pesa, the mobile money-transfer service that revolutionized banking. Mobile banking services offer efficiency and are time and cost saving for people who have to travel long distances to access a physical bank branch. The introduction of new mobile banking platforms has extended the benefits of mobile banking to more Kenyans (Mulupi, 2011).M-banking enables the micro-business operators to transact payments directly with their customers and suppliers through a mobile phone in the palm of their hands without necessarily going through a bank (Anuradi, Tyagi & Raddi, 2009) and without having to leave their business premises. These features bring considerable convenience to business operations. It is also easy for the micro business operators to control their mobile phone accounts as they can access their accounts any time.

Statement of the Problem

According to the 2013 Economic Survey, the MSE sector, contributed 18.4% of the country's Gross Domestic Product (GDP). This shows the importance of SMEs to the Kenyan economy mainly as a source of employment to an ever increasing population. The use of electronic money transfer services has continued to grow over time. According to CCK quarterly sector statistics report, by September 2012, total deposits on mobile platforms had increased from shillings 192 billion to shillings 205 billion with over 15.8 million customers who are supported by over 60,000 agent outlets countrywide. This growth indicates that the electronic money transfer services have become a key payments and transaction tool, mainly due to its easy use of applications, convenience and low cost value propositions (CCK report).

Previous studies have highlighted the poor performance of SMEs is attributed to lack of electronic money transfer services (Levy, 2013). Typically, smaller enterprises face higher transactions costs than larger enterprises in obtaining credit (Saito and Villanueva, 2011). Insufficient funding has affected access to finance working capital for the SMEs (Peel and

Wilson, 2010). Poor efficiency and consumer convenience practices have hampered the ability of smaller and medium enterprises and have restricted the flow of finance to smaller and medium enterprises. Study by Tushabonwe-Kazooba, (2006) revealed that lack of e-marketing and transaction costs are major contributors to failure of small business. It is on this premise the study seeks to establish the influence of electronic money transfer services on performance of Small and Medium Enterprises (SMEs) in Kenya, a case of Bungoma County.

Objectives of the Study
:

i. Establish how mobile banking services influence performance of small and medium enterprises in Kenya.
ii. Examine how ease access to finance influence performance of small and medium enterprises in Kenya.
iii. Determine how internet banking services influence performance of small and medium enterprises in Kenya.
iv. Find out influence of e-commerce services on performance of small and medium enterprises in Kenya.

Conceptual Framework

Mugenda, (2008) defines conceptual framework as a concise description of the phenomenon under study accompanied by a graphical or visual depiction of the major variables of the study. Kombo and Tromp, (2009) defines it as a set of broad ideas and principles taken from relevant fields of inquiry and used to structure a subsequent presentation. It is a research tool intended to assist a researcher to develop awareness and understanding of the situation under scrutiny and to communicate this. Bell, (2010) describes it as a diagrammatical representation that shows the relationship between dependent and independent variables. A conceptual

framework assists a researcher to organize their thinking and complete an investigation successfully. It also explains the relationship among interlinked concepts and explains the possible connection between the variables (Kombo & Tromp, 2009). The conceptual framework comprises of the independent variables also known as the exploratory variables and which are the presumed cause of changes in the dependent variable and the dependent variable also called the criterion or predictor variable which the researcher wishes to explain (Kothari, 2004).

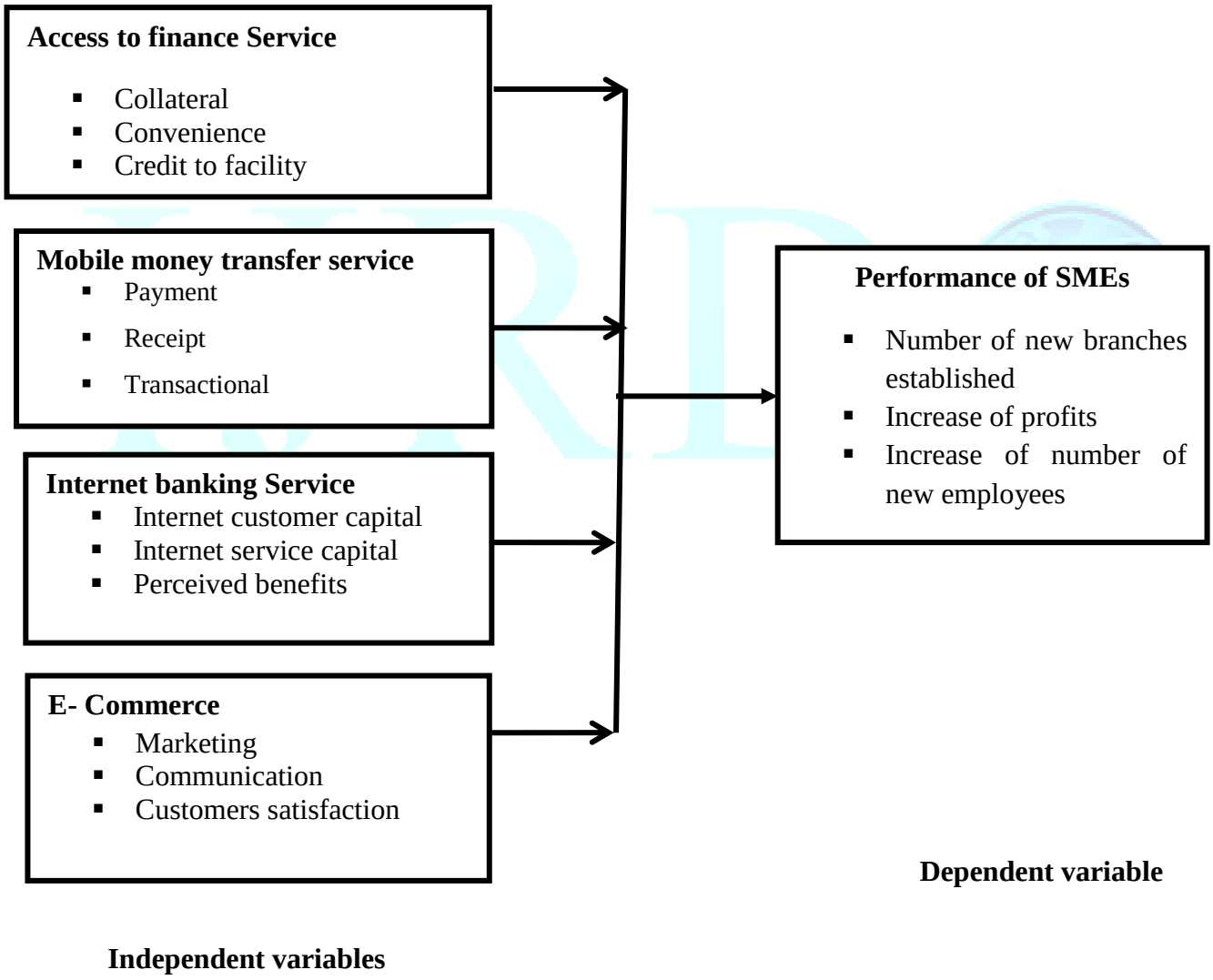

Figure 1: Conceptual Framework

Mobile Banking Services

Mobile money transfer service refers to the service which allows users to transfer money via mobile phone text messaging. Mobile money transfer service has seen "phenomenal growth", according to Bob Collymore, the CEO of Safaricom Limited, which became the first mobile company to introduce mobile money transfers in March 2007 under the "M-PESA" brand name. The "m" stands for mobile, while "pesa" means money in Kiswahili. Efficient and affordable money transfer and payment services are an important financial service most people require, including those who do not typically use financial or banking services (Kamau, Cerstin and Mukwana, 2003). Mobile money transfer has turned out to be efficient and affordable and is therefore preferred by many people, Micro enterprise operators are in the Micro and Small Enterprise (MSE) Sector. Efforts have been made by academics (Mead and Morrison, 1996) in defining Micro and Small Enterprises. Micro-enterprises are those that employ less than ten people and small scale enterprises are those that employ 11-50 workers. According to the 1999 National Baseline Survey and many other prior studies, only a small proportion of SMEs employ 11-50 people. This therefore means that since micro enterprises form the bulk of MSEs, when reference is made to MSEs this largely refers to micro-enterprises.

Mobile money service, designed to help SMEs streamline their operations (Omwansa 2009), has received overwhelming uptake in Kenya since its introduction in 2007. This success is attributed to the service being affordable and accessible (Mbogo 2010) including low income earners. The technological invention is considered easy to use yet efficient and reliable with the potential to extend financial services to the unbanked or those preferring cheaper financial services. It is an appropriate technological invention for SMEs that continue to face challenges related to limited affordable and accessible financial services to support business

operations. SMEs needs for payment and transactional services are not always well served by conventional banks since they do not always find it easy or cost effective to adopt a full-feature package for banking services (Higgins, Kendall & Lyon, 2012).

The extensive coverage of mobile service providers has not only resulted to high rates of convenience, but has made the service effective and reliable as a form to send money with the interface between agents and customers functioning with minimal complaints from customers. This is even so witnessed as the number of agents continues to increase as more sophisticated banking services are added to the mobile money platform such as M-Kesho, M-Shwari and others according to CCK 2011/2012 Report. Literature reveals that the mobile money is faster, cheaper, more reliable, and safer (Jack & Suri 2011). The benefits of cashless transaction including less opportunity for fraudulent and criminal activities, and mobile money technology (Wishart 2006) have increased adoption rates among SMEs in the capital city (Mbogo 2010). Even though current research suggests that mobile phone coverage and adoption has a positive impact on risk reduction, market improvement, coordination amongst firms and labor market (Jenny and Mbiti, 2010).

Access to Finance Service

Pagani (2004), states that accessibility (ability to reach the required services) is one of the main advantages of mobile payment services. Small and micro businesses are among the greatest beneficiaries of using M-Pesa mobile payment. As at 31stMarch, 2009, there were 8,650MPesa agents spread throughout the country offering the mobile payments service (Annual report, 2008/2009). The micro-business operators go to the bank less often and spend more time running their businesses. Equally, many unbanked Kenyans can now receive or send money wherever they are in the country (Omwansa, 2009).Majority of the micro business operators are familiar with the use of the mobile payment services as they are easy

to use and require no formal training before use. With more time in the business, more customers are served leading to increased sales and therefore growth of the business. The transaction costs of sending money through the mobile payment technology are lower than those of banks and money transfer companies (Omwansa, 2009). The cost of the mobile payments is affordable to most of the micro business operators and far below what the banks normally charge for their bank transactions. The reduced cost of transactions positively influences the growth of the business.

Internet Banking Service

According to Wade et al. (2004), the literature suggests two approaches to how e business tools affect firm performance and competitiveness. One is the revolutionary view (RV), which embodies radical organizational changes through the adoption of Internet business solutions (IBS) that help firms to increase revenue through externally focused initiatives, such as new market expansion new products and services development. The other is the evolutionary view (EV), where IBS primarily lead to higher efficiency and reduced costs through improvement of internal processes in key business areas such as financial and accounting information management, human resources, and procurement. From another perspective, the study by Varian et al. (2002) estimated the impact of the Internet on productivity and growth based on the assessment of eight business areas: a) customer development / e –marketing; b) customer service and support; c) e-commerce; d) finance and accounting; e) human resources; f) procurement and MRO; g) sales force automation; and h) supply chain management. The authors used survey information to estimate the impact of IBS on costs savings and productivity based on business indicators such as annual revenue, gross and net margin, costs of production, and perceptions of general organizational improvements.

From the "supply side," Gehling et al. (2007) argue that the impact of electronic banking on small businesses depends on several factors related to the bank's understanding of the relationship between those businesses and their customers, and how well electronic banking services address their business requirements. Liu (2008) argues that Internet customer capital (customer databank, customer trust, customers' complaint analysis and customer loyalty) and Internet service capital (speed of transaction check, security of transaction, knowledge databank, stability of system, and diversity of services) are significantly correlated with business performance. Another issue is the willingness of firms (particularly micro and small enterprises) to use Internet banking services. According to Flavián et al. (2006), among the main factors influencing the adoption of online banking reported in the literature are: a) security; b) ease of use, perceived benefits in the service, resistance to change, price and availability of infrastructure; c) image, comparative advantage and compatibility; d) attitude, control of behavior, and existing subjective norms; e) compatibility of the new channel with the individual's personality, computer skills and the chance to try it out; and f) trust and satisfaction.

E-Commerce Services

In the current competitive business environment, marketing can be seen as a matrix of business activities organized to plan, produce, price, promote, distribute goods, service, and ideas for the satisfaction of relevant customers and clients. Achumba &Osuagwu (1994) posit that marketing is important for the success of any organization, whether service- or product-oriented. Chilya et al (2006) confirm that marketing performance is central to success in today's fast moving competitive markets, and measuring marketing's performance is critical to managing it effectively. The process of communicating the value of a product or service to customers, for the purpose of selling the product or service has become complex in recent times due to globalization. There is also the need to exceed the expectation of customers

since satisfied customers : (i)are the organization's least expensive customers; (ii)buy again and again; (iii) talk favourably about the business, which means free advertising; (iv) pay less attention to competition and (iv)tend to buy new products or equipment lines an organization may add later(Kotler,1988).

Marketing has been described by the American Marketing Association (2013) as the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large. Typically, marketers have a range of tools they use and these include mega marketing (Kotler, 1986) and the so-called "4Ps" of marketing (McCarthy,1995) among others. Mega marketing is a term used to describe the type of marketing activity required when it is necessary to manage elements of the firm's external environment (governments, the media, pressure groups, etc.) as well as the marketing variables; but two more Ps (public relations and power) are sometimes added to the marketing mix so as to ensure that the firm is competitive in the market (Kotler, 1986). "Marketing" seems easy to describe, but extremely difficult to practice (Kotler & Connor,1997). Marketing have evolved, and it involves an assessment and the inclusion of various stakeholders in the decision making process(Darroch et al. 2004; AMA 2008).It is therefore important for banks to develop and implement efficient and effective marketing strategies through mbanking services which will incorporate relevant dimensions of the marketing concept. This involves the organic tasks of selecting a target market (customers/clients) in which to operate and developing an efficient and effective marketing ingredient combination (Kotler & Connor, 1997).

According to UNCTAD(2010)'s recent Information Economy Report shows how ICT use by micro- and small and medium-sized enterprises (SMEs) has improved not only business performance but has helped improve livelihoods in some of the world's poorest regions and

communities. Many entrepreneurs in developing countries now have a real possibility to benefit from ICTs in their business activities. In many cases, this has resulted in gains in enhanced productivity. By improving communication channels, both domestically and internationally, the application of relevant ICTs can greatly enhance the competitiveness of business. Government efforts to further improve, upgrade and expand ICT use by the private sector should, therefore, be reinforced. UNCTAD's study finds that governments and their various partners, including the private sector, are far from taking full advantage of the opportunities that are emerging in the new ICT landscape. This is evident in part from the relatively limited attention that has been given to ICTs in strategies aimed at promoting private sector development (PSD)

Methodology

This study will use descriptive research design. This design refers to a set of methods and procedures that describe variables. It involves gathering data that describe events and then organizes, tabulates, depicts, and describes the data. Descriptive studies portray the variables by answering who, what, and how questions (Bernard, 2011). The target population in this case was all the registered Small and Medium Enterprises and individual users within Bungoma CBD, a total of 3680 legally registered as medium and small business Enterprises in Bungoma CBD. The sample size for the study was 360.

The study used questionnaire as the research instrument to collect primary data while Secondary data was obtained from literature sources or data collected by other people for some other purposes.

Data collected was analyzed using both quantitative and qualitative methods with the help of (SPSS) version 21 and excel. Data processing was carried out through editing, coding and classification. Content analysis was employed to analyze the qualitative data whereas

statistical methods, regression and correlation analysis was utilized to analyze the quantitative data. In order to analyze the relationship between the independent variables and the dependent variable the study used multiple regression analysis at 5% level of significance. The Multiple Regression model that aided the analysis of the variable relationships was as follows:

$$\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon,}$$

Where; Y= Performance of SMEs(dependent variable); β0= constant (coefficient of intercept); X_1= Mobile banking transfer service(independent variable); X2= Internet banking service(independent variable);X_3= Ease access to finance services(independent variable);X_4= E- commerce services(independent variable);ε = Error term; β1…β_4= regression coefficient of four variables. To test the level of significance of each independent variable against dependent variable the study will use the model summary ANOVA and Coefficient Regression.

Results of Findings

The study targeted a sample size of 160 respondents from which 100 filled in and returned the questionnaires making a response rate of 62.50%

Mobile Banking Service

The study results revealed that 68% of the respondents stated that it provided efficient and affordable services, 70% of the respondents stated that it reduced risks of payment, 72% posited that it enhances quality and quantity operations of activities to meets enterprise objectives and 66% stated that it enhances decision making and problem solving. This infers that mobile payment influence increases number of newly established branches of the MSEs in the study area. The study findings are in agreement with literature review by Omwansa(2009) who stated that mobile money service, designed to help SMEs streamline

their operations has received overwhelming uptake in Kenya since its introduction as the mobile payment influemce performance of SMEs. This success is attributed to the service being affordable and accessible (Mbogo 2010) including low income earners. The technological invention is considered easy to use yet efficient and reliable with the potential to extend financial services to the unbanked or those preferring cheaper financial services.

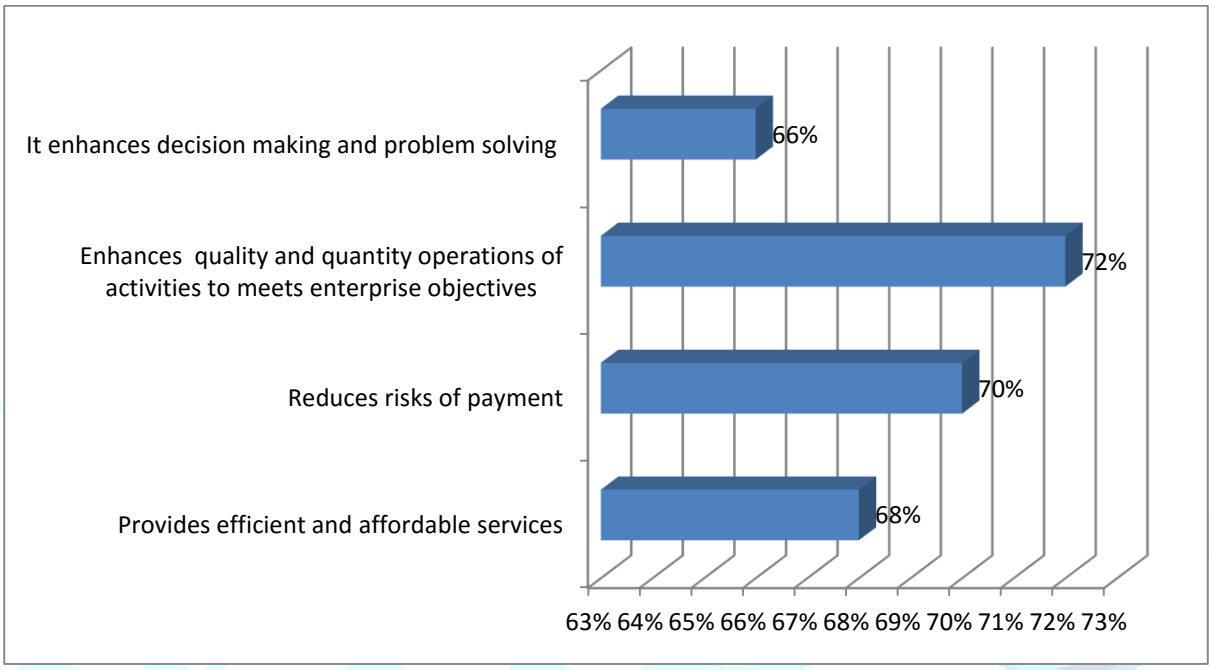

Figure 2: Mobile payment on increase of number of newly established branches

The study results revealed that 68% of the respondents stated that it Makes payment accessible especially to low income earners, provided efficient and affordable services, 75% of the respondents stated that it facilitates services that are not well served by conventional banking, 72% posited that it enhances quality and quantity operations of activities to meets enterprise objectives and 66% stated that it enhances decision making and problem solving. This infers that mobile payment influence increases profits of the MSEs in the study area. The study findings are in tandem with literature review by Mbogo(2010) who observed that SMEs needs for payment and transactional services are not always well served by

conventional banks since they do not always find it easy or cost effective to adopt a full-feature package for banking services (to enhance their performance.

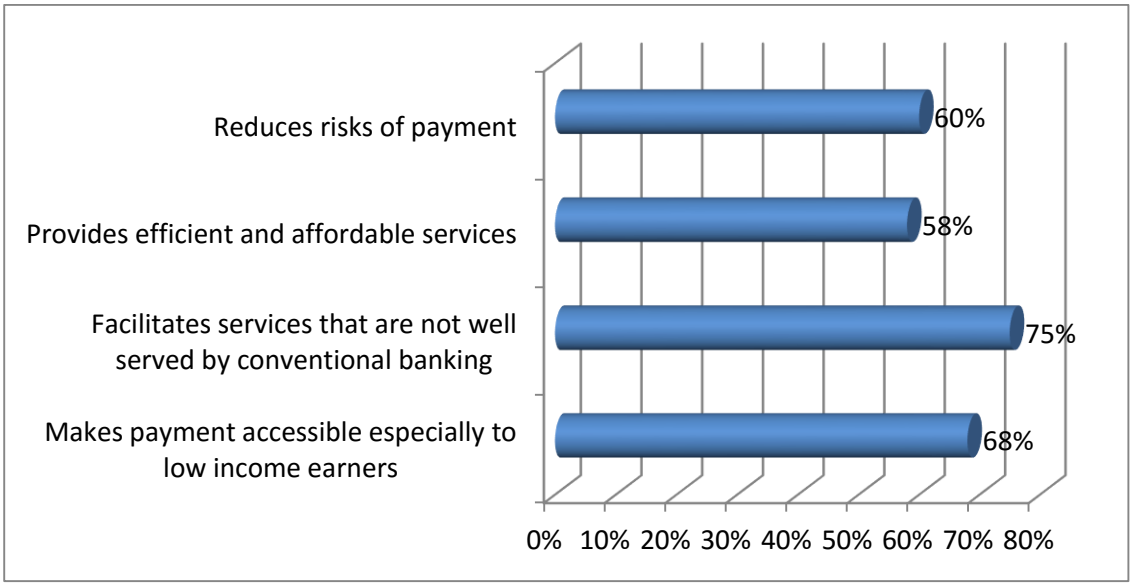

Figure 3: Mobile payment on increase of profits

The study results revealed that 86% of the respondents stated that it provided efficient and affordable services, 72% of the respondents stated that it reduced risks of payment, 68% posited that it enhances quality and quantity operations of activities to meets enterprise objectives and 56% stated that it enhances decision making and problem solving. This infers that mobile payment influence increases number of employees of the MSEs in the study area. The study results concurs with literature review by Higgins, Kendall & Lyon (2012) who indicated that the extensive coverage of mobile service providers has not only resulted to high rates of convenience, but has made the service effective and reliable as a form to send money with the interface between agents and customers functioning with minimal complaints from customers. This is even so witnessed as the number of agents continues to increase as more sophisticated banking services are added to the mobile money platform hence influencing performance of SMEs

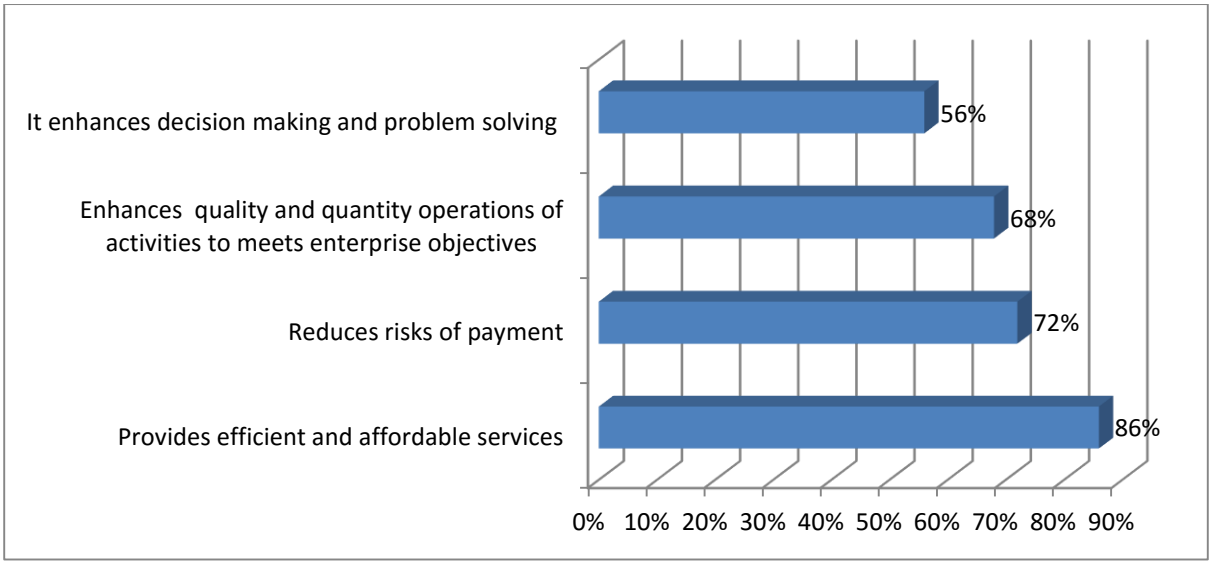

Figure 4: Mobile payment on increase of number of employees

The study results revealed that 68% it facilitates services that are not provided by the conventional banks, 76% indicated that it provides efficient and affordable services, 64% stated that it reduces risks of receipt, 56% posited that it enhances quality and quantity operations of activities to meets enterprise objectives, 80% indicated that it enhances decision making and problem solving and 72% of the respondents stated that it streamline their operations. This infers that mobile receipt influence increases number of newly established branches of the MSEs in the study area. The study results are in agreement with literature review by Jack & Suri (2011) who observed that the benefits of cashless transaction including less opportunity for fraudulent and criminal activities, and mobile money technology have increased adoption rates among SMEs.

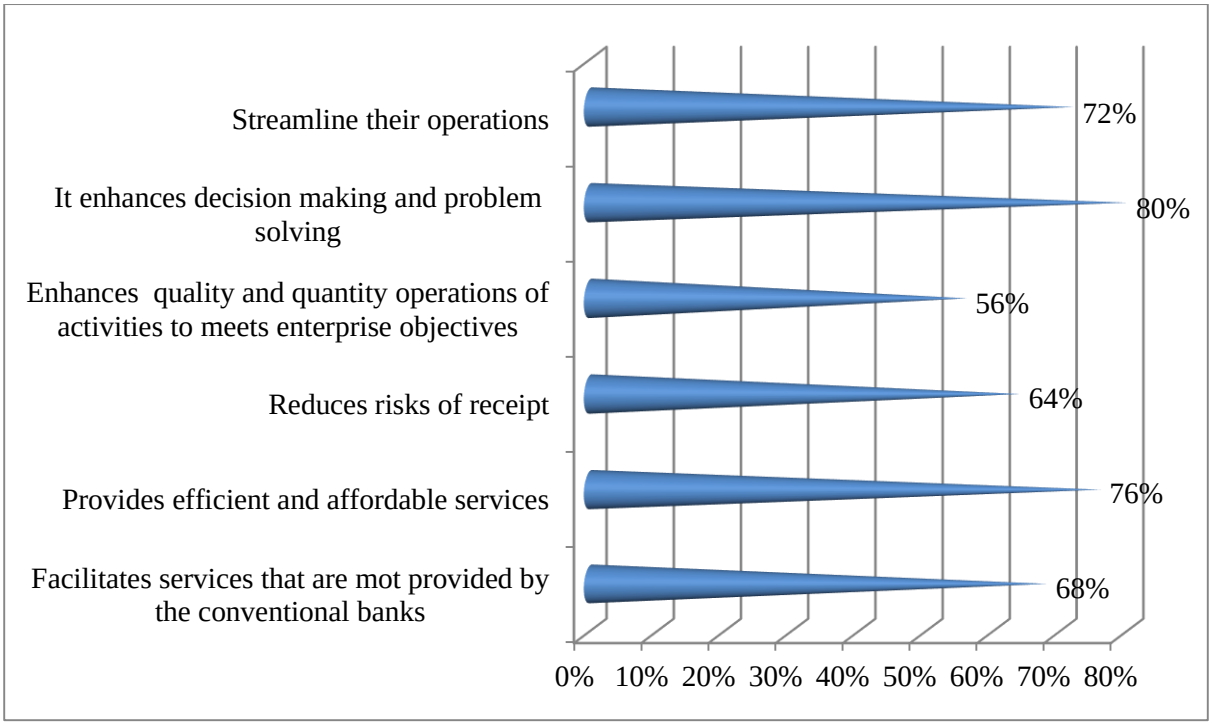

Figure 5: Mobile receipt on increase of newly established branches

The study results shows that 64% it facilitates services that are not provided by the conventional banks, 68% indicated that it provides efficient and affordable services, 78% stated that it reduces risks of receipt, 56% posited that it enhances quality and quantity operations of activities to meets enterprise objectives, 62% indicated that it enhances decision making and problem solving. This can be deduced that mobile receipt influence increases profits of the MSEs in the study area.

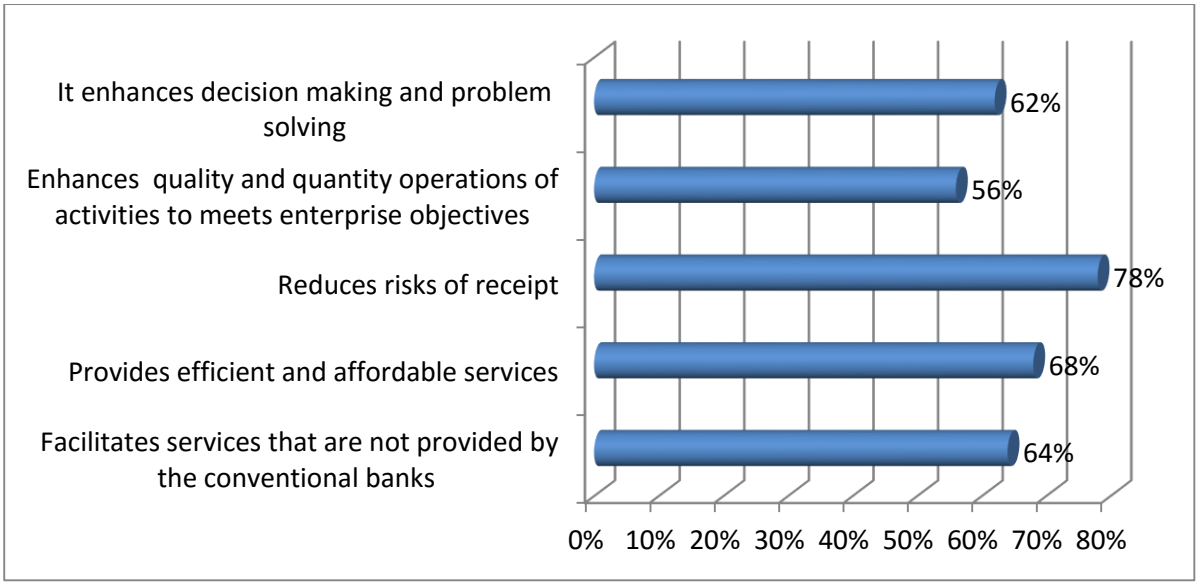

Figure 6: Mobile receipt on increase of profits of MSEs

From the study results the respondents stated that 82% it facilitates services that are not provided by the conventional banks, 68% indicated that it provides efficient and affordable services, 50% stated that it reduces risks of receipt, 64% posited that it enhances quality and quantity operations of activities to meets enterprise objectives, 54% indicated that it enhances decision making and problem solving. This implies that mobile receipt influence increase number of new employees of the MSEs in the study area. The study results conforms to literature review by Higgins, Kendall & Lyon (2012) who observed that the extensive coverage of mobile service providers has not only resulted to high rates of convenience, but has made the service effective and reliable as a form to send money with the interface between agents and customers functioning with minimal complaints from customers and have increased adoption rates among SMEs

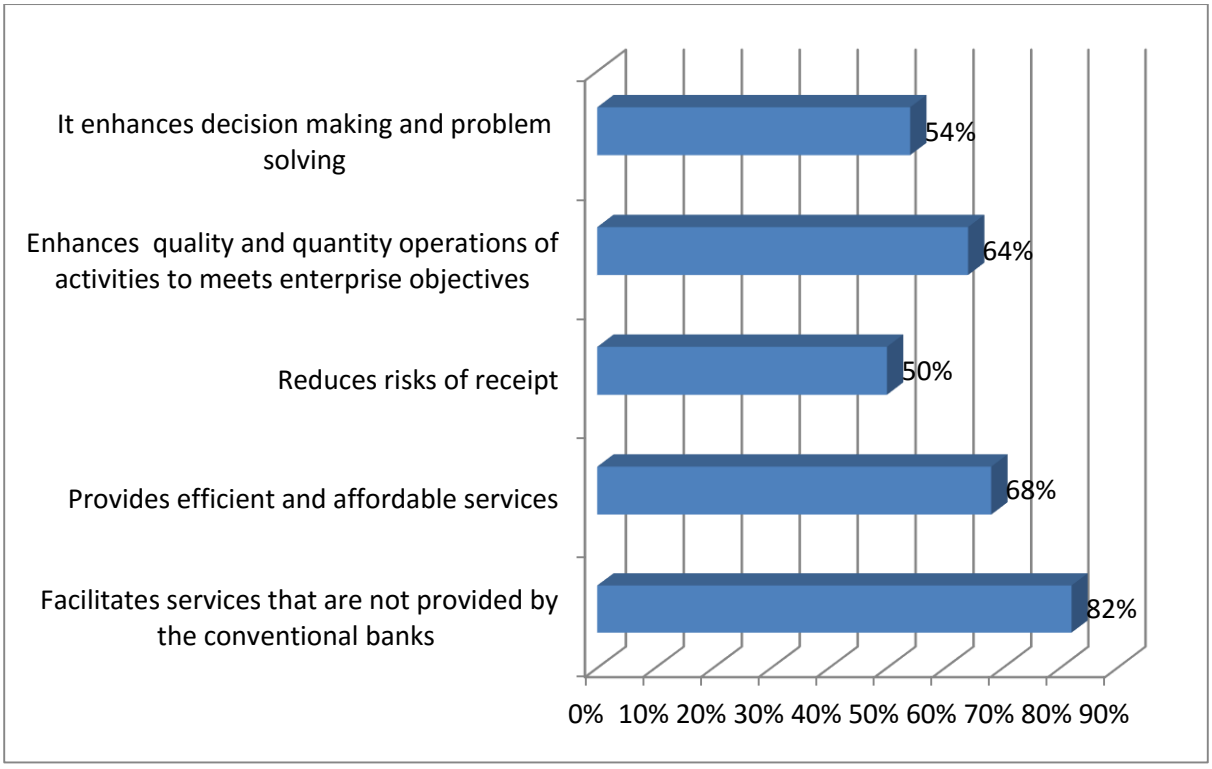

Figure 7: Mobile receipt on increase number of employees of MSEs

The study results revealed that 66 % it facilitates services that are not provided by the conventional banks, 88% indicated that it provides efficient and affordable services, 60% stated that it reduces risks of receipt, 62% posited that it enhances quality and quantity operations of activities to meets enterprise objectives, 48% indicated that it enhances decision making and problem solving and 64% of the respondents stated that it streamline their operations. This implies that mobile transactional influence increases number of newly established branches of the MSEs in the study area.

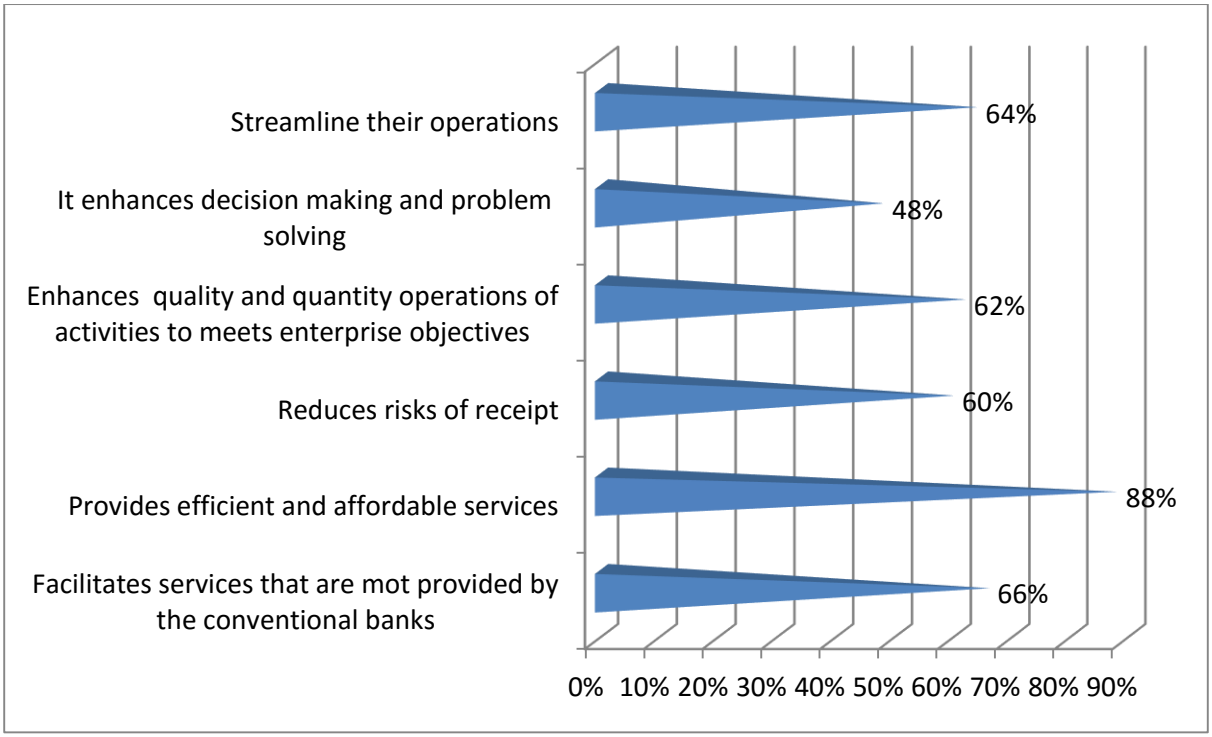

Figure 8: Mobile transactional on increase number of employees of MSEs

The results revealed that 68% of the respondents stated that it makes payment accessible especially to low income earners, provided efficient and affordable services, 72% of the respondents stated that it facilitates services that are not well served by conventional banking, 68% posited that it Provides efficient and affordable services and 58% stated that it enhances quality and quantity operations of activities to meets enterprise objectives. This infers that mobile transactional influence increases profits of the MSEs in the study area. According to Jack & Suri(2011) the benefits of cashless transaction including less opportunity for fraudulent and criminal activities, and mobile money technology (Wishart 2006) have increased adoption rates among SMEs in the capital city (Mbogo 2010). Even though current research suggests that mobile phone coverage and adoption has a positive impact on risk reduction, market improvement, coordination amongst firms and labor market (Jenny and Mbiti, 2010).

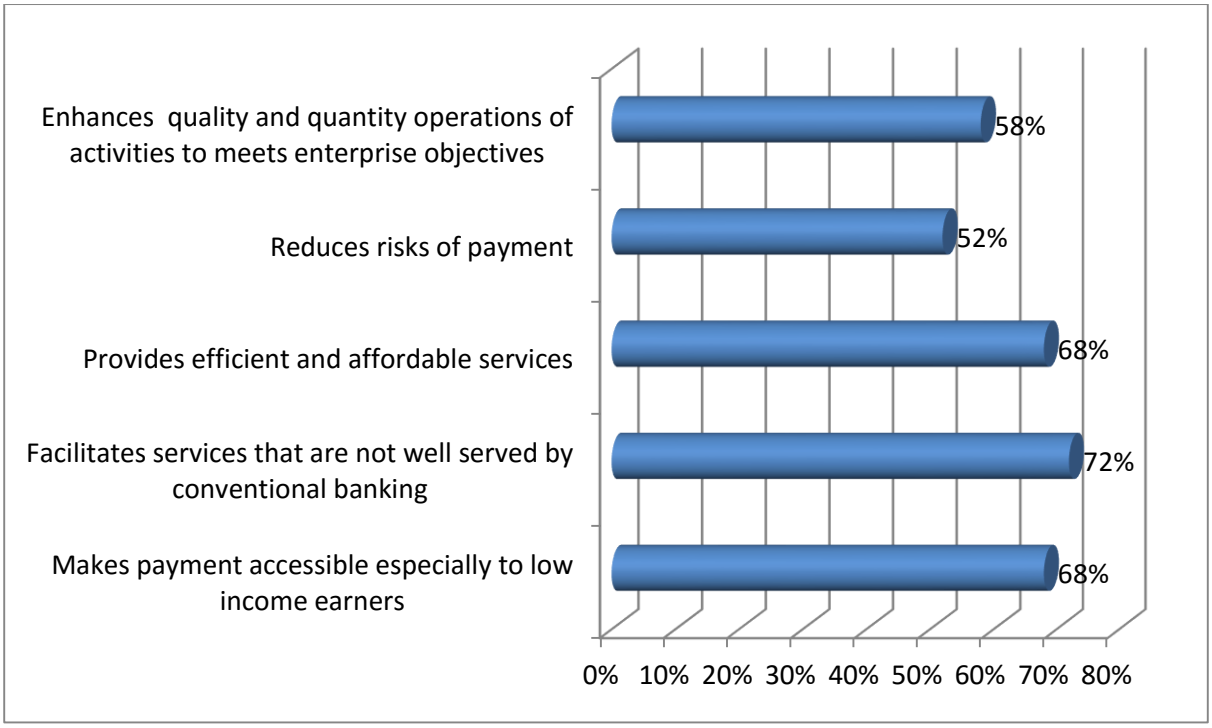

Figure 9: Mobile transactional on increase of profits

Further, the respondents were asked to indicate whether the mobile transactional influence increases number of employees of the MSEs in the study area. From the study findings 70% of the respondents stated that it makes payment accessible especially to low income earners, provided efficient and affordable services, 76% of the respondents stated that it facilitates services that are not well served by conventional banking, 64% posited that it Provides efficient and affordable services, 82% stated that it reduces risks of payment and 58% stated that it enhances quality and quantity operations of activities to meets enterprise objectives. This can be deduced that mobile transactional influence increases number of employees of the MSEs in the study area Mobile money service, designed to help SMEs streamline their operations (Omwansa 2009), has received overwhelming uptake in Kenya since its introduction in 2007. This success is attributed to the service being affordable and accessible (Mbogo 2010) including low income earners. The technological invention is considered easy to use yet efficient and reliable with the potential to extend financial services to the unbanked or those preferring cheaper financial services. It is an appropriate technological invention for

SMEs that continue to face challenges related to limited affordable and accessible financial services to support business operations. SMEs needs for payment and transactional services are not always well served by conventional banks since they do not always find it easy or cost effective to adopt a full-feature package for banking services (Higgins, Kendall & Lyon, 2012).

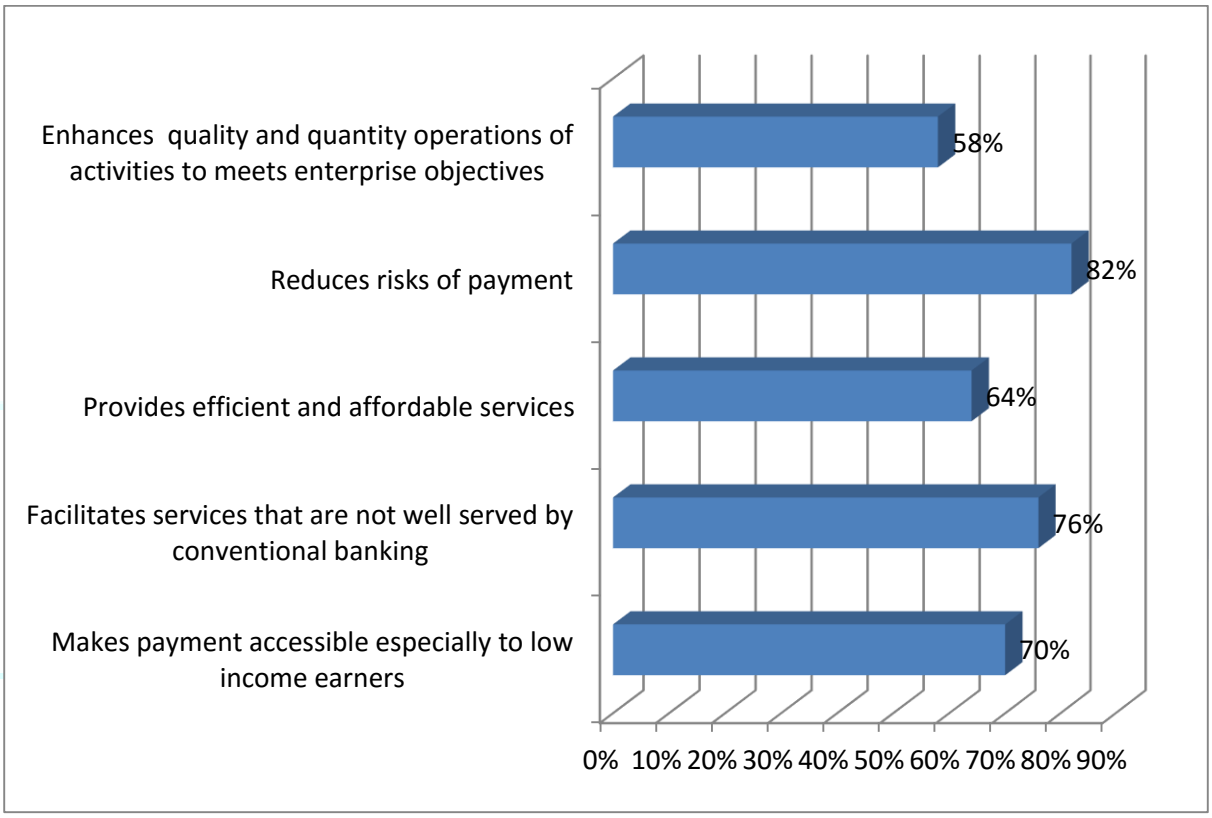

Figure10: Mobile transactional on number of employees

Access to finance services

The study sought to find out whether the mobile banking influences number of newly established branches of MSEs in the study area. From the study findings in Figure 11, the study results revealed that 64% of the respondents stated services are effective and reliable, 72% of the respondents stated that provides efficient and affordable services, 64% posited that it provides efficient and affordable services, 67% stated that it less opportunity for fraudulent and criminal activities and 68% stated that it enhances quality and quantity operations of activities to meets enterprise objectives. This infers that mobile transactional influence increases number of employees of the MSEs in the study area. The study results are in agreement with literature review by Pagani (2004), states that accessibility (ability to reach the required services) is one of the main advantages of mobile payment services. Small and micro businesses are among the greatest beneficiaries of using M-Pesa mobile payment. With more time in the business, more customers are served leading to increased sales and therefore growth of the business. The transaction costs of sending money through the mobile payment technology are lower than those of banks and money transfer companies (Omwansa, 2009). The cost of the mobile payments is affordable to most of the micro business operators and far below what the banks normally charge for their bank transactions. The reduced cost of transactions positively influences the growth of the business.

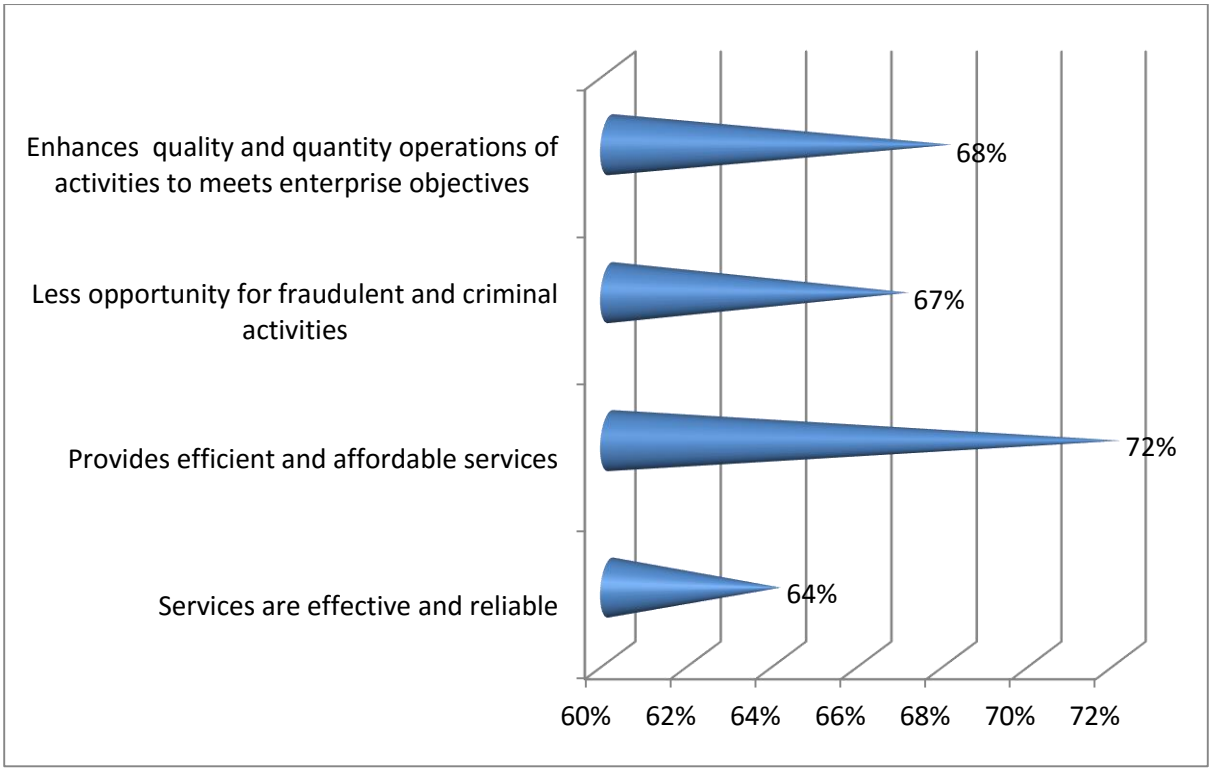

Figure 11: Mobile banking on number of newly established branches of MSEs

Internet banking Services

The study sought to establish whether internet banking capital influence increase number of newly established branches of the MSEs in the study area. According to Figure 12, the study results show that 76% of the respondents stated that it embodies radical organizational changes through the adoption of Internet business solutions, 68% of the respondents stated that it help firms to increase revenue through externally focused initiatives, such as new market expansion new products and services development, 52% posited that it primarily lead to higher efficiency and reduced costs through improvement of internal processes in key business areas. This implies that internet banking capital influence increase number of newly established branches of the MSEs in the study area The study findings are in agreement with the study by Varian et al. (2002) estimated the impact of the Internet on productivity and growth based on the assessment business areas the impact of IBS on costs savings and

productivity based on business indicators such as annual revenue, gross and net margin, costs of production, and perceptions of general organizational improvements.

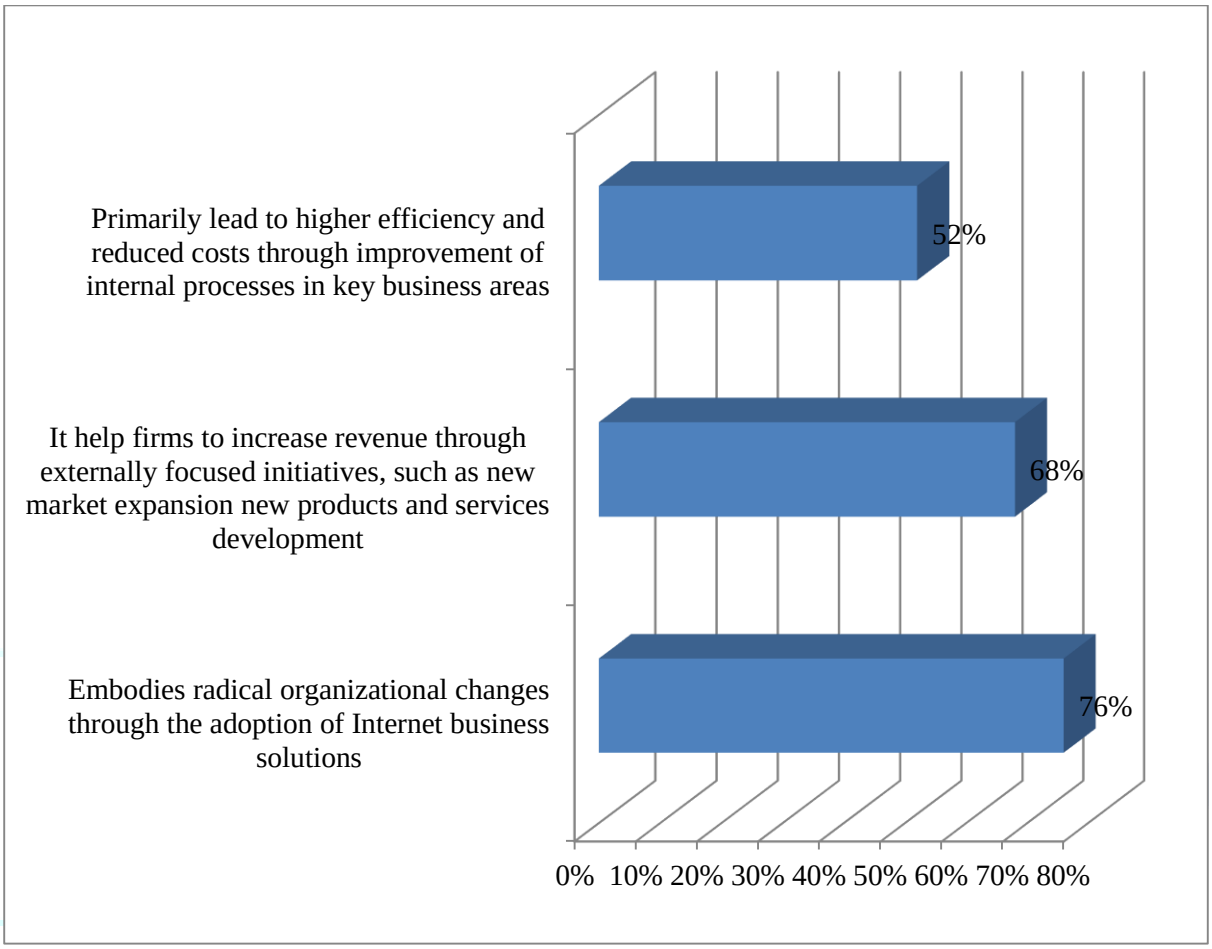

Figure 12: Internet banking capital on newly established branches

Performance of SMEs

The study established that majority of the respondents (70%) indicated no new branch was opened, 15% of the respondents posited between 1 to 5 new branches of the enterprises were established, 5% posited 6 to 10 new branches and 3 % of the respondents stated 10 to 15 new branches established and 7% stated that over 15 new branches have been established in the last five years. This can imply that majority of the women SMEs were not could not open even a single branch thus they were performing poorly in the last five years.

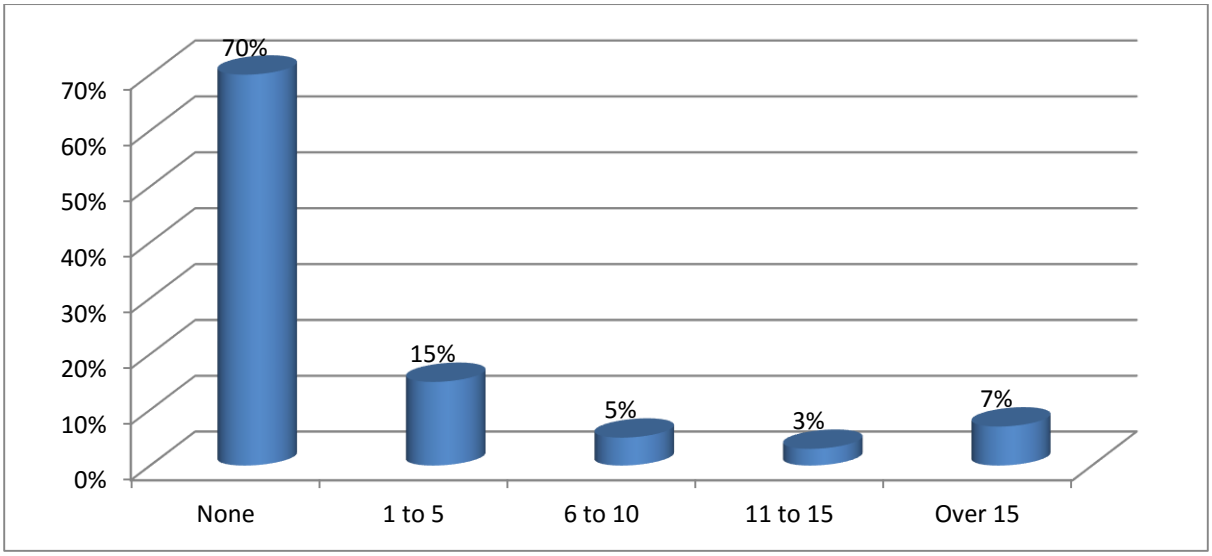

Figure 13: Number of newly established branches

The research sought from the respondents to indicate the profitability of their enterprises in the last 5 years (2011 to 2015).From the study findings as shown in Figure 12 there was decrease on the amount of profits in many of the organizations in the study area. This infers that majority of the enterprises were not likely to be sustainable in future since they were not rising in terms profit making.

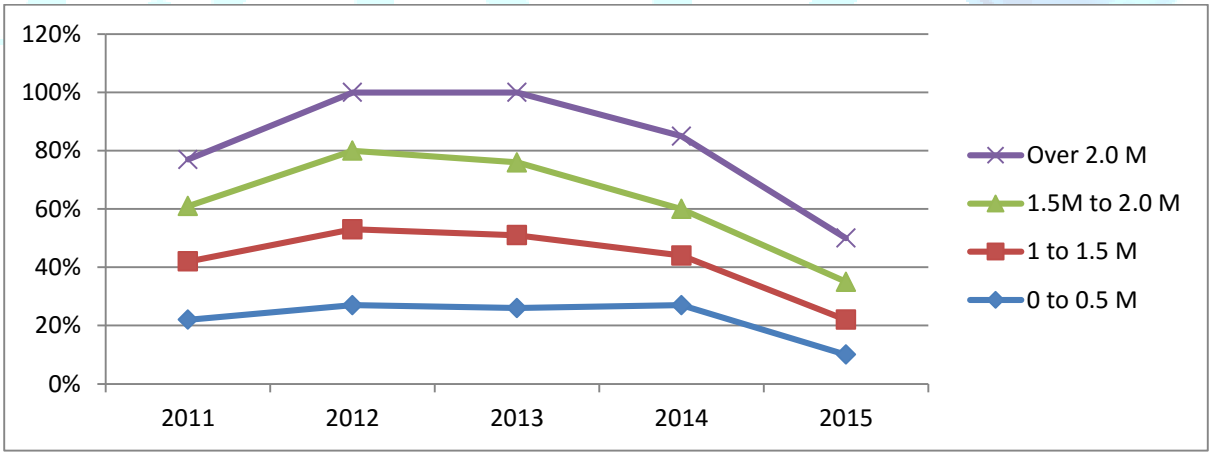

Figure 14: Trend on Profits of the organization (Year 2011 to 2015)

The respondents were kindly requested to indicate the number of new employees added in their enterprises in the last five years (2011 to 2015) and as illustrated in Figure 12, the study established that majority of the respondents (49%) indicated no between 1 to 5 new

employees were added in the enterprises, 25% of the respondents posited between 6 to 10 new employees, 14% posited 11 to 15 new employees and 12% of the respondents stated over 15 new employees have been recruited in the established enterprises in the last five years. This can imply that majority of the women SMEs were could not hire more employees since they were not performing well.

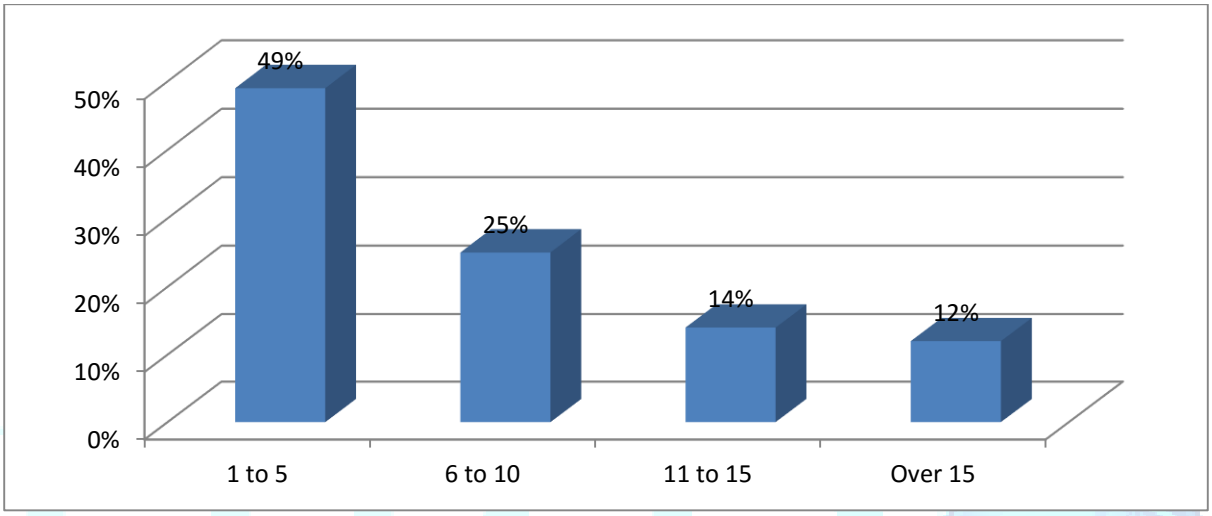

Figure 15: Increase of new of employees

Correlation Analysis

Pearson correlation was used to measure the degree of association between variables under consideration (independent variables and the dependent variables). Pearson correlation coefficients range from -1 to +1. Negative values indicates negative correlation and positive values indicates positive correlation where Pearson coefficient <0.3 indicates weak correlation, Pearson coefficient >0.3<0.5 indicates moderate correlation and Pearson coefficient>0.5 indicates strong correlation. The analysis of correlation results in Table 1 illustrates that between mobile banking services and performance of SMEs there is a positive coefficient 0.802, with p-value of 0.003. It indicates that the result is significant at α =5% and that if the access to finance increases it will have a positive impact on performance of SMEs. The correlation results between access to finance services and performance of SMEs also indicates the same type of result where the correlation coefficient is 0.900 and a p-value of 0.001 which significant at α = 5%. The results also show that there is a positive association between internet banking services and performance of SMEs where the correlation coefficient is 0.760, with a p-value of 0.007. Further, the result shows that there is a positive association between e-commerce services and performance of SMEs where the correlation coefficient is 0.704, with a p-value of 0.009. This therefore infers that access to finance services contributed most to performance of SMEs followed by mobile banking services in performance of SMEs, then internet banking services while e-commerce services had the least influence on performance of SMEs. The correlation matrix implies that the independent variables are very major determinants of performance of SMEs as shown by their strong positive relationship with the dependent variable; performance of SMEs.

Table 1: Correlation Coefficients

		performance of SMEs	Mobile banking services	Access to finance services	Internet banking services	E-commerce services
Perfomance of SMES	R	1.000				
	Sig. (2-tailed)	.				
	N					
Mobile banking services	R	.802				
	Sig. (2-tailed)	.003				
	N	100				
Access to finance services	R	.900	1.000			
	Sig. (2-tailed)	.001	.			
	N	100	100			
Internet banking services	R	.760	.142	1.000		
	Sig. (2-tailed)	.007	.001	.		
	N	100	100	100		
E-commerce services	R	.704	.054	.065	1.000	
	Sig. (2-tailed)	.009	.000	.001	.	
	N	100	100	100	100	

* Correlation is significant at the 0.05 level (2-tailed)

Multiple Regression Analysis

The study applied the statistical package for social sciences (SPSS V. 21) to code, enter and compute the measurements of the multiple regressions for the study. According to the model summary Table 2, R is the correlation coefficient which shows the relationship between the indepednt variables and depedent variable. It is notable that there extists strong positive relationship between the indepedent variables and depedent variable as shown by R value (0.899). The coefficient of determination (R^2) explains the extent to which changes in the

dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable and the four independent variables that were studied explain 86.70% of the performance of SMEs as represented by the R^2. This therefore means that other factors not studied in this research contribute 13.30% to the performance of SMEs. This implies that these variables are very significant therefore need to be considered in any effort to boost performance of SMEs in the study area. The study therefore identifies variables as critical determinants of performance of SMEs in the study area.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.867	.752	.643	.023

The study revealed that the significance value is 0.001 which is less that 0.05 thus the model is statistically significance in predicting how mobile banking services, access to finance services, internet banking services and E-commerce services affect performance of SMEs. The F critical at 5% level of significance was 31.543. Since F calculated (45.876) is greater than the F critical (value = 31.543), this shows that the overall model was significant.

Table 3: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	32.543	4	4.245	45.876	.008[a]
	Residual	33.765	95	.1683		
	Total	66.308	99			

NB: F-critical Value = 31.543; **Predictors: (Constant):** Mobile banking services, Access to finance services, Internet banking services and E-commerce services

The Multiple regression analysis was conducted as to determine the relationship between performance of SMEs and the four variables. As per the SPSS generated table below, the model equation would be ($\mathbf{Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon}$) becomes: Y= 25.876+ 0.7860+0.687X_2+ 0.654X_3 + 0.581X_4. This indicates that Performance of SMEs = 25.876+ 0.7860(Access to finance services) + 0.68(Mobile banking services) + 0.654(Internet banking services) + 0.581 (E-commerce services). According to the regression equation established, taking all factors into account (Mobile banking services, Access to finance services, Internet banking services and E-commerce services) constant at zero performance of SMEs was 25.876. The data findings analyzed also shows that taking all other independent variables at zero, a unit increase in mobile banking services will lead to a 0.687 increase in Performance of SMEs.; a unit increase in access to finance services will lead to a 0.786 increase in Performance of SMEs, a unit increase in internet banking services will lead to 0.654 increase in Performance of SMEs and a unit increase in E-commerce services will lead to 0.581 increase in Performance of SMEs. This infers that access to finance services contributed most to Performance of SMEs. At 5% level of significance, mobile banking services had a 0.003 level of significance; access to finance services showed a 0.001 level of significance, internet

banking services showed a 0.007 level of significance and E-commerce services showed a 0.009 level of significance hence the most significant factor was access to finance services.

Table 4: Regression Coefficient Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	P-value.
		B	Std. Error	Beta		
1	(Constant)	25.876	.223		2.615	.007
	Mobile banking services	.687	.293	.502	6.098	.003
	Access to finance services	.786	.150	.554	7.087	.001
	Internet banking services	.654	.247	.416	5.008	.007
	E-commerce services	.587	.273	.403	4.546	.009

Optimal Model; $Y= 25.876+ 0.7860+0.687X_2+ 0.654X_3 + 0.581X_4$.

Summary of the Findings

The study sought to establish whether mobile banking services influenced performance of SMEs. From the descriptive analysis, the study results revealed that mobile payment of the organization influence increase number of newly established branches through provides efficient and affordable services, reduces risks of payment, enhances quality and quantity operations of activities to meets enterprise objectives, it enhances decision making and problem solving The mobile payment also influence increase profits of the enterprise by making payment accessible especially to low income earners, facilitates services that are not well served by conventional banking, provides efficient and affordable services and reduces

risks of payment. From study results the respondents stated mobile banking on collateral to increase number of newly established branches as the services are effective and reliable, provides efficient and affordable services, less opportunity for fraudulent and criminal activities, enhances quality and quantity operations of activities to meets enterprise objectives, reduces time spent to bank less often ant spend more time running business for more opportunities, easy to operate and require no formal training before use, reduced costs than conventional banks, more customers served leading to increased sales

From the descriptive analysis, the respondents stated that it embodies radical organizational changes through the adoption of Internet business solutions, it help firms to increase revenue through externally focused initiatives, such as new market expansion new products and services development, primarily lead to higher efficiency and reduced costs through improvement of internal processes in key business areas. The internet banking capital influence increase profits of the enterprise as it reduces time spent to bank less often ant spend more time running business for more opportunities, easy to operate and require no formal training before use, reduced costs than conventional banks and more customers served leading to increased sales. The internet service capital affect increase on number of new employees as it provides efficient and affordable services, reduces risks of payment, enhances quality and quantity operations of activities to meets enterprise objectives and enhances decision making and problem solving .

The internet service capital increase number of newly established branches as the services are effective and reliable, provides efficient and affordable services, less opportunity for fraudulent and criminal activities, enhances quality and quantity operations of activities to meets enterprise objectives The internet service capital increase profits of the enterprise as it reduces time spent to bank less often ant spend more time running business for more opportunities, easy to operate and require no formal training before use, reduced costs than conventional banks , more customers served leading to increased sales . The banking perceived benefits affect increase number of new employees as it provides efficient and affordable services, reduces risks of payment, enhances quality and quantity operations of activities to meets enterprise objectives, it enhances decision making and problem solving. It also offers security and ease of use, perceived benefits in the service, resistance to change, price and availability of infrastructure;

Conclusions of the Study

The study revealed that mobile banking services influenced performance of SMEs. It led to increase number of newly established branches through provides efficient and affordable services, reduces risks of payment, enhances quality and quantity operations of activities to meets enterprise objectives, it enhances decision making and problem solving The mobile payment also influence increase profits of the enterprise by making payment accessible especially to low income earners, facilitates services that are not well served by conventional banking, provides efficient and affordable services and reduces risks of payment

Additionally, study results showed that mobile banking on collateral to increase number of newly established branches as the services are effective and reliable, provides efficient and affordable services, less opportunity for fraudulent and criminal activities, enhances quality and quantity operations of activities to meets enterprise objectives, reduces time spent to

bank less often ant spend more time running business for more opportunities, easy to operate and require no formal training before use, reduced costs than conventional banks, more customers served leading to increased sales Further, the study established that radical organizational changes through the adoption of Internet business solutions, it help firms to increase revenue through externally focused initiatives, such as new market expansion new products and services development, primarily lead to higher efficiency and reduced costs through improvement of internal processes in key business areas.

Recommendations of the Study

The study recommends for effective mobile banking services to enhance performance of SMEs. The entrepreneurs should be made to understand the importance of mobile banking services such as it provides efficient and affordable services, reduces risks of payment, enhances quality and quantity operations of activities to meets enterprise objectives, making payment accessible especially to low income earners, facilitates services that are not well served by conventional banking, provides efficient and affordable services and reduces risks of payment

Additionally, study results recommends for internet banking services to enable entrepreneurs to have collateral to increase number of newly established branches as the services are effective and reliable, provides efficient and affordable services, less opportunity for fraudulent and criminal activities, enhances quality and quantity operations of activities to meets enterprise objectives, reduces time spent to bank less often ant spend more time running business for more opportunities.

Further, the study recommends for radical organizational changes through the adoption of Internet business solutions, it will help firms to increase revenue through externally focused initiatives, such as new market expansion new products and services development, primarily lead to higher efficiency and reduced costs through improvement of internal processes in key business areas. The internet banking capital can also enable organization to increase profits though e–marketing, customer service and support, finance and accounting and human resources.

Recommendations for Further studies

Since this study sought to establish the influence of electronic money banking transfer services on performance of SMEs in Kenya, it was established that from literature review that there are scanty studies available on performance of SMEs specifically in Kenya. Therefore, study recommends for similar studies to be undertaken in other SMEs in other areas for generalization of the findings of this study. Additionally, the study did not tie the selected factors of electronic money transfer services as the only determinants of performance of SMEs. Thus, there is need to undertake another research to examine the other factors of electronic money transfer services which could be influencing performance of SMEs in Kenya..Thus, the findings of this study serve as a basis for future studies on performance of SMEs and on these enterprises. Performance of SMEs as a result of electronic money transfer services, has not been widely studied which presents gaps in African and Kenyan contexts. The study has contributed to knowledge by establishing that mobile banking services, access to finance services and internet banking services influence performance of SMEs of these enterprises in the Kenyan context

REFERENCES

Adeya N. (2003). Potential Uses of ICTs by Small and Micro Enterprises in Ghana and Kenya. U/INTECH.

Anurag, S, Tyagi, R, and Raddi S (2009).“Mobile Payment2.0:The Next-Generation Model,” in *HSBC”s Guide to cash, Supply Chain and Treasury Management in Asia Pacific.Ed.178-183.*

Balasubramanian, S., Peterson, R.A., & Jarvenpaa, S.L.(2002).Exploring the implications of m-commerce for markets and marketing. *Journal of the Academy of Marketing Science*, 30(4), pp. 348-361.

Barnes & Corbitt (2003) Mobile banking: concept and potential, *international of mobile communications*, 1(3); 273-278.

Cavana, R.Y., Delahaye, B.L. and Sekaran, U. (2001) *Applied Business Research: Qualitative and Quantitative Methods*, John Wiley and Sons Australia Ltd.

CGAP. (2006). Mobile Phone Banking and Low -Income Customers Evidence from South Africa. Retrieved from:http://www.globalproblems-globalsolutions-iles.org

Choi, K-S. Cho, W-H. Lee, S. Lee, H. &Kim, C. (2004). The relationships among quality, satisfaction and behavioral intention in health care provider choice: a South Korean study. *Journal of Business Research*, vol. 57, pp. 913-921.

Chong,S., Pervan,G.,& Bauer,C. (2001). Implementation Success of Internet-based Electronic Commerce for Small-and Medium-sized Enterprises in Australia. *14th International Bled Electronic Commerce Conference*, Bled, Slovenia, June 25-26.

Davis,F.D.(1985,1989).Perceived usefulness, perceived ease of use and end user acceptance of information technology.MIS Quarterly,13(3):319-340.Retrieved from: http://www.jstor.org/stable/249008

Dooner, J.(2005). 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.

Duncombe, R. and Boateng, R. (2009). What Every Business Student Needs to Know About Information Systems. *Communications of the Association for Information Systems*, 9, 467-477.

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 28th April, 2009.

Featherman, M.S. & Pavlou, P.A (2003). Predicting e-services adoption: a perceived risk facets perspective. *International Journal of Human-Computer Studies*, vol. 59, pp. 451-474.

Finance, including E-Finance to Enhance Enterprise Development,." *A Paper Presented in Expert Group Meeting, Geneva* 22-24: 1-19.

Fraser, J., N. Fraser, *et al*. (2000). "The strategic challenge of electronic commerce." *Supply Chain Management:* An International Journal 5(1): 7-14.

Giovanni F. & Mario A.(2003). Small company attitude towards ICT based

solutions:some key-elements to improve it. Educational Technology & Society, Hershey, PA: Idea Group Publishing Guthrie

Hallberg, K. (2000). A market-oriented strategy for small and medium enterprises. In *IFC Discussion Paper no. 40, 2000,* The World Bank, Washington,DC.

Hawkins, R. & A. Prencipe (2000). "Business-to-Business E-Commerce in the UK: *A Synpaper of Sector Reports Commissioned by the Department of Trade and Industry. DTI, London.*"

infoDEV.(2006).*Micro-payment systems and their application to mobile networks.* http://infodev.org/files/3014_file_infoDev.Report_m_Commerce_January.2006.

Hughes, N. & Lonie, S. (2007). M-PESA: Mobile money for the "Unbanked". *Turning Cell Phones into 24-Hour Tellers in Kenya. Kenya.*

ITU, (2009). Information Society Statistical Profiles 2009:*Africa.* Retrieved

from: http://www.itu.int/dms-pub/itu-d/opb/ind/ .

Ivatury, G., & Mas, I. (2008). The early experience with branchless banking .

Washington, DC: CGAP.

Ivatury, G. & Pickens, M. (2006). Mobile phone banking and low-income customers:

Evidence in Africa. *Washington, DC: Consultative group to assist the poor (CGAP) And United Nations Foundation.*

Kaplan,S. & M. Sawhney(2000)."E-hubs: The new B2B marketplace." *Harvard Business*

Review May-June (97-103).

Kim, C., Mirusmonov, M., & Lee, I.(2010).An empirical examination of

factors influencing the intention to use mobile payment. Computers in Human Behavior, 26, 310-322.

Koenig-Lewis,N. Palmer, A.& Moll, A.(2010). Predicting young consumers' take up of mobile banking services," *The International Journal of Bank Marketing*, vol. 28, no.5, pp. 410-432.

Koivu, T.(2002). Do Efficient banking sectors accelerate economic growth in transition countries? *Bank of Finland Institute.*

Kumar,Mas&Ignacio(2006): "Banking on Mobiles: Why, How, for Whom?," Consultative Group to Assist the Poor, Focus Note No. 48, Washington DC.

Lal, K. (1996): Information Technology, International Orientation and Performance: A Case Study of Electrical and Electronic Goods Manufacturing Firms in India. *Information Economics and Policy* **8**, pp. 269-280.

Lal, K. (1999): Information Technology and Exports: A Case Study of Indian Garments Manufacturing Enterprises. ZEF Discussion Papers on Development Policy No. 15, Bonn.

Laukkanen. T & Lauronen. J.(2005)."Consumer value creation in Mobile Banking services", *International Journal of Mobile Communications*, vol. 3,no. 4.

Leeladhar,V. (2006). Taking banking services to the common man-financial inclusion. *Reserve Bank of India Bulletin.*

Loudon, K.C. & Loudon, J.P (2005). Management Information Systems; *Organization and technology in the networked enterprise,(6th Edition).* Prentice Hall, Englewood Cliff, NJ.

Loudon, K.C. & Loudon, J.P (2007). Management Information Systems- *Managing the Digital Firm (10th Edition).* Pearson, Prentice Hall, 413.

Luarn, P. & Lin, H.-H(2005). Toward an understanding of the behavioral intention to use mobile banking. *Computers in Human Behavior*, vol. 21, no.6, pp. 873-891.

Lyman, Timothy R, Pickens & Porteus,(2006).“ Regulating Transformational Branchless Banking: Mobile Phones and Other Technology to Increase Access to Finance.” CGAP Focus Note No.43.

Macharia, J. (2009). *Factors affecting E-commerce Adoption*: Nairobi United States, International University.