

# The Use of Mobile Phone Technology and the Performance of Agro Based Small and Medium Enterprises: A Review of Literature

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**Abstract:** Agro based Small and Medium Enterprises (SMEs) are perceived to be a critical component in economic growth in Kenya yet faces many constraints that hinder them from realizing their potential. These SMEs have reacted to changing market forces by adopting innovations aimed at maximizing on their returns as they minimize costs. The use of mobile phone technology is a common aspect of these enterprises. However, the effect this use has had on their performance has remained unclear. The aim of this Independent study paper was to determine the use of mobile phone technology and its effect on the performance of agro based SMEs. Exploratory research design was used based on desk research that involved a review of relevant literature and past studies. Findings of the study indicated that most agro based SMEs used their phones for marketing purposes and for the gathering of information. From the study agro based SMEs have benefited from the use of mobile phones because it has enabled lower operational cost and increased savings. The implications of these findings are that the use of mobile phone technology can improve the performance of agro based SMEs only if the challenges associated with adoption and use of mobile phone technology are addressed. The study concluded that opportunities exist for agro based SMEs to apply mobile phone technology to facilitate communication and access information. The study recommends that the government should improve the network infrastructure, lower mobile phone operation costs, sensitize and build capacity of entrepreneurs on the use of mobile phone technology.

**Key words:** Agro based SMEs, Mobile phone technology, Performance

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## I. Introduction

### Agro Based Small And Medium Enterprises

Small and Medium Enterprises (SMEs) in Kenya have been the focus of national debate for the last thirty years with regards to their role and importance. This has not been a debated topic in Kenya alone, but also in other developing countries.

It is widely believed that SMEs can solve some of the economic challenges faced by the country such as unemployment, lack of much needed technical skills, lack of basic income and low standards of living for people both in urban and rural areas. As such, SMEs have enjoyed a lot of interest and investment from various stakeholders e.g. the government, non-government organizations (NGOs), non-profit organizations and financial institutions. It is important to note that in the rural areas most of the SMEs are agro based.

With the above economic challenges addressed by SMEs it is easy to see that small and medium enterprises are propelling economic growth in Kenya.

Policy makers in various economies have frequently tried to define the concept of SMEs. The different attempts have resulted into multi approach in understanding the concept of SMEs. The idea of SMEs differs from one country to another and its definition is based on the indicators used (Ongo'olo & Awino, 2013). The first criteria, based on the number of employees, defines SMEs as those enterprises below a certain number of workers. The second and third criteria define the SMEs as the degree of legal formality (which has been used to distinguish between the formal and informal sectors) and based on the limited amount of capital and skills per worker respectively (Ongo'olo & Awino, 2013).

In Kenya, the regulatory and institutional framework for the SMEs has been based on the number of employees and the company's annual turnover (MSE Act, 2012). Consequently, the SMEs have been categorized as follows:

Micro enterprises- those with less than 10 workers with annual turnovers of less than Ksh. 500,000 and capital establishment of less than Ksh. 5 million for services or less than Ksh. 10 million for enterprises doing manufacturing.

Small enterprises - those that employ between 10 and 50 workers with annual turnovers between Ksh. 500,000 and Ksh. 5 million and capital formation between Ksh. 5 million and Ksh. 20 million for services or between Ksh. 5 million and Ksh. 50 million for enterprises doing manufacturing (MSE Act, 2012).

The SMEs in Kenya generally consist of manufacturing and trade (wholesale and retail) sub-sections. The portion of the population affected by the substantial engagement in agriculture by SMEs is large; they are affected in various ways such as provision of new employment opportunities, goods and services and the steering of competition in the sector.

SMEs include about seventy-five percent of all businesses, employ 4.6 million people, accounts for eighty-seven percent of the new jobs created and contribute 18.4 % of the GDP (GOK, 2009); furthermore, eighty percent of these enterprises are agro based.

While Agriculture refers to crop and animal production, agro based enterprises (Agribusiness) refers to farming as a business. This involves agriculture where profit maximization is the main focus. In most cases agro based enterprises also involve value addition to agricultural products (UNCTAD, 2009).

Specifically, agro-food is a subcategory of agribusiness that refers to businesses involved in the production, processing and inspection of only food products made from agricultural produces. It cuts across various industries and constitutes the combination of many commodity sub-sectors such as grain, dairy, coffee, fruit, vegetables, cotton among others.

Small and medium enterprises play a key role in the food processing sectors in developed countries, particularly in Europe and Japan, both statistically and in terms of manufacturing value-added products. At the same time, the tendency to concentration is obvious as different products segments on the retail shelves are condensed to three or four leading brands (FAO, 2009). The trends in developed countries involve a reduction in farm numbers and consequently an increase in minimum viable cultivation sizes.

Agro based enterprises are seen to generate income for people, especially the youth and women. It is also perceived as an element which offers farming sustainability. Entrepreneurial activities in agriculture can reduce unemployment, improve national food security and reduce poverty levels. Ultimately, it can reduce the country's reliance on food imports and ensure food security (Dardak, 2016). The Kenyan agricultural sector involves crop production, animal production and the sale of crop and animal products. Small and medium enterprises in this sector refer to the business that comes with engagement in these activities. Agro based enterprises therefore include agro based co-operative societies, sole proprietorship and partnerships engaged in agriculture directly or indirectly.

Agriculture is in fact the backbone of Kenya's economy, it is therefore evident that agro based SMEs play an important role in the growth and expansion of Kenya's economy.

In Kenya, the sector is considered the center of industrial development. The government has hinged several development plans on it (GOK, 2009). However, these agro based SMEs face many challenges that make it unrealistic for it to realize its full potential and provide results that measure up to the government expectations. These include restricted market access, inadequate access to technology, finances, information, uncomplimentary policy and supervisory environment among others (GOK, 2009). This is where the adoption of mobile phone technology by small and medium entrepreneurs comes in as it may address some of the challenges they face in managing their SMEs.

### **The use of Mobile phone technology**

There are more than 2.5 billion mobile phone users all over the world according to the Global system for Mobile Communications. This implies that developed and developing nations are becoming more and more linked to form a global grid. As mobile phone use becomes more widespread within the developing world, it is relevant to ask: is the mobile phone a feasible tool for economic growth? Can it enhance sustainability among those engaged in agro based SMEs?

SMEs are a vital component of developing economies so that "any gains in stability, productivity, and profitability are of utmost importance to the livelihoods of the households involved" (Donner, 2008). Access to information through the use of information and communication technologies (ICTs) in all these sectors is critical to economic growth, especially in resource – contained environments (Donner, 2008). Hence, the role these technologies can play in uplifting the living standards of the people has been the subject of considerable study.

Researchers are predominantly preoccupied with understanding the use of ICTs according to diverse information and communication needs and how social, economic and cultural practices have contributed to adoption of these technologies. As ICTs including mobile phones, continue to advance and be adopted at a fast rate, their contributions and their impediments, if any, must be continuously evaluated (FAO, 2009). Defining how ICTs are being used to promote marketing of the agriculture sector in low income countries is of extreme importance. This is critically important in a country like Kenya that depends mainly on agriculture. As a result of the improved wireless communication set-up, mobile communication has become a part of daily life for millions of people (Iddrisu&Alhssan, 2016)

Most sectors of the economy especially in the informal sector have experienced substantial changes with the adoption of mobile phones. SMEs are adopting new ways and means of transacting business through mobile phones, this has impacted greatly on the telecom industry and has made it the fastest growing sectors in

the country (Overa, 2006). Mobile phones provide technical services that bring about proficiency in the operational cost resulting in increase in incomes and also suppliers' ability to network with the stakeholders (Aker, 2010).

### **Statement of the problem**

Small and medium enterprise owners have adapted the use of mobile phone technology over the past few years for the purpose of improving the performance of their enterprise. According to an annual report (2015/2016) by the communication authority of Kenya, mobile phone penetration stood at 88.1% with 37.8 million subscribers. Out of these 28.7 million had registered mobile money transfers services and 135,724 were registered as mobile money agents. This success is attributed to the service being inexpensive and accessible even to low income earners (Mbogo 2010). The mobile phone technology invention is considered easy to use, efficient and reliable with prospects to offer financial services to those who do not access services from banks or those preferring cheaper financial services. It is an appropriate technological invention for SMEs that continue to face challenges related to inadequate, affordable and accessible financial services to support enterprises. The wide coverage of mobile service providers has not only resulted to high rates of convenience, but has made the service effective and dependable and has enabled entrepreneurs to network, markets their products, undertake payments and even access credit facilities. These services play a key role in the growth of agro based SMEs; however, it was not really known whether the use of mobile phone technology had a direct impact on the performance of agro based SMEs; this study was therefore justified on the strength of the importance of building empirical evidence on the effects of mobile phone technology on performance of agro based SMEs.

The objectives of the study were to review the extant theoretical literature on the construct of the use of mobile technology and performance of agro based SMEs, Identify the emerging theoretical and empirical gaps in the topic of the use of mobile phone technology and its effects on the performance of agro based SMEs and Propose theoretical framework for responding to the identified gaps in the topic of the use of mobile phone technology and performance of agro based SMEs.

The remainder of this article is organized as follows: The next section reviews the literature on the use of mobile technology and performance of agro based SMEs. A theoretical model is then proposed, followed by discussion and the presentation of research propositions. A brief discussion of proposed research methodology then follows. The article ends with avenues for further research and concluding comments.

## **II. Theoretical Review**

### **Innovation theory of Schumpeter**

A vigorous theory of entrepreneurship was first advocated by Schumpeter (1947) who stated that entrepreneurship initiates and sustains the process of developments by disrupting the stationary spherical flow of the economy and by embarking upon new mixtures of the factors of production which he concisely termed as innovation. The entrepreneur stimulates the economy to a new level of development. Sledzik (2013) in his paper stated that Schumpeter (1947) introduced the concept of innovation as key factor in entrepreneurship in addition to assuming risks and organization factors of production. An innovator who brings new products or services into an economy is given the status of an entrepreneur. Schumpeter (1947) regards innovation as tool of entrepreneur. The entrepreneur is viewed as the 'engine of growth', Schumpeter (1947) saw the chance for introducing new products, new markets, new source of supply, new methods of industrial organization or for the development of newly discovered resource. Innovation entails five functions: - introduction of a new product or new quality for existing products, new source of supply of raw materials and new organization of the enterprise. Schumpeter is the first major theorist to put the human agent at the center of the method of economic development. He is very clear about the economic functions of the entrepreneur. The businessperson is the key mover in economic development; his function is to innovate or carry out new combinations (Sledzik, 2013)

Innovation Theory of Schumpeter is relevant to the study as use of mobile phones in agro based SMEs can be considered as an innovation, furthermore mobile phones can facilitate an entrepreneur to know a new source of raw materials and venture in to new markets and all these are concepts of innovation; however, the theory does not address factors that enhance or hinder technology adoption and implementation within the enterprises.

### **The diffusion of innovation theory**

Diffusion of innovation theory was advanced by Everret Roger as a general diffusion model in 1962; although research in the area was started earlier in 1940's and 50s by different researchers. Quantitative and qualitative tools for assessing the likely rate of diffusion of a technology are provided by the diffusion theory. The theory additionally identifies several factors that facilitate or hinder technology adoption and implementation (Makee, Muturi & Atandi, 2014)

According to Rogers (2003), innovations possess certain characteristics; comparative advantage, compatibility, and observation which determines the pattern and ultimate rate of adoption. Potential adopters have different innovations leading to different levels of adoption; these adopters can be identified as such by their personal individualities; cosmopolitanism, level of education and so on. The decision to adopt a technology progresses through a series of stages which include: knowledge of the innovation through encouragement, decision, implementation and confirmation. Different individuals in a society based on whatever actions they take can hasten adoption. Some of these individuals include opinions leaders and change agents.

In Kenya the high rates of mobile phone technologies adoption meet three of the five principles of diffusion of innovations theory namely: relative gain, compatibility and complexity. Compared to other methods of communication in sending and receiving information from key stakeholders (suppliers, customers, friends and relatives) in enterprises, the mobile phones have delivered more advantage Furthermore on complexity; mobile phones when compared to computers do not require high mastery levels and are also readily available due to their relative affordability (Makee*et.al*, 2014).

This theory is relevant to this study as it helps in understanding the level of adoption of mobile phones by the entrepreneurs. The theory agrees with innovation theory of Schumpeter in that it recognizes innovation as key in performance of enterprises; however, the theory does not address other variables that may affect the impact of usage of mobile phone on the performance of agro based enterprises.

Some of the emerging issues include the need to understand factors that facilitate or hinder the use of mobile phone technology by entrepreneurs. It's also important to recognize all actors in the relationship between the use of mobile phone technology and performance of agro based enterprises.

### **III. Empirical Review**

#### **The use of Mobile phone technology**

Several past studies have emphasized the role of mobile phone in the development of small, medium and microenterprises using experiences in several continents. Usually, mobile phones give people the chance to converse at a distance and with the press of a button facts are accessed immediately. Therefore, mobile phone use has the likelihood of increasing SMEs productivity. Overa (2006) has argued that mobile phones use leads to reduction in both transportation and transaction costs both which are the features of business profitability. According to the authors, the two costs can also affect incomes of both producers and merchants, and can determine the availability and pricing of goods.

Mbogo (2010) in her study showed that supposed convenience had influence on the purpose to use the mobile payment services. In addition, perceived support from the mobile payment services provider impacts the intention to use. Perceived support from the mobile services provider had an influence on the perceived convenience. From a real point of view, this would be in order because the services become suitable to the user if they are sufficiently supported by the provider.

Mbogo, (2010), stated that previous studies have considered convenience as one of the factors that contribute to the use of mobile payments. Majority of the entrepreneurs who participated in the survey strongly agree that it is easy to access the mobile phone payment; hence perceived ease of approachability had an impact on the intention to use the mobile payment services. These outcomes provide proof to support those mobile payments users consider the technology to be suitable, well supported and that perceived advantage will impact on the behavior to use the technology (Mbogo, 2010). Mobile payments technology is progressively being used by micro entrepreneurs in Kenya

Kwakwa (2012) in his study also concluded that the use of mobile has been of great help to MSEs in the Akuapem North district of Ghana. From the study MSEs have benefitted from the use of mobile because it has helped lower operational cost and increased savings. It has also improved customers' services, improved interactions with suppliers and customers open up new branch, keep up with competitors and it has helped increased profit.

Njau&Njuga (2015) in their study which examined the impact of mobile phones usage on the performance on the micro enterprise in Moshi municipality concluded that mobile phone services contribute positively to SMEs performance. The study showed clearly the benefits mobile phone contributes; these include flexibility in terms of time and space, convenience when employed in business communication. In addition, mobile phone reduces costs and saves time for entrepreneurs with limited economic resources. Mobile phones play a role in upholding customers' relations in an enterprise through prompt problems solving and regular communications, hence holding their customers. Again, mobile phones have the ability to provide basic information about products, price, availability of products and services to customers and share business information with other micro entrepreneurs. The study concluded that mobile phone services had made a positive input to the performance of microenterprises in Moshi municipality (Njau&Njuga, 2015)

Martin (2010) in his study concluded that Mobile phones have been adopted by the majority in the rural areas of Uganda in the past five years, providing new opportunities for communicating information that could be helpful to farmers and small agricultural entrepreneurs with limited resources.

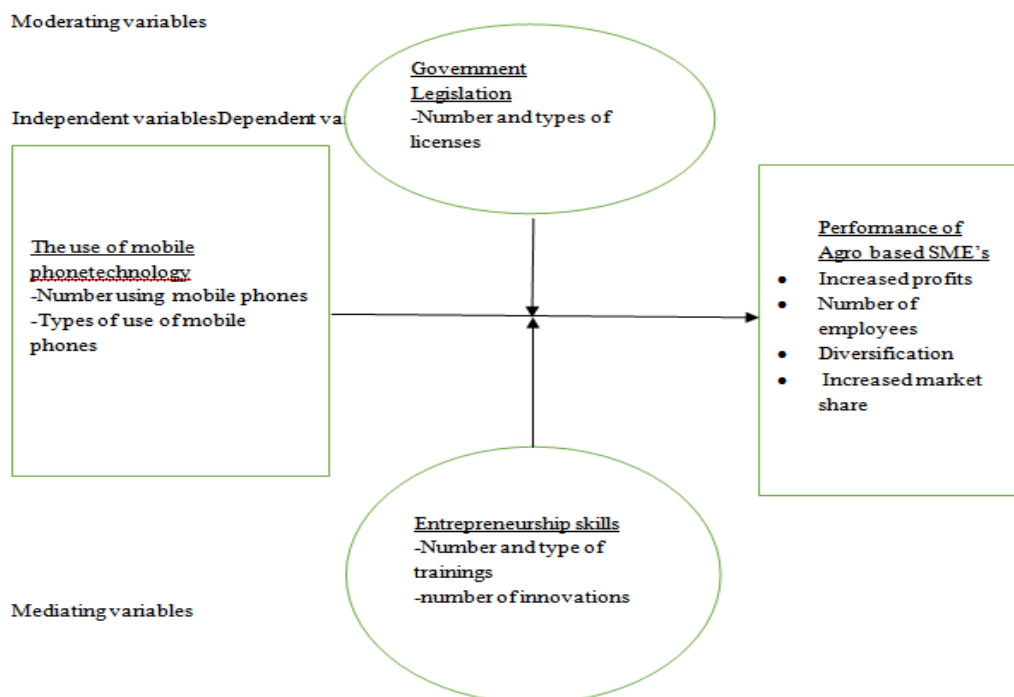
Onyango, Ongus, Awuor&Nyamboga (2014) in their study of adoption and use of mobile phones technology among SME's in Kisii Municipality Kenya, identified different uses of mobile phone technology as being memos/reminders, internet and data services, marketing services, voice communication, mobile banking, electronic payments, mobile money transfers, business contacts, remote computing and storage memory. It further stated that mobile phones can be used for making phone calls and sending SMS. Utility services in general were popular in current use. The study further found out that there was a positive impact of adoption and use of mobile phone technology among SMEs in Kisii Municipality (Onyango *et.al*, 2014).

Many of the SMEs owners who participated in the study stated that there were benefits to adoption namely; increased internal efficiency, faster response to customers' needs and keep up with competitors' access to new markets and lower operational costs. Factors affecting adoption of mobile phone technology as stated by the SMEs owners include lack of technical knowledge by owner, inadequate hardware and software. They also expressed that lack of skills amongst owners on usage of mobile phones, lack of software usage knowledge, dangers of job loss and preparedness to adopt new technologies led to their adoption and use of mobile phone (Onyango *et.al*, 2014).

The above studies mainly focused on the impact of adoption of mobile phone on the performance of general SME's hence the need for the study on the effects of adoption of mobile phones on the performance of agro based SMEs.

**Research framework**

Based on review of the extant literature a conceptual model and a series of propositions, regarding the relationship between the use of mobile phone technology and the performance of agro based SMEs were developed. The various constructs reviewed are shown in Figure 1, which also displays the expected relationships between the dependent variable, performance of agro based SMEs, and the independent variables, number of agro based SMEs using mobile phones and types of use of mobile phones, which form the basis of the propositions. According to the literature, Figure 1 suggests that the relationship between the use of mobile phones and the performance of agro based SMEs is a positive one and that government legislation and entrepreneurial skills moderate this relationship. In this regard, the use of mobile phones is seen as providing opportunities for agro based SMEs in developing countries to improve the performance of their business.



**Figure 1:** Conceptual model for the use of mobile phone technology-performance of agro based SMEs relationship

**Propositions**

The use of mobile phone technology has been argued to play a role in the performance of agro based SMEs. In view of the authoritative argument drawn from both the theoretical and empirical evidence this paper proposes that: The use of mobile phone technology will determine the level of performance of agro based SMEs.

### **Proposed Methodology**

A research design can be regarded as an arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance with the research purpose.

It constitutes the blueprint for the collection, measurement and analysis of data (Kombo and Tromp, 2006). The study will adopt descriptive survey research design where responses and perception held by the respondents will be studied. Descriptive survey research is used to investigate populations by selecting samples to discover and analyze occurrences at a particular point in time. The study will gather quantitative data which will be used to explain the effects of use of mobile phone technology on growth of agro based SMEs.

Within this context, this research aims to investigate the use of mobile technology and its effects on growth of agro based SMEs. In other words, the main aim of the research is to test and investigate the causal relationship between the use of mobile phone technology and the performance of agro based SMEs. Consequently, both descriptive and quantified descriptions of the phenomenon that employs both quantitative and qualitative techniques will be used in this study

The target population will be all the registered agro based SMEs owners/managers in Sotik Sub county who are a total of 8500 (Sotik Sub County administrators' office). The agro based SMEs deal mainly with agricultural products. In Sotik Sub County, agro based SMEs deal mainly with milk and its products, livestock (cows, goats and sheep), maize and horticultural crops.

The selection of the sample will be done through use of stratified and simple random sampling techniques. Stratified sampling technique will be used to ensure that the different sub-groups of SMEs are proportionally represented and their characteristics were accounted for.

The sample size will be gotten using the formulae  $n = \frac{z^2 pqN}{e^2(N-1) + z^2 pq}$  (Kothari, 2004). Therefore, the sample size will be  $n = \frac{[(1.96)^2 \times 0.5 \times 0.5 \times 8500]}{[(0.1)^2(8500-1) + (1.96)^2(0.5 \times 0.5)]} = 95$ . where  $n$  is the sample size,  $N$  is the population size,  $p=0.5$ ,  $p+q=1$ ,  $e$  is the margin error and is considered at 10% for the study and  $z$  is the normal reduced variable at 0.05% level of significance hence  $z$  is 1.96 (Kothari, 2004).

The study area which is a sub county will be stratified into wards. Sotik Sub County has five wards and therefore there will be five strata in this study.

The obtained sample size, 95 will be divided proportionately among the five strata giving a sample size of 19 for each stratum; thereafter simple random sampling will be used to pick the respondents within these strata.

Primary data will be collected through questionnaires, which will be filled by the respondents. It is composed of both open and closed ended questions. According to Mugenda (1999) open and ended questions permit individual to respond in his or her own words.

Analysis is the process of simplification and interpretation of data. The questionnaires will be screened for completeness and then coded and formatted. The data will be analyzed by use of both quantitative and qualitative method of data analysis. The quantitative measures will be used to generate descriptive statistics to analyze for frequencies, means and percentages while qualitative methods will be used in sorting out data from questionnaires.

Both descriptive and inferential data analysis will be carried out to analyze the data. Statistical package for social sciences (SPSS) will be used to process data. Regression analysis will be carried out to establish the relationship between independent and dependent variables. The results will be reported using descriptive statistics such as frequency tables, pie charts and graphs.

### **IV. Discussion**

The study examines the effects of the use of mobile technology on the performance of agro based SMEs. Findings from the previous studies indicate most SMEs have adopted the use of mobile phone technology. Most entrepreneurs use mobile phones in their business for communication, information access through the internet, mobile banking, electronic payments marketing services, business contacts and storage memory.

The benefits accompanying with the use of mobile phones by SMEs included faster response to customer needs, access to new markets, and lower operational costs. The same studies were able to identify challenges associated with mobile phone usage in business; these include lack of capacity, high transactional costs, limited marketing functionalities and inadequate network infrastructure.

Despite the identified challenges, the study found out that mobile phone services contributed positively to the performance of SMEs. The implications of these findings is that the use of mobile phone technology can

improve the performance of the agro based SMEs; but this can only happen if the challenges associated with adoption and use of mobile phones are addressed.

## **V. Conclusions**

Regarding their business activities and mobile phone usage, most agro based SMEs used their phones for marketing/sales purposes and for the gathering of information. The other usages of mobile phone identified were for product delivery/procurement, managing internal affairs, accessing the internet, for banking services and data processing. Again, it was found that most agro based SMEs used their phones to make voice calls, followed by sending text messages and accessing the internet. From the study agro based SMEs have benefitted from the use of mobile because it has helped lower operational cost and increased savings. It has also improved customer services, improved communication with suppliers/customers, open up new branch, keep up with competitors and it has helped increased profit. Despite the benefit agro based SMEs enjoy from mobile phone usage, the study identified a number of challenges. The top most three identified challenges were no reception, poor sound/breaking up of sound and calls ending unexpectedly. The rest were unable to send text messages and receive text messages

## **VI. Recommendations**

Since most studies have identified the positive effects of the use of mobile phone technology on the performance the agro based SMEs, there is need to upscale the use of mobile phones by entrepreneurs. To do so there is need to address the challenges identified by these studies.

To address the identified challenges, the government needs to improve the network infrastructure and lower costs of using mobile phones; this will enable more entrepreneurs to adopt the use of mobile phones hence improve the performance of their enterprises. The government should also sensitize the entrepreneurs on the different applications that can help them in managing their enterprises; finally, the government should build the capacity of the entrepreneur on how to use phones to manage their enterprises.

The study was also able to identify areas for further research. Further research should be done on how networking using mobile phones can affect the performance of the business. The use of social media applications as a marketing tool by agro based SME's should be investigated further.

The challenges faced by entrepreneurs when using mobile phones should be further investigated and what impact they may have on the business activities. Further research can also be done on the characteristics of entrepreneurs that make use of mobile phone technology.

Finally, most of the studies concentrated on general SMEs, there is need therefore to investigate how adoption of mobile phone technology affects the performance of agro based SMEs.

## **References**

- [1]. Aker J.C. (2010). Information from markets near and far: Mobile phones and Agricultural markets in Niger. *American Economic Journal: Applied Economics*, 2(3): 46-59.
- [2]. Dardak.R. A (2016). The Development of Agro-based SMEs through Technology Transfer from Government Research Institution Economic and Social Science Research Centre, Malaysian Agricultural Research and Development Institute (MARDI).
- [3]. Donner, J. (2008). Research approaches to mobile use in developing world: A review of the literature. *The Information Society*, 24(3), 140-159.
- [4]. Donner, Jonathan & Tellez, Camilo. (2008). "Mobile banking and economic development: Linking adoption, impact and use", *Asian Journal of Communication*, 18(4), 318-322.
- [5]. FAO. (2009). *Agro-industries for development*. Food and Agriculture Organization of the United Nations Report
- [6]. Iddrisu, B. & Al-hassan, S (2016). Adoption of mobile phone use by Shea butter processors UDS *International Journal of Development [UDSIJD] Volume 3 No. 1*.
- [7]. Kombo, D. K & Tromp D. L (2006). *Project and Thesis writing, An Introduction*. Paulines Publications Africa, Nairobi, Kenya.
- [8]. Kwakwa. P. A (2012). Mobile Phone Usage by Micro and Small-Scale Enterprises in Semi-Rural Ghana. *International Review of Management and Marketing*, 2, No. 3, 2012, pp.156-164 ISSN: 2146-4405.
- [9]. Makee, K. B, Muturi, W & Atandi, F. G (2014). Effects of Mobile Phone Transfer Services on performance of Micro and Small Enterprises: A Case study of Trans-Nzoia County, Kenya *International Journal of Academic Research in Business and Social Sciences*. Vol.4, No.11. ISSN 2222-6990
- [10]. Martin, Brandie Lee (2010). "Mobile phones and rural livelihoods: An exploration of mobile phone diffusion, uses, and perceived impacts of uses among small- to medium-size farm holders in Kamuli District, Uganda" *Graduate Theses and Dissertations*. Paper 11452.
- [11]. Mbogo.M (2010). The Impact of Mobile Payments on the Success and Growth of Micro-Business: The Case of M-Pesa in Kenya, *The Journal of Language, Technology & Entrepreneurship in Africa*, Vol. 2. No.1. 2010, ISSN 1998-1279.
- [12]. MSE Act, (2012). *Micro and Small Enterprise Act No.55*, National Council for Law Reporting.
- [13]. Njau.J. E & Njuga.G. O (2015). Mobile phones usage in micro enterprise in Tanzania and its impact on their performance. A case of micro enterprises in Moshi municipality, Tanzania *International Journal of Economics, Commerce and Management*. United Kingdom Vol. III, Issue 6, Page 1047.
- [14]. Ong'olo.D & Awino.S (2013). *Small and Medium Enterprises and Devolved Government System: An Assessment of the Regulatory and Institutional Challenges Affecting the SMEs Development in Kenya*. CUTS Centre for International Trade Economics and Environment (CUTS CITEE) Nairobi, Kenya

- [15]. Onyango.R. A, Ongus.R. W, Awuor.F.M&Nyamboga.C(2014). Impact of Adoption and Use of Mobile Phone Technology on the Performance of Micro and Small Enterprises in Kisii Municipality, Kenya. *World Journal of Computer Application and Technology* 2(2):34-42.
- [16]. Overa, R. (2006). Networks, distance and trust: Telecommunications development and changing trading practices in Ghana. *World Development*, 34(7):1301-1315
- [17]. Rogers, E.M (2003). *Diffusion of Innovations* (5<sup>th</sup>Ed.) New York; Free Press
- [18]. Schumpeter J. (1947). The creative response in economic history. *Journal of Economic History*, 7(2), retrieved on 5 March 2017 from [www.jstor.org.ezproxy.uws.edu/stable/pdfplus/2113338](http://www.jstor.org.ezproxy.uws.edu/stable/pdfplus/2113338).
- [19]. Sledzik, K. (2013). Schumpeter's view on Innovation and Entrepreneurship-SSRN Electronic Journal
- [20]. UNCTAD. (2009). *Transnational corporations, agricultural production and development. World Investment Report 2009*, New York, Geneva.

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