



Effects of Market Share by Use of Mobile Phone Money Transfer on The Profitability of Micro and Small Enterprises in Bungoma County

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ABSTRACT

There have been relatively few studies focusing directly on the way mobile payments are used to enhance the quality of the services of MSEs especially those in rural areas and therefore increasing their profitability. The main purpose of this study was to determine the effect of mobile phone-money transfer services (*M-PESA*) on the profitability of Micro and Small Enterprises in Bungoma County. The target population was Micro and Small Enterprises which consisted businesses such as retail shops, tailoring, chemists, hardware's, carpentry, metal workers, hair salons, repair services and butcheries. Descriptive research design was used to obtain information about the existing phenomenon by use of questionnaires. The sampling technique used was multi-stage random sampling where a total of 57 sample size was yielded. Excel Computer Package was used to analyse data which was descriptive and presented in form of graphs, pie-charts and percentage tables. Some of the major findings included that almost each business own or have used a mobile phone in their business at 98% which signifies that the high penetration of the mobile phone among the MSEs in rural areas can serve to help the high percentage of unbanked small businesses access financial services through M-pesa which helps them to increase their profits and as a result, the mobile phone industry can be seen as an ideal partner to offer mobile services to MSEs in rural areas. The government should assist in bringing down the cost of m-pesa transactions so as to induce MSEs in using mobile money transfer services.

Keywords: Market Share, Micro and Small Enterprises, Mobile phone money, Profitability

Lack of employment alternatives has pushed many people into self employment activities which largely form the micro and small enterprises sector in the country. A micro enterprise is one having not more than ten employees including the owner, while a small enterprise is the one having eleven to fifty

employees (Stevenson, 2005). The Kenyan economy has gone through substantial liberalization and changing economic opportunities, which has led many organizations to either down-size or retrench their employees, forcing them into the informal sector. The Kenyan Government recognizes the contribution of the small enterprises to the Kenyan economy. It has come up with the department of micro and small enterprise development. The department is a result of the merger of the division of small scale and *Jua Kali* (hot sun) enterprises and the Directorate of Applied Technology. This department is responsible for the formulation and implementation of policies and strategies for the development of the MSEs sector. Although huge amounts of money have been spent on MSEs through projects and programs in recent years, their impact on survival and development of the enterprises has been low, as their mortality rate remained high (Government of Kenya, 2005). Earlier on this evolution, mobile phone users were made aware that they could use the cell phone technology to transfer money across wide distances.

Several mobile payment trend studies have revealed the potential of mobile network technologies for payment purposes (Pousttchi, 2003; Taga and Karlson, 2004). Most of these studies were conducted in developed countries and thus may not reflect the impact on the success, growth and more specifically the profitability of micro businesses in a developing country like Kenya. There exists a need therefore, for a substantive research on the effect of mobile payments on the profitability of micro and small business operators in rural Kenya.

So far, there has been no clear insight into the role that mobile phone money transfer system play in the development of micro-business. This implies that technology providers, government agencies and development partners may not address the required interventions and there is therefore a need to examine the contribution of mobile payment technology on micro businesses and the effect on their business profitability. The micro business operator also needs to fully understand the entrepreneurial effect of this new technology on their business so as to cope with the increasing developments in the mobile payment services on one hand, and the challenges of the micro business operating environment, on the other hand. The choice and use of technology in micro business is dependent on how well it is likely to influence greater success, growth and profitability of the business.

Micro and Small Enterprises (MSEs)

MSE is a business segment that is slightly bigger than income generating and which includes small shops, metal working, carpentry, tailoring, and various forms of repair services (e.g. radio and TV, cars, household appliances). The main characteristics of MSEs are:-They work with a few family workers, apprentices with one or a few (up to 10 including the owner(s) of the business) permanent workers, their technology is a mix of traditional and more-modern-but obsolete, they lack access to capital, have modest technical skills and lack management, they are more linked with markets as part of their production, inputs are imported and they serve local and nearby markets, they are found in larger villages, rural towns and regional centres, some of them have some potential for growth, or at least for the development of entrepreneurial skills (Chogi, 2007).

Integration of mobile phones in MSEs

Phones are the information-related technology that has done the most to reduce costs, increase income and reduce uncertainty and risk. Phones support the current reality of informal information systems, they can help extend social and business networks, and they clearly substitute for journeys and, in some cases, for brokers, traders and other business Intermediaries (Donner, 2005; Hughes and Lonie, 2007). Phones also meet the priority Information needs of this group of communication rather than processing of information (Duncombe and Heeks, 2006). They also have a direct basic task of running a business—reducing costs, increasing income, managing risk—and links them to core functions of mediated communication technologies, particularly the substitution for journeys. As demonstrated elsewhere, the key is increased productivity (Saunders *et al.*, 1994).

Statement of the problem

Mobile phones, once a toy for the rich, have evolved in a few short years to become tools of economic empowerment for the world's poorest people. They compensate for inadequate infrastructure, such as bad roads and slow postal services by allowing information to move more freely, making markets efficient and accelerating entrepreneurship. Further, this has direct impact on economic growth; more than 4 billion handsets are now in use worldwide and three-quarters of them are in the developing world (The Economist, 2009). Mobile phones are not clearly identified by most international agencies as tools for development, while they have become long term economic investment for the disadvantaged (Diga, 2008). There is significant potential for a mobile phone to increase profitability of MSEs but current supporting evidence is scarce, methodologically heterogeneous and economically unreliable (Donner and Escabari, 2009). There have been relatively few studies focusing directly on the way mobile phones are used in enhancing productivity among the users in the developing world, some businesses also lacks the awareness regarding the potentials that exist in the use of mobile phones and ICTs. MSEs from the rural areas were also facing problems in settling their day to day transactions as they had to visit banks to settle their obligations (Donner, 2005).

Since March 2007, when the mobile money transfer system *M-Pesa*, was launched by Safaricom mobile operator, the mobile payment has become popular with both the banked and the unbanked population serving as a deposit account for some. The service enables subscribers to use their mobile phones to carry out transactions such as pay for goods and services, pay bills, send to and receive money from friends and family, withdraw cash for their use, top up their own airtime account or top up someone else's account and manage their own accounts. The use of mobile payment technology requires basic knowledge to operate. As a result, majority of the micro business operators in Kenya have embraced its use in their daily business operations and are registered users of *M-Pesa*. Consequently, they carry out various transactions using their mobile phones within and around their business surroundings such as paying suppliers for goods and services, paying bills, sending money to friends and relatives, withdrawing cash and topping up airtime accounts. They are able to know their account balances and easily manage their accounts. This has enabled the banked to avoid long queues at banks. The banked

and the unbanked can also maintain account balances in their mobile phones which can be perceived as deposits (Njenga, 2009). This has become a convenient way of doing business. However, there are no existing studies that have been done to determine the effect of using these mobile payments on the profitability of these micro businesses.

General Objective

To determine the effects of mobile phone-money transfer system (*M-PESA*) on the profitability of Micro and Small Enterprises in Bungoma County.

Significance of the study

Mobile phones are increasingly affordable to the lower strata of the population especially the rural people, and thereby can be used as a mechanism to ensure greater participation of these groups in the development process. Secondly, due to the pervasive subscription and usage of mobile phones, and *M-PESA*, which provides an easier and cheaper way of making payments through sending and receiving m-money among business transactions in Kenya, there is need to analyze their effects on Micro and Small Enterprises particularly on their profitability. Finally, the study may benefit a number of groups, among them the MSEs owners to understand the benefits of the mobile-based money transfer system in their businesses. The government too under the Ministries of Trade and National Planning and vision 2030 will find the study appropriate for strategic reasons, crafting appropriate policies to ensure MSEs utilizes benefits accrued by the mobile base money transfer system (*M-PESA*).

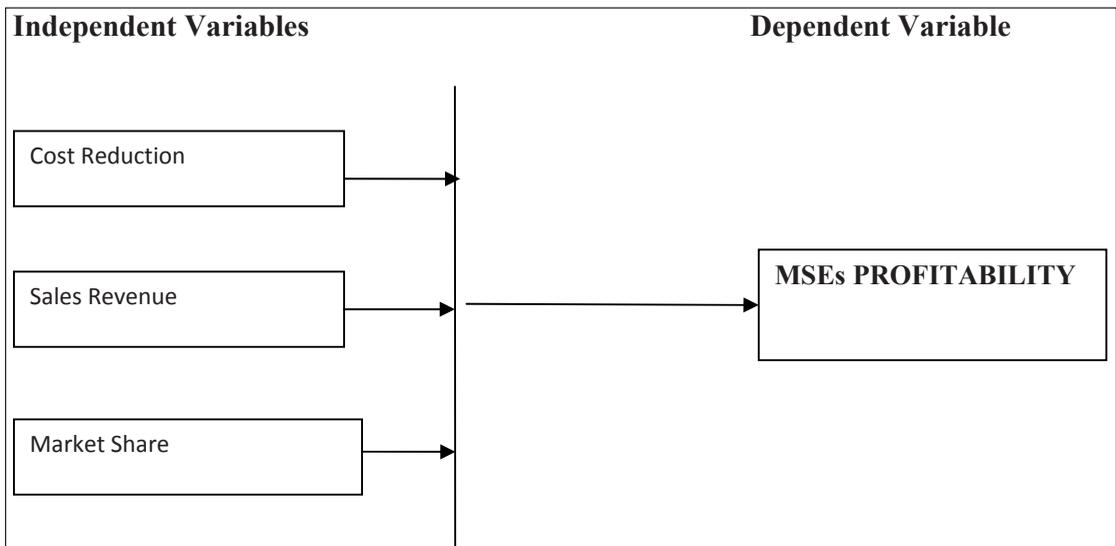


Fig. 1: Conceptual Framework

Fig. 1 shows the Conceptual Framework indicating the relationship between the independent variables-cost reduction, sales revenue and market share/growth and the dependent variable which is MSEs Profitability.

LITERATURE REVIEW

The effect of market share by use of *M-PESA* on the profitability of MSEs

Market share is the percentage of a market (defined in terms of either units or revenue) accounted for by a specific entity. Marketers need to be able to translate sales targets into market share because this will demonstrate whether forecasts are to be attained by growing with the market or by capturing share from competitors. The latter will almost always be more difficult to achieve. Market share is closely monitored for signs of change in the competitive landscape, and it frequently drives strategic or tactical action. Increasing market share is one of the most important objectives of business. The main advantage of using market share as a measure of business performance is that it is less dependent upon macro environmental variables such as the state of the economy or changes in tax policy. Market share increases can allow a company to achieve greater scale in its operations and improve profitability. Companies are always looking to expand their share of the market, in addition to trying to grow the size of the total market by appealing to larger demographics, lowering prices, or through advertising.

RESEARCH DESIGN AND METHODOLOGY

Research Design

A research design is a presentation of the plan, the structure and the strategy of investigation, which was used to answer various research questions. It constitutes the blue print for collection, measurement and analysis of data and answers the question what, where, when, how much, by what means the research was conducted (Kothari, 2004). It is a framework that guides the collection and analysis of data. The researcher employed a descriptive or survey research design. Descriptive research involves surveys, a fact finding enquires of different kinds. It attempts to describe and explain conditions of the present by using many subjects and questionnaires to fully describe a phenomenon. The major purpose is the description of the state of affairs as it exists at present. Survey design is a report of study, which requires the collection of quantifiable information from the sample. The survey research was descriptive because it obtained information about the existing phenomenon. Mugenda (1999), noted that the design takes less time to carry out and is simple.

Target population

The researcher defines a target population as the population from which a Sample can be obtained and conclusions applied on it. The target population for the study was drawn from Micro and Small

Entrepreneurs based in Bungoma South District, running Micro and Small businesses. The total target population of Micro and small businesses for the entire Bungoma District was 8,074 (Business Register-County Council of Bungoma, 2016) that of Bungoma South District was 2,557 (Bumula constituency had 861 businesses while Kanduyi constituency had 1,696 businesses). The research involved businesses such as retail shops, tailoring, chemists, hardware's, carpentry, metal workers, hair salons, repair services and butcheries.

Sampling Technique

Multi-stage random sampling technique was used where a sample was prepared in stages and sampling was ideally random at each stage. Since Bungoma South District was a large area, the researcher first considered the Constituencies in the district which were only two, that is; Bumula and Kanduyi Constituencies. In the second stage, a random sample of smaller areas that is wards was taken within each of the constituencies chosen in the first stage where three wards were randomly selected from each constituency. In the third stage, a random sample of one ward in each constituency was taken from the second stage, where finally Bumula ward and Bukembe ward were randomly selected to come up with a representative sample.

Sample size

The researcher defines a sample as a representative group of the target population that is selected using various sampling methods. The total target population of the studied wards was 570 (Bumula-205 and Bukembe-365 Businesses). The researcher studied only 57 MSEs out of the total 570. This sample is enough for conclusive generalization of the whole population as it constitutes 10% of the target population (Kothari, 2006).

Data Collection Procedures and Instruments

The main primary data collection instrument that was used was the questionnaire. The draft of the questionnaire was pre-tested on a sample of 5 respondents in order to test the instruments validity and reliability and the final draft adjusted as per the observations made during the pre-test such as the responses received for open-ended questions were coded to closed-ended questions for easier analysis. Closed-ended questions in the long run were used to collect data. They were administered to the respondents on normal working day.

Data Analysis and Presentation

Analysis of data in this study was descriptive. Nachmias and Nachmias (2004) noted that descriptive statistics enables the researcher to summarize and organize data in an effective and meaningful way. They provide tools for describing collections of statistical observations, reducing information to an understandable form. Microsoft Excel was used in the processing of data and the information generated

was presented in the form of graphs, pie charts, frequency and percentage tables. These gave a clear and a more understandable presentation of the data so obtained.

RESEARCH FINDINGS AND DISCUSSIONS

Ownership of Mobile Phone by Businesses

According to the findings, 92% of Micro and small business owners own a mobile phone while a further 6% can access one through family or friends. The study also found out that in totality, therefore, 98% of Micro and Small businesses in Bungoma County can access mobile phone money transfer services through *M-PESA* if they wanted while 2% of Micro and Small businesses cannot access *M-PESA* services.

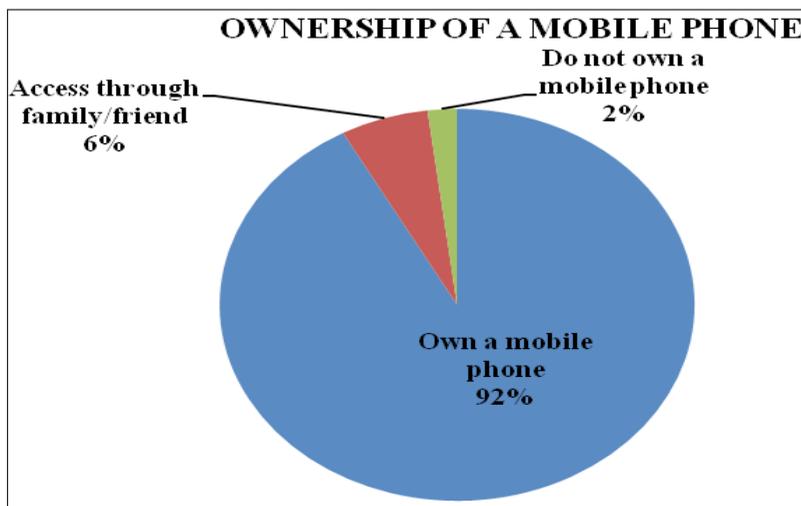


Fig. 2: Ownership of mobile phones

According to the researcher's opinion, the 2% of MSEs without phones have used a phone in one way or another. They can buy SIM cards to use in others' phones, while some can borrow phones with or without paying compensation for the airtime from local businesses or other people in the community besides friends and family. It can be seen therefore that the high penetration of the mobile phone among the MSEs in rural areas can serve to help the high percentage of unbanked small business access financial services through M-pesa which helps them to reduce costs. The mobile phone industry can therefore be seen as an ideal partner to offer mobile services to MSEs in rural areas.

Nature of phone used in a business

This data helped the researcher to understand the level of mobile phone money transfer services used by Micro and Small Enterprises in rural areas and its likely effect on the profitability.

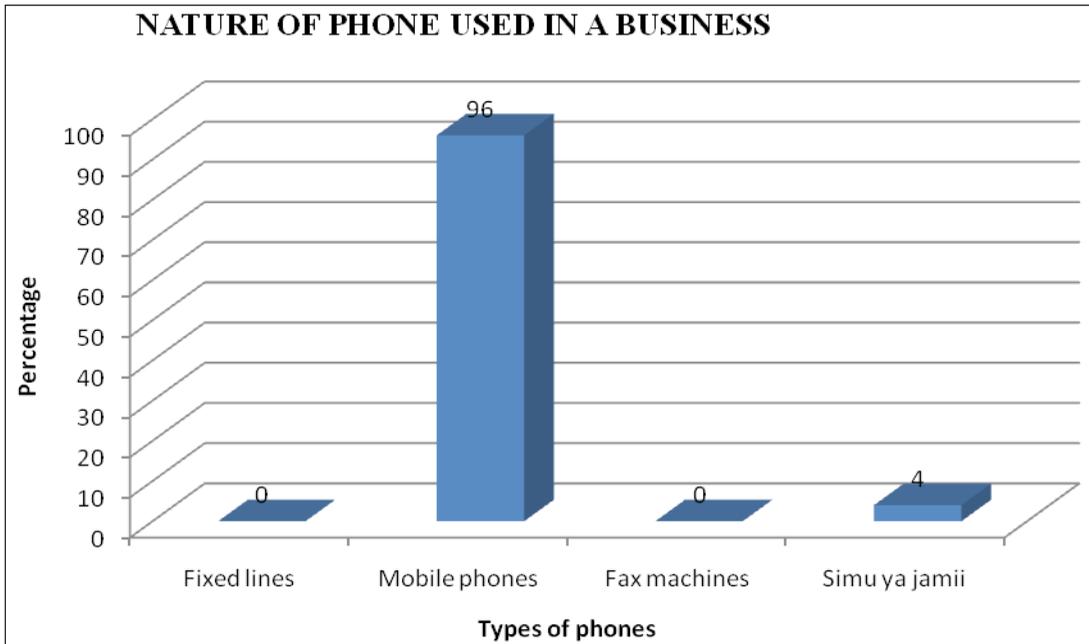


Fig. 3: Nature of phones used in a business

Fig. 3 highlights the nature of phones used in a business. Mobile phones were the ones mostly used in a business and had the highest perceived impacts on their MSEs at 96% of the respondents while only 4% of the respondents used *simu ya jamii* in their businesses. However, most respondents felt that fax machines and fixed lines were not used in their businesses. This was contributed by the fact that most of the micro entrepreneurs had no access to fixed lined and faxes machines and hence felt no impact about them on their businesses. The mobile phones were the mostly available tool and effective communication channel for conducting businesses transactions with the micro entrepreneurs’ due to their easy accessibility to persons with limited resources and semi permanent structures as in the case of *jua kali* /MSEs (Chogi, 2007).

Education Level

The results are evidence that those running the Micro and Small business are High school leavers at 73% followed by tertiary college at 13%, primary school level at 10% and only 4% with university education level. It is evident that most of the entrepreneurs (83%) had secondary education and below. Lack of school fees and formal employment could have been one of the reasons that pushed these entrepreneurs into venturing into different types of businesses. Those with little education are yet to realize the better side of running businesses due to lack of information and adequate knowledge on how to run and sustain the MSEs to maturity. Therefore, education matters a lot in running a small enterprise. University graduates holds only at 4% who are involved in running small enterprises but not micro.

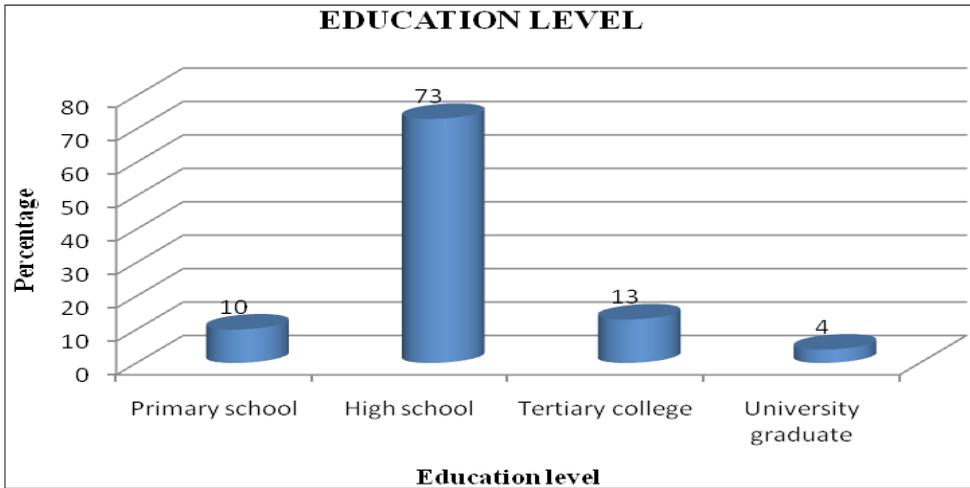


Fig. 4: Education Level

Education level has an effect on running the business and hence the profitability of that business. Businessmen with different education levels perceive the importance of Mobile Money Transfer services on their businesses in different ways. The higher the levels of education, the better for the entrepreneurs’ to take advantage of different business changes. *There is a challenge posed to education level and skills training by the large numbers employed in micro and small enterprises particularly on the advantages of the current technology by use of mobile phones to help them reduce costs and increase profitability.*

Techniques applied in business to increase market share

Market share shows how businesses need to be able to translate sales targets into market share because this demonstrates whether forecasts are to be attained by growing with the market or by capturing share from competitors. Increasing market share is one of the most important objectives of a business. The main advantage of using market share as a measure of business performance is that it is less dependent upon macro environmental variables such as the state of the economy or changes in tax policy.

Table 1: Techniques applied in business to increase market share

Category	No of respondents
Improve the product	0(0)
Change prices and offer special incentives	3(6)
New distribution methods	4(8)
Advertising and promoting the product	2(4)
Use of mobile phone to reach customers	43(82)
Total	52(100)

*Figures in brackets are percentages

Table 1 indicates that most MSEs in rural areas use a mobile phone in their businesses to increase market share since they form a total of 82%. This is an indication that there is a need for the businesses to diverse other better methods to increase their market share so that they may not be competed out of the business

Rating of Mobile Money Transfer Services

This shows how respondents perceive and rate the quality of mobile money transfer services used in their business.

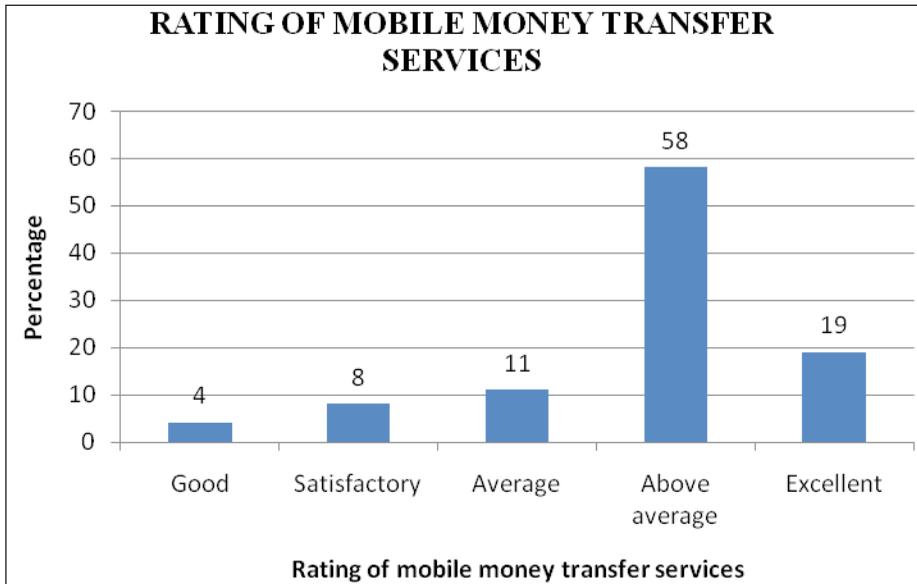


Fig. 5: Rating of Mobile Money Transfer Services

According to the data collected the researcher noted that most respondents rated mobile money transfer service as above average at 58%, excellent at 19%, average at 11%, satisfactory at 8% and good at 4%. This shows that most of the MSEs have confidence and satisfaction in the services provided by safaricom providers.

How M-PESA has influenced the profitability of micro and small businesses

From the Fig. 6, it reveals that many of the business owners felt that by use of the mobile phone money transfer system has helped their businesses to cut costs and hence increase their profitability. Thus, 86% of the respondents agreed that it has made a tremendous positive change in different sectors or areas of operation within the business. Only 14% of those who own and transact using the service felt it was yet to bring about a positive change in terms of cost savings and safety.

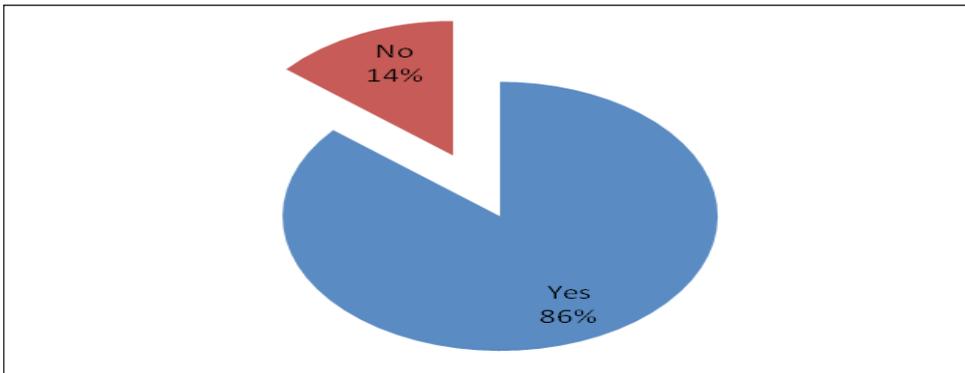


Fig. 6: How M-PESA has influenced the profitability of micro and small businesses

The 86% of those who felt the system has helped their businesses increase their profitability highlighted that it has helped their business save on cost, reduced number of times of going to the bank i.e. time saving on queuing, it left individuals with more time to run and monitor their businesses one on one, transaction fees were lower than those charged by most banks, it's easier to use it when paying for clients and customers in their rural areas, they used it to pay for the goods and services like water , It reduced their transport cost and risks when sending cash compared to other means.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The researcher mainly focused on Micro and Small Enterprises in Bungoma South District and concentrated on the entrepreneurs' who owned a mobile phone and used mobile money transfer services specifically M-PESA because of its customer base. In the study, the researcher was able to determine the effect of cost reduction, sales revenue and market share by use of mobile phone money transfer services on the profitability of Micro and Small Enterprises. The sample size was 57 respondents and 52 responded giving a response rate of 91%. The data collected from the questionnaire was sorted, edited, analyzed and then presented in the tables and charts for quick reference and to provide insight into the response from the opinions of the respondents.

Some of the major findings included that almost each business own or have used a mobile phone in their business at 98%, education level and duration of running the business has an effect on the profitability of that business. Other major findings were that Mobile Money Transfer services forms the highest percentage of usage among the respondents at 86% as opposed to traditional banking hall and money transfer companies at 10% and 4% respectively as it reduced their transport cost and risks when sending cash. Mobile Money Transfer services were also rated above average with 58% and have assisted MSEs to reduce costs as it reduced the number of times going to the bank i.e. time saving on queuing, it left individuals with more time to run and monitor their businesses one on one, transaction fees are lower

than those charged by most banks and it's easier to use it when paying for clients and customers in their rural areas. Most MSEs also felt that mobile money transfer services have helped to increase sales revenue as mobile phones are mostly used by businessmen to communicate with customers and suppliers and also has helped the business to grow and as a result increased the productivity and profitability of the business because the service can be used at anytime while purchasing goods and services.

Conclusions

From the findings of the study, the following conclusions were made in determining the effect of mobile phone-money transfer services (*M-PESA*) on the profitability of Micro and Small Enterprises in Bungoma South District. There are high chances for all the people in the rural areas to own a mobile phone and thus there will be increased use of the Mobile Money Transfer services among the MSEs in rural areas. Majority of the micro business operators who completed the survey questionnaire strongly agreed that Mobile Money Transfer services has increased the profitability of a business as it reduces costs, increases sales revenue and enables the MSEs to have a high market share. Just like all other users use mobile phones same device for both business and social purposes, as a result there were increased profits in business, and enhanced social networks (Chogi, 2007).

Most of the MSEs are literate people due to current unemployment in formal sectors and therefore institutions should come up with lessons to teach mobile phone usage technology which is transforming the lives for better in the informal sector and train the public on business benefits of mobile money transfer services. Based on the research model and research findings, the government and the mobile service providers can enhance the micro business operators' use of the mobile payments and the digital technology by: Providing infrastructure that minimizes congestion periods within the mobile network and enhance security measures. The above measures would encourage positive attitude in the mobile payment users which would result in increased use of the services and hence the profitability of MSEs in rural areas.

This study identified that mobile money transfer service increases market share as more and more people are increasingly using the mobile payment services and a more extensive research should be conducted to bring out those factors that are necessary to ensure that the micro businesses embrace the digital technology in the conduct of their business and enhance their business performance not necessary for social network.

Mobile payment technology is increasingly being used by micro business enterprises in Kenya as most respondents agreed to recommend MMTs to other people. These findings provide evidence to support that the mobile payments users consider the technology to be convenient, well supported and that perceived advantages will influence the behavior to use the technology. The findings of this research are useful to the mobile payments providers who may use them to provide greater support and enhance customers' convenience to use the technology.

There is evidence that the entrepreneurs have accepted the use of the technology and hence the governments should provide appropriate policies to facilitate the use of the mobile technologies in

the MSEs and explore the viability of mobile commerce in the informal sectors. The policy makers, ministry of finance, ministry of labor and human resource development and mobile service providers should educate the masses more about the benefits of integrating and using mobile technologies to enhance small businesses and also the need to enhance technical capabilities of entrepreneurs to allow widespread use of emerging technologies in MSEs.

Recommendations

Studies that have been done so far on information and communication technologies (ICTs) in the informal sector have focused on the internet and computer usage rather than on applications of a mobile phone, and yet the mobile phones are wide used in the informal sector for business transactions. The mobile phone handset performs the same tasks as input and output devices of a computer, and since the phone is widely spread among the MSEs in the informal sector, chances of all customers and business people having the phone in the rural area are very high. The researcher recommends that institutions should come up with policies to educate individuals on the importance of ICTs also focusing on mobile payments by use of phones but not only computers.

The mobile phones have become a springboard for MSEs to be entrepreneurial and hence increase the profitability of a business; they are helping operators in the informal sector to come up with solutions that are specific to their problems, as compared to those imposed on them by outside agencies and as a result it reduces the costs of a business. Education level is key to any business set up, and according to the results of the study, most high school leavers followed by tertiary college then primary school leavers and university graduates are involved in informal sector which implies that this sector is not dominated by illiterate people and unskilled workers as some of the studies have claimed. The operators in this sector are hard working and creative and should be made aware of the enormous opportunities that are availed by the use of mobile phones for business. Appropriate premises would also ensure that the MSEs have access to electricity, which is crucial for the possession and usage of mobile phones.

Policies to encourage innovation among the MSEs should be formulated so as to create jobs within the sector, as stipulated in Kenyan Vision 2030. The people who publicly demonstrate new inventions in mobile phone applications should be identified and facilitated so as to continue with their inventions. These young people appear on television and are never heard of again. In a country like Kenya with weak enforcement of the law on intellectual property rights, ideas of such entrepreneurs can easily be stolen. Mobile phone innovations in the informal sector can increase the number of employees and the number of MSEs as well as increase the sales of an MSE. Since the sector has many literate people, an effort should be made to ensure that operators are made aware of new applications of mobile phones. Most of these applications are advertised on television, or an alert is sent on the mobile handset without any thorough explanation of how these new tools can assist an MSE improve its e-commerce transactions especially those in rural areas.

There are many institutions in Kenya that train people on computer usage, but none trains them on mobile phone usage, a technology that is transforming lives for the better in the informal sector. There

is a lot of talk about third generation mobile phones 3Gs, blackberries and mobile modems, but no effort is being made to educate the public on business benefits of these new technologies. It seems as if the target for public discussion of these innovations is a particular group in the society, yet many people in the country have mobile phones, and are using them extensively for e-commerce this should be also be extended to MSEs in rural areas. The Communication Council of Kenya has the mandate to ascertain that every citizen in Kenya makes an informed choice when using the mobile for e-commerce or any other purpose. Literacy classes in computer science should continue to be encouraged. Computers are the platform for mobile usage. Innovations in mobile telephony would depend on how much one understands the functions of the computer. The training should not only concentrate on computer studies but on information and communication technologies. There is need to popularize the connection between computers and other ICTs, in particular, the mobile phone which is widely used. Research work for this report showed that rural people are entrepreneurs; what might be lacking is exposure, and the right business environment and infrastructure.

It is commendable that the Kenyan government has removed tax from mobile handsets making mobile phones affordable by many people. Nevertheless, it should also assist in bringing down the cost of airtime further so as to induce most of the MSEs in using the mobile money transfer services. Internet enabled mobile phones are already on the Kenyan market and most MSEs in rural areas do not use these service therefore training is required to enlighten rural people as the internet is important for the import or export of goods, and MSEs that would like to participate in global markets should be given a chance to make informed market choices by being enlightened on internet-based mobile phones.

Suggestions for further Research

Globalization is one of the goals of Kenyan Vision 2030, and this goal cannot be achieved without widespread adoption of high-powered mobile phones in the informal sectors. Research is needed to measure the extent to which internet enabled mobile phones and mobile money transfer services have diffused in the informal sector and their effects on import/export.

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