

# Effects of Cost Reduction by Use of Mobile Phone Money Transfer System 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 effects of mobile phone-money transfer services (*M-PESA*) on the profitability of Micro and Small Enterprises in Bungoma South District. The target population was MSEs in Bungoma South District which consisted businesses such as retail shops, tailoring, chemists, hardware's, carpentry, metal workers, hair salons, repair services and butcheries. 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. 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. More effort should be made to educate the public especially the MSEs on business benefits of these new technologies. 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.

**Key Words:** cost reduction, mobile phone, money transfer system, profitability, Micro and Small Enterprises

## INTRODUCTION

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. 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 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). 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.

## MATERIALS AND METHODS

Cost reduction refers to the process of identifying and eliminating unnecessary costs to improve the profitability of a business. It may also be defined as the achievement of Real and Permanent Reduction in the unit cost of goods manufactured or services rendered without impairing their suitability for the use intended or diminution in the quality of the product. Cost reduction, should therefore, not be confused with cost saving and cost control.

Cost saving could be a temporary affair and may be at the cost of quality. Cost reduction implies the retention of essential characteristics and quality of the product and thus it must be confined to permanent and genuine savings in the costs of manufacture, administration, distribution and selling, brought about by elimination of wasteful and inessential elements from the design of the product and from the techniques and practices carried out in connection therewith. In other words, the essential characteristics and techniques and quality of the products are retained through improved methods and techniques used and thereby a permanent reduction in the unit cost is achieved (John, 2005).

#### **Actual Usage of the Mobile Payment and business performance**

The rapid spread of the mobile phone usage in Kenya means that the number of mobile users exceeds by far the number of banked people. Mobile phones offer easy communication and the current M-Pesa facilities have reduced the average transaction costs for the consumer (Vaughan, 2009). The Safaricom's Annual Report 2008/2009 show that person to person transactions stood at KShs. 120.61 billion for the same year against 14.74 billion for the year 2007/2008. The total cumulative person to person transactions stood at KShs. 135.38 billion as at 31st March 2009 since inception of the mobile payment service. This indicates that M-Pesa mobile payment is reaching the unbanked (Vaughan, 2009). Omwansa (2009), argues that the benefits associated with M-Pesa are so enormous that those who try to place regulatory pressure on it might feel guilty if they appear to frustrate it. The extent to which the mobile payment usage would impact on performance depends largely on whether there is an enabling environment (Porteous, 2006). The micro businesses are spread throughout the country with huge clusters in the market areas and near shopping centers. This enables them to easily access the M-Pesa service providers for registration and to make cash deposits into their accounts. The mobile payment providers' agents are well distributed and easily accessible to the micro business owners for support.

#### **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). 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, 2012) 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.

**Table 1.1 Target Population of MSEs in Bungoma South District**

CONSTITUENCIES	WARDS	TARGET POPULATION
Bumula	Mukwa	65
	Siboti	45
	Bumula	205
	Kimaeti	102
	Musikoma	185
	Namasanda	98
	Sio	65
	Siritanyi	96
	<b>Total</b>	<b>861</b>
Kanduyi	Khalaba	197
	Mjini	155
	Sinoko	205
	Stadium	165
	Kibabii	235
	Bukembe	365
	East sang'alo	198
	West sang'alo	176
	<b>Total</b>	<b>1,696</b>

**Source: Business Register-County Council of Bungoma**

#### **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.

**Quantitative analysis and presentation**

**Data collected was presented in charts and tables making it easier to read and interpret.**

Table 1.2.. Response rate

Category	No of respondents
<b>Responded</b>	<b>52 (91)*</b>
<b>Did not respond</b>	<b>5(9)</b>
Total	57 (100)

**\*Figures in brackets are percentages**

During the study, not all targeted respondents responded to the questionnaire and the informal interview sessions. As represented in table 4.1 above, 9% did not respond whereas 91% of the target population responded which implies that the response rate was good and the information analyzed and discussed, can be generalized to the whole population.

Comparison of mobile money transfer services, traditional banking and money transfer companies

Mobile money transfer service utilizes technology which enables micro and small enterprises to do a number of transactions such as: - Payment for trading between businesses, Secure money transfer for People journeying between the places, depositing cash at one end, and Withdrawing it a few hours later at the other; People sending airtime purchased by M-PESA directly to their relations up-country as a kind of informal remittance; Send money for various ad hoc reasons etc.

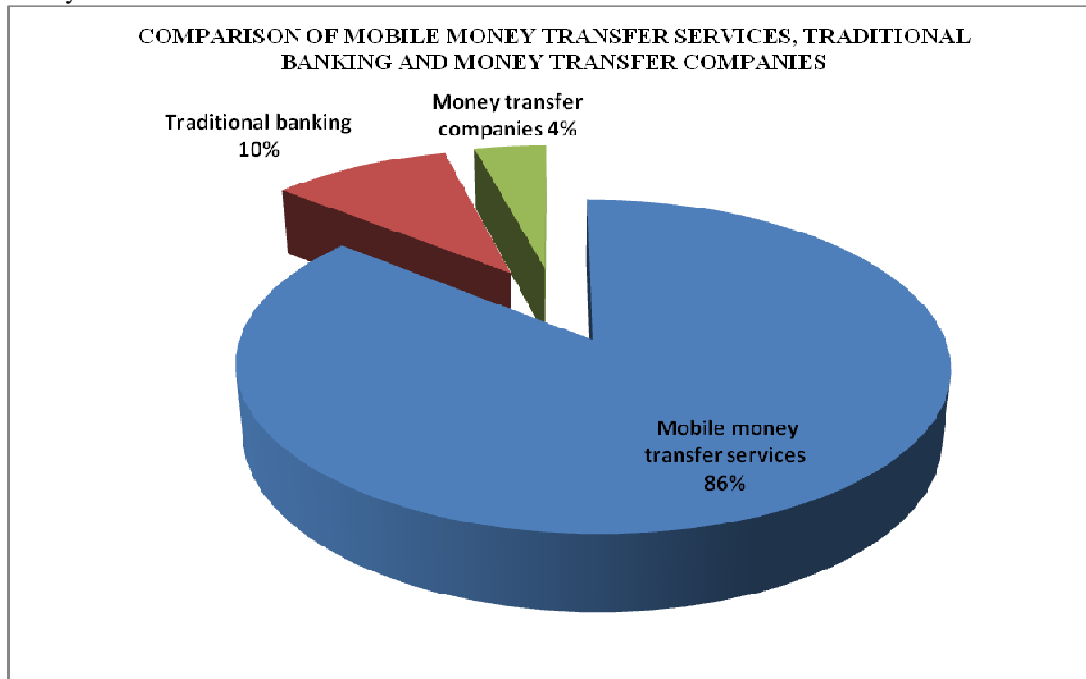


Figure 1.3 comparison of mobile money transfer services, traditional banking, money transfer companies

The study reveals that mobile money transfer services forms the highest percentage of banking usage among the respondents at 86% as opposed to the traditional banking hall set up and money transfer companies at 10% and 4% respectively. Respondents prefer using this mode of service compared to traditional banking halls and money transfer companies because Mobile Money Transfer Services holds the prospect of offering a low cost, accessible transaction banking platform for currently unbanked customers in Kenya (Info DEV, 2006).

Additionally, the flexible operating hours of the M-pesa agents leaves them with greater opportunities to satisfy banking requirements that may arise at any time. On the contrary, Kenyan banks operate for an average of seven hours per day. The supplementary Automated Teller Machines (ATMs) do not have a sufficient outreach since they are only available in major towns. While money transfers companies are expensive, not reliable and takes more time to deliver the service.

Table 1.4 Respondents opinion If M-PESA has reduced costs and increased profitability

Category	No of respondents
<b>Yes</b>	<b>40(77)*</b>
<b>No</b>	<b>8(15)</b>
<b>Do not know</b>	<b>4(8)</b>
Total	52(100)

**\*Figures in brackets are percentages**

Mobile Money Transfer (MMT) services dramatically reduce the cost of delivering financial services this is aptly demonstrated by the 77% score of the respondents interviewed. CBK (2007), statistics put the average monthly cost of operating a current account with a Kenyan commercial bank at over Ksh 900 (\$13). M-pesa reduces the cost of basic banking services to customers with over 60 percent from what it would cost through traditional channels. The electronically managed transactions result in huge cost savings, the benefits of which are transferred to the users. This is explained by the absence of charges at the time of registration. It can be deduced that majority of MSEs seeking MMT attach a high consideration to the monetary consequence of enrolling into a banking facility. Thus the absence of opening account balance boosts their preference for the service.

#### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

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.

#### 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.

#### 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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