

# Role of Mobile Money Transactions on Revenue of Microbusiness in Kenya

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## Abstract

This paper determined the effect of mobile money transactions on the sales turnover of MSEs in Nakuru Town. The study used a descriptive cross sectional survey design targeting 21,139 registered MSEs located within Sub-Counties in Nakuru Town, Kenya. A stratified sampling technique was used to select 246 MSE. A questionnaire was used to collect primary data from the MSEs. A regression model was used to determine the effect of mobile money services and sales turnover. The result revealed that mobile money transactions has a positive significant relationship with MSE sales turnover. The study recommends that mobile phone operators need to consider reduction in money transfer transaction cost, and insurance companies need to encourage payment of premiums using mobile money services. In addition, financial institutions need to offer banking services through mobile phones such as deposits, withdrawals and loan applications with a reduced cost.

**Keywords:** key words, Mobile Money Transactions, Revenue, Microbusinesses

## 1. Introduction

The financial market are witnessing the advent of mobile money services. Recent observations indicates that many individuals are lacking banking services especially those earning low incomes who fails to meet the threshold of commercial banks (Porteous, 2006). The introduction of this new technology of mobile money services has spread beyond financial markets worldwide and more effective than traditional banking (Dolan, 2009). The financial markets transactions are slowly changing to cashless basis as opposed to the cash. Through this, electronic transactions has increased thereby changing the means of transacting businesses (Aron, 2015).

The growth of mobile money services is a blessing to microenterprises, which otherwise could not be served well by commercial banks. It is possible for banked individuals to access their accounts through their phones. Mobile money services is widely being expanded to reach the rural areas. The ideal it provides has also enhanced the use of the platform to carry out various transactions that can be offered through banks or registered agents. The person who makes payment and the person who receives the payment are linked together with the existing framework. Mobile phones enables both communication and financial transaction processing. The new technology, does not only covers local transaction, but also international transactions (Bangens & Soderberg, 2011).

The environment in Kenya favors mobile money transactions and enhances adoption and use. Competition among the operators and partnership with financial institutions like commercial banks is deepening the provision of mobile money services. Though there are challenges posed by the use of mobile money services, the rate of adoption and usage is steadily growing. Mobile phone services are taking root to both customers and traders themselves to perform financial transactions than using phones for communication only. Taken into account, earlier case was the only means of settling the financial transactions, electronic transactions through mobile phone is increasingly being used. Its availability and convenience is stimulating the use of the new technology as compared to traditional means of settling financial transactions. MSE make frequent and small transactions that are appropriate to settle using mobile money services than using banks. The nature of this microbusinesses involve the owners being also the business the operators, thus the relationship between the business operators and the customers is too close thus enabling a better environment for the use of mobile money services. Allowing customers and service providers to view their transaction logs at any time via their mobile handsets, and reducing the chances of loss as compared with cash, perceived ease of use, perceived usefulness of using mobile money is enhancing the adoption and the spread of these innovative tools in carrying out daily transactions (Jenkins, 2008).

Many MSEs are adopting the use of mobile money services to execute financial transactions. Wamuyu, et al. (2011) have reported a positive significant effect on MSEs' financial performance and mobile money services. However, Ngaruiya et al. (2014) found an insignificant effect of mobile money on sales turnover pointing. The effect of mobile money services remains inconclusive and unaccounted fully. The current study therefore aimed at adding to the existing literature by hypothesizing that, mobile finance, mobile banking, and mobile payments do not significantly affect sales of MSEs in Nakuru Town.

Mobile finance refers to transactions done relating to credit, insurance, asset accumulation, repayments and disbursements made by those transacting. On the other hand, mobile banking (M-banking) is the use of a mobile device primarily as a channel to conduct transactions and get information relating to bank account. Data concerning the bank balance inquiries, transaction notifications and as well as simplified statements can be

accessed. Mobile payment services may include; person to person, person to business, and business to business transactions.

## 2. Reviewed Literature

Emergence of mobile money services in the financial market is playing critical role in economic development. Porteous (2006) asserts that the success of the new technology requires enabling environment as a working mobile money ecosystem requires a concerted effort from many players in the market (Jenkins, 2008). In Africa, the adoption rate of mobile money is high. Initially, focus on determinants to use mobile money aroused concern on the social and economic variables (Litondo & Ntale, 2013). More interest on the economic impact on performance triggering a number of studies conducted on microenterprises indicating positive benefits for those who use it to carry business (Kwakwa 2012; Donner 2007).

Similarly, Aker & Mbiti (2010) report on five merits that MSEs can benefit because of adopting this technology. Microenterprises play a role in economic development and evidence shows that they use mobile money transactions to carry out their businesses. Mobile money transactions involve mobile finance, mobile banking and mobile payments (Gencer 2011). Mobile finance services assist microenterprises to pay for their insurance premiums, accumulate assets and obtain credit. Govil et al. (2014) have analyzed the role of mobile finance and found that it enhances economic growth of businesses. It speeds up the flow of goods and services create conducive atmosphere for investment and above all security. Onyango et al. (2014) examined the impact of adoption and use of mobile phone technology on the performance of micro and small enterprises, and indicated a positive relationship between mobile usage and the performance of micro and small enterprises. Similarly, Kakwa (2012) report that there is an influence of adoption and use of mobile phone technology among MSE's through faster response to customers' needs, increased internal efficiency, access to new markets and lower operational costs.

Nyaga (2013) examined the impact of mobile money services on the performance of MSEs, and found out that use of mobile money has made a significant contribution to the MSE sector. First, majority of traders relies on it as opposed to the formal banking sector for their day-to-day transactions. Secondly, MSE operators have a clear understanding of the basic functions of mobile money services. Banking services assist both customers and businesses to settle their transactions. As opposed to traditional banking services, mobile banking is a new innovation, where banking services done through a network referred to as branchless banking.

Microenterprises obtain both transactional and informational services through this new technology. Information relating to account balance and notification on transactions are also accessible easily. In addition, processing of loan proceeds, withdrawals, and depositing of funds are also doable (Ishengoma, 2011). Traditional banking exposes MSEs to risk associated with cash transactions but use of mobile banking reduces such risk, save them time and reduce cost of transport. Since the services are accessible within the premise, MSEs can dedicate their time to manage the business well thus reducing operational cost (Otiso et al., 2013; Jagun, et al., 2008).

Use of mobile payments also provides economies of scale in procuring of materials and reduce the supply chain (Donner & Escobari, 2010). Wanyonyi & Bwisa (2013) determined the influence of mobile money transfer services on the performance of MSEs. They found that MSE use mobile money transfer for: B2B (business to business) transfer when making purchases from suppliers and C2B (customer to the business) transfers when customers buy from the business and for debt collection for credit sales contributes to improved performance of the micro enterprises. However, Wamuyu, et al. (2011) reported a limited use of mobile money transfer for B2B and B2C transactions as opposed to C2C and C2B e-commerce transactions though mobile money transfer, and that mobile internet services have a positive significant effect on the performance of MSE.

Financial performance of MSE is a critical issue since the revenue earned by MSE determines its sustainability. The frequent sales made improves the profitability of an enterprise whereas few sales indicate little or no profits at all. Similarly, MSEs are able to receive payments from customers on due dates without spending much monitoring cost. This cost reduction is beneficial to the MSEs since they are able to create long-term relations to their customers and suppliers (Otis et al. 2013).

Mbogo (2010) has established the success factors attributable to the use of mobile payments by Micro-business operators and revealed that the convenience of the money transfer technology plus its accessibility, cost, support and security factors relate to the behavioral intention to use and actual usage of the mobile payment services by the micro businesses to enhance their success and growth.

## 3. Methodology

The study employed a cross sectional descriptive survey design since it enabled a researcher to determine whether there were significant associations among variables at some point in time. The study was conducted in Nakuru Town and targeted 21,914-registered MSE. The microbusinesses surveyed in the study included Tailoring shops, Saloons, Food stores, electronic shops, hardware shops, Bookshops, Restaurant, Boutique, Spare shops, and printing/ communication businesses. Out of this, 246 MSE were selected and studied with respect to their use of

mobile money in carrying out business transactions. Primary data was collected using a questionnaire during the month of November 2014. The questionnaires were personally administered to microbusiness owner/operators. The study adopted the following multiple regression model:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$

Where; Y represent Sales turnover in Kenya shillings;  $X_1$  represent Mobile Finance transactions,  $X_2$  represent Mobile Banking transactions,  $X_3$  represent Mobile payments transactions,  $\epsilon$  is the error term, while  $\beta_0$ - $\beta_3$  are the parameters estimated.

#### 4. Effect of Mobile Money Services on MSE Revenues

The study assessed the effect of mobile money services on MSE sales turnover by performing regression analysis on mobile money transactions and the sales turnover of MSE.

**Table 1. Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error
1	.680 <sup>a</sup>	.463	.455	3.26154

a. Predictors: (Constant), Mobile Finance, Mobile Banking, Mobile Payment

From Table 1, the results indicate that the coefficient of determination was 0.680, implying that 68 percent of the total variation in sales is explained by use of mobile money services. The remaining 32 percent is explained by other factors, not captured by the model. The adjusted  $R^2$  indicates that it is closer to the  $R^2$  therefore there is no much variation existing between the two thus proving the coefficient of determination.

**Table 2. Effect of Mobile Money Services on Sale**

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	10.642	1.282		8.301	.000
Mobile Finance	.159	.071	.161	2.250	.025
Mobile Banking	.155	.070	.154	2.219	.028
Mobile Payment	.719	.093	.473	7.729	.000

a. Dependent Variable: Mobile Payment

The results in Table 2 shows that a coefficient of 0.161 of mobile finance, was significant meaning, a unit increase in mobile finance usage leads to 0.161 unit increase in sales. It suggests that mobile finance affects sales positively. Mobile finance assists MSEs to save and get credit, which enable them to communicate with their clients. The improvement in communication enhances their business transactions. They can reduce unnecessary cost of meeting their clients and cost of debt collection through communication. The link between them and their clients improves their sales over time. MSEs can access credit through mobile finance that help them achieve short-term needs of the business. Donner (2007) has observed in Rwanda that MSE benefit because of using mobile money in business operations. Kakwa (2012) made similar observation in Ghana that mobile finance improves customer services not excluding marketing. Our findings are also in line with Govil et al. (2014) findings that businesses using mobile finance such as savings, insurance and credit experiences improved economic progress in their activities.

The next predictor of sales turnover was mobile banking services with a significant positive effect. The coefficient for mobile banking was 0.154, meaning that a unit increase in mobile banking transactions leads to a 0.154 unit increase in sales. It suggests that mobile banking has a significant positive effect on sales. Mobile banking services supplement traditional banking services and the frequency of use is not limited by time and locality. The services involve small, frequent transactions, which are convenient to use mobile banking services. Our finding also support others existing in the literature. For instance, Otiso et al. (2013) have found that the highest percentage of MSE uses mobile banking as opposed to traditional banking. Further, MSEs obtains both information and transactional services through their mobile phones. Mobile banking assists MSEs to access banking information about their bank account inquiries and mini statement. Mobile banking also saves them time on queuing and visiting the bank premise thus concentrating on their businesses. Microbusiness operators can make withdrawals within their business premise and consequently use the same to pay suppliers and utility bills. Wamuyu, et al. (2011) observed that it assist in reducing transport cost and risk associated with transacting in cash.

Lastly, the results indicated that the coefficient of mobile payment was 0.473, positive and statistically significant. This means mobile payment has a significant positive effect on MSEs' sales turnover. Mobile payment accounts for the largest proportion of changes in MSEs' sales as the owner/operators receive payments from customers on sale of goods and services and make payments for business bills and supplies. In fact the frequency of mobile payment dominates the MSE transactions, and account for a large proportions of sales compared to mobile finance and banking. These results are in line with Otiso et al. (2013), who made similar observations that

payment to customers increases sales as mobile payment assists MSEs to perform various financial transactions. Their transactions steadily increase with the use of mobile payments.

These payments assist MSEs in placing orders and paying for them via the use of mobile money services. MSEs also accept cashless payment for goods and services from customers. Mobile payment has eased their transactions, giving them time to attend to their businesses. Mobile payments even make business to business transactions easier. Wanyonyi and Bwisa (2013) have also made similar observations in Kitale that the use of mobile payment to make purchases and customer paying through the service contribute to the performance of MSE. The overall effect of mobile money services on sales was positive and significant. Nyaga (2013) also found a positive significant contribution of mobile money services on MSEs' performance in Naivasha. Based on these results, it shows that mobile money services contribute significantly to MSE overall financial performance.

## 5. Conclusion and Policy Consideration

Mobile money services assist MSE to transact their financial transactions. Results indicated a significant positive effect on sales turnover. Mobile finance services such as premiums and asset accruals do have a positive effect on the sales of MSE. Similarly, mobile banking services including withdrawals, making deposits and getting loans through the phone increases the liquidity position of the MSEs. They can increase sale due to availability of funds to settle suppliers and pay for other obligations, with mobile money services. The use of mobile payment services contribute much on MSE's sales. However, the other services contribute to the effect, mobile payment contribute much. Mobile money services therefore has a significant positive effect on sales of MSE. Nyaga (2013) similarly observed that mobile money services have a positive significant effect on the performance of MSE sector. However, Ngaruiya et al. (2014) found no significant effect on financial performance, a finding that can be explained due to the approach used in the study as no financial data was analyzed. Policy makers interested in improving the MSE sector should therefore consider how to lower mobile money charges. This would encourage use of mobile phones in performing business and financial transactions.

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