

Effect of Mobile Money Transactions on Financial Performance of Small and Medium Enterprises in Nakuru Central Business District

Bernard Ngaruiya^{1*} Mary Bosire² Simon M. Kamau³

^{1,3} Faculty of Commerce, Department of Accounting Finance and Management Science, Egerton University, Nakuru Town Campus College, P.O Box 13357, Nakuru-Kenya

² Lecturer, Faculty of Commerce, Department of Accounting Finance and Management Science, Egerton University, Nakuru Town Campus College, P.O Box 13357, Nakuru-Kenya

* Email of the corresponding author bngaruiya2001@yahoo.com

ABSTRACT

The inception of mobile phone financial transaction has brought a lot of benefits to SMEs. It has made money transfer to be available at a low cost compared to the traditional banking system where some transactions would be done within the premises of the bank. As a result, there was a need to study effects of mobile money transactions on financial performance of Small and Medium enterprises. The aim of this study was to find out the effect of mobile money transactions on financial performance of Small and Medium enterprises in Nakuru town Central business district (CBD). The study employed descriptive research design. The study sampled 120 out of 640 businesses using purposive sampling technique. Questionnaire was used as data collection instrument. The results of the study indicated that mobile money transactions have a significant effect on sales revenue.

Keywords: Mobile phone financial transactions, financial performance of SMEs, Sales revenue, Nakuru town Central Business District.

1.1 INTRODUCTION

The term small and medium enterprises cover a wide range of definitions and reasons, varying from country to country and the source reporting SMEs statistics. There is no universally agreed definition of small and medium enterprises because their classification into large or small is a subjective and qualitative judgment based on number of employees, values of assets, value of sales and size of capital and turnover. The most common definitional basis used is employees because of comparability (Nyangori, 2012). In Kenya, according to the Sessional Paper No. 2 of 2005, SMEs refers to the full range of enterprises employing between 1-50 workers in all sectors. The term embraces all businesses in the informal sector. Those working in this sector work in a manner which is not organized and thus unregulated. Their main target group is people whose income is low.

According to the Kenya National Bureau Statistics (2005), Kenya has over 5,970,600 people employed in this informal sector, which is about 19% of the total Kenyan population (Chogi, 2006). This is because to start a business in this sector requires less capital and it is not structured. Nyangori (2012) observe that the SMEs sector has continuously experienced growth thereby becoming a key sector in the economy of the country as well as creating most of the new jobs. The sector constitutes 98% of all businesses in the country, absorbing a high population of school, college and university leavers (Malick, 2004). Bowen et al (2009) notes that SMEs contributed over 50 percent of new jobs created in the year 2005. For that reason, SMEs play a crucial role in increasing growth, innovation and prosperity (Dalberg, 2011). Therefore, this sector is important because it plays a crucial role in the development of the Kenyan economy and thus it cannot be ignored.

According to World Bank (2012), the inability of the SMEs to access funds is still a major issue that limits the formation of new businesses and prevents others from expanding and growing. Lennart and Bjorn (2010) note that cash-flow management are key bottlenecks for micro and small enterprises operations. This assertion tallies with what Booster et al (2008) who established that debt collection, lack of working capital and low sales are among the top five challenges facing micro and small businesses. These challenges make SMEs lack financial capacity to enlarge and develop. According to Atieno (2009), most formal financial institutions consider SMEs as uncreditworthy, thus denying them credit. This lack of access to financial resources has been seen as one of the reasons for the slow growth of SMEs. This is coupled with negative perception towards them, which adversely affect their ability to access financial services provided by financial institutions. This is because they are considered not viable customers by the formal financial sectors as their transaction sizes are small. Their accessibility to financial institutions is difficult due to low capital base, poor returns, lack of financial records and collateral property to secure loans from banks and this in turn affects their development (Amyx, 2005).

Lennart and Bjorn (2011) note that business as well as society at large in Sub-Saharan Africa has a very strong cash-based heritage, and cash is the default means for carrying out small-scale transactions. Cash is also the key to doing business and the success of any business may very well depend on how to mobilize cash quickly from savings, credit from suppliers, or to have customers that can pay upon delivery. This insinuates that the performance of the SMEs businesses depends on how fast cash receipt and payments are made since any delay

affects operations of their business. However, the biggest challenges that they face in attaining this is how to reach their customers, the mode of payment and accessibility to local receipts of money and payment of their credit.; Since in many developing countries 9 out of 10 people do not have a bank account or access to basic financial service (Wambari, 2009). This implies that majority of the people who transact or either do businesses are unbanked.

The presence of the mobile money transaction has changed how business is conducted. This is because offering banking products through mobile phones has brought about great potential for reaching those who have no bank accounts. Moreover, accessibility to the mobile phone is to both the poor and the rich. According to Lennart and Bjorn (2010), the fast diffusion of mobile money transfer was viewed as a potential key tool for facilitating financial transactions. This indicates that the rapid adoption of mobile phone was seen as a means of uplifting the financial functionality of SMEs. A positive aspect of mobile phone is that mobile networks can reach remote areas at low cost thereby making it possible for financial transactions to be made in a simple and faster manner from any point insofar as there are mobile money service providers. It is easier to transact and at a lower cost. There was need therefore to find out whether SMEs entrepreneurs (whose main target populations are unbanked), use mobile phones to transact their businesses. At the same time how the use of mobile money had affected financial performance of their businesses in terms of their sales. Therefore, this study sought to find out the effects of mobile money transactions on financial performance of the SMEs within Nakuru town CBD.

1.2 Statement of the Problem

SMEs face unique challenges due to the nature of their operations. Their need for payment and transactional services are not always served by banks. This is due to lack of capacity to qualify them to access financial services from commercial banks since they experience low capital base and lack of collateral property to secure loans. They also do not find it very cost effective to embrace banking services because their target customers are mostly the unbanked. Additionally, they lack proper mode of receipts and payments, debt collection procedures and access to finance and this makes them to be faced with problems associated with liquidity and working capital management (Higgin at el, 2012). This scenario is likely to have an effect on the growth and performance of the SMEs. The inception of the mobile phone financial transactions has changed how business is being done. It has made financial transactions to be easy and faster and at the same time provided a saving avenue for those without bank accounts. However, Kanyi and Maharaj (2011) observe that despite the exponential growth in the use of mobile money in East Africa, only few studies have focused on its impact on the financial performance of SMEs. This means that the effect of using mobile money in the growth of SME's businesses has not been effectively assessed. Consequently, there was need to study how this financial innovation has affected the performance of SMEs. Therefore, this study sought to determine the effect of mobile money transactions on the performance of SMEs in Nakuru CBD.

1.3 Purpose of the Study

The purpose of this study was to find out the effect of mobile money transactions on financial performance of the SMEs within Nakuru town CBD.

1.4 Objectives of the Study

- i. To determine the proportion of the SMEs in Nakuru town CBD that use mobile money to carry out their business and financial transactions
- ii. To determine the frequency by which SMEs in Nakuru town CBD use mobile money to carry out their business and financial transaction.
- iii. To determine the effects of mobile money transactions on sales revenue of SMEs within the Nakuru town CBD.

1.5 Research Hypothesis

H_0 there is no statistical significant relationship between mobile money transactions and sales revenue of SMEs in the Nakuru town CBD.

2.0 Literature Review

2.1 The concept of mobile financial Transactions

The objective of mobile financial transactions is to improve the efficiency of microfinance by using mobile technology to make transactions faster, cheaper and more secure (Guagraw, 2007). It involves account transactions, balance checks and payments. Accordingly, Mbiti and Weil (2011) note that mobile phones technology has made it easier for SMEs to conduct their financial transactions. This is because mobile phone financial transactions saves time and provides a safer means of handling money transfer. Additionally, mobile technology can be used to reach more customers and facilitate exchange of information and decision making.

According to Jack and Suri (2010), the launch of M-PESA in Kenya by the telecommunication company Safaricom has enabled SMEs to expand and grow. This is because the service provides them with efficient and

easier ways of paying and receiving payments for goods and services thereby facilitating their trading activities. Chogi (2007) observes that the M-PESA service allows users to deposit and withdrawal money in their accounts as well as to send money using SMS technology. Therefore, mobile financial transactions provide SMEs with a means through which they can reduce their operating costs as well as increase their ability to extend their business networks thus enabling them to increase their performance.

2.2 Mobile phone financial Transactions and SMEs financial performance

According to Bangens and Soderberg (2010), mobile financial transactions lead to increased efficiency in SMEs. This is because mobile financial transactions assist in saving time while undertaking business transactions. Haggins at el (2012) observes that most SMEs find mobile phone financial transactions easier than bank based financial transactions. This is due to the fact that they assist the users to avoid incurring travelling expenses when making and collecting payments. This enables them to significantly reduce their operating costs and increase their performance. Jensen (2007) emphasizes that mobile phone financial transactions assist SMEs to reduce information asymmetries and market inefficiencies hence enabling them to achieve better performance.

Chogi (2006) points out that SMEs in Kenya perceive mobile phones financial transactions as tools that can mediate their activities by transforming their objectives into outcomes. This in turn has an effect on their profitability and productivity. According to Higgins at el (2012), SMEs are characterized by frequent financial transactions which may involve large amounts or long distances. As a result, mobile phone financial transactions provides them with a way through which they can lower their costs and save time with a cheaper and more convenient way to carry out their financial transactions.

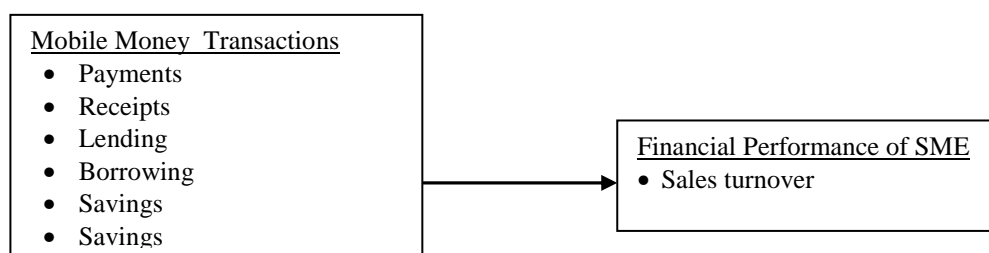
2.3 Empirical Literature

Huang (2008) conducted a study to determine the impact of mobile phones on SMEs performance in Auckland, New Zealand. He used a questionnaire to collect primary data. The results of his study indicated that most SMEs in Auckland were using mobile technology to conduct their business activities. Additionally, the results of the study indicated that the use of mobile devices had enabled SMEs to increase their annual turnover due to additional business networking opportunities. Furthermore, Bangens and Soderberg (2008) assessed the role of mobile banking and its potential to provide basic banking services to the vast majority of people in Sub-Saharan Africa. The data for the study was collected from both the primary and secondary sources. According to their findings, mobile banking has facilitated financial transactions and remittance of funds. Additionally, the results of their study indicated that mobile banking has enhanced the operations and competitiveness of SMEs

Chogi (2006) did a study to investigate the impact of mobile phone technologies on SMEs in Nairobi. The data for the study was collected using a self-structure questionnaire. The results of the study revealed that most SMEs perceived that mobile phones had a positive impact on their revenues. Additionally, the study results indicated that the majority of SMEs perceived that mobile banking enabled them to reduce their operating costs. Similarly, Donner and Escobari (2010) assessed the use of mobile phones by SMEs in developing countries. They used questionnaires to collect data from fourteen research studies that had examined mobile use by SMEs. According to their findings, mobile phones have helped SMEs to become more productive and to improve their sales thereby improving their financial performance.

Wambari (2009) did a case study in Kenya to determine the impact of mobile banking in developing countries. He used a semi-structured questionnaire to collect data from a sample of 20 SMEs. The results of his study indicated that mobile banking had a positive impact on financial transactions of SMEs. Furthermore, the results of the study indicated that the adoption of mobile banking had enabled SMEs to increase their sales thereby leading to improved financial performance. Likewise, Higgins at el (2012) conducted a study to determine mobile money usage patterns of Kenyan SMEs. They used a questionnaire to collect data from 865 SMEs owners. The results of their study showed that 99.5% of the SMEs used mobile money. Moreover, the study results indicated that the use of mobile money enabled SMEs to improve their performance.

2.4 Conceptualization



3.0 Research Methodology

3.1 Research Methodology and Target Population

The study used descriptive research design. The design involved selecting a sample that was representative of the target population, study its characteristics and then draw conclusion about the population from which the sample was selected. The population under study comprised all the 634 SMEs within the Nakuru town CBD.

3.2 Sample and Sampling Procedure

Out of the target population of 634 small and medium enterprises the study took a sample size of 120 businesses representing 18% of the total population. According to Mugenda and Mugenda (2003), for descriptive studies 10% of the population is adequate. The study sampled 19% of the target population in order to have a sizable population above the threshold of 10%, in order to ensure a margin of safety in case some questionnaires were not returned. The population was segregated into ten mutually exclusive sub populations or strata referred as business categories; Curio shops, Boutique, saloons, electrical, electronic shops, hardware shops, bookshops, restaurant, Spare shops and others. Simple random sampling technique was used to choose six categories in which each business category received 20 questionnaires. The study used purposive sampling in order to identify the respondents.

3.3 Data analysis and Presentation

The study used descriptive statistics deviations to analyse the data. In order to accomplish objective one and two, percentage was used to indicate the proportion and the frequency by which SMEs use mobile money transaction. In objectives three, the collected data was analyzed using Chi-square in order to test the corresponding hypotheses on effects of mobile money on the sales revenue of the SMEs.

4.0 Results and Analysis

Table 1: Proportion of SMEs that use Mobile Money Transactions

Response	Frequency	Percent
Yes	91.0	75.8
No	29.0	24.2
Total	120.0	100.0

According to the results in table 1, 75.8% of the SMEs in Nakuru town use mobile money transactions compared to 24.2% who do not use mobile money transactions. This implies that 3 out of 4 SMEs use mobile money to carry out their business and financial transactions. Therefore, the results in table 1 indicate that mobile money is greatly used as a means of doing financial transactions by SMEs.

Table 2: Frequency by which SMEs Use Mobile Money in carrying out Financial Transactions

Use	Always	Often	Sometimes	Rarely	Never
Receiving	26.4	31.9	29.7	7.7	4.3
Payments	17.6	30.8	34.1	5.5	12.1
Borrowing	3.3	8.8	17.6	20.9	49.5
Lending	2.2	6.6	24.2	13.2	53.8
Saving	35.2	25.3	20.9	8.8	9.9

The table 2 above indicates that mobile money is frequently (69.5%) used by SMEs to save money. Furthermore, 58.3% of the respondents indicated that they frequently use mobile money to receive payments. Table 2 shows that 48.4% of the respondents use mobile money to make payments while 12.1% use it to borrow money. According to results in table 2, 70.4% of the respondents did not use mobile money to borrow; while 60.7% indicated that they rarely or never used it for lending. This means SMEs mostly use this service to save, receive and make payments.

Table 3: Sales revenue before and after usage of mobile money transactions

Performance	Before the usage		After the usage	
	Frequency	Percent	Frequency	Percent
Very Good	3.00	3.3	45	49.5
Good	31.00	34.1	38	41.8
Indifferent	19.00	20.9	8	8.8
Not Good	30.00	33.0	-	-
Very Bad	8.00	8.8	-	-
Total	91.00	100.0	91.00	100.0

According to the findings in table 3, majority of the respondents 41.8% indicated that their sales revenue before the usage of mobile money transaction was not good, 37.4% observed that it was good and 20.9% were indifferent. However, after the adoption of mobile money financial transactions, the majority of the respondents (91.4%) observed that their sales revenue after the usage of mobile money transaction was good and 8.8% were indifferent.

Table 4: Testing the hypothesis

Performance	Observed N	Expected N	Residual
Very Good	43.0	29.7	13.3
Good	38.0	29.7	8.3
Indifferent	8.0	29.7	(21.7)
Total	89.0		

Chi-squared = 5.99

Df = 2

The results in table 4 indicate that the calculated chi-square was 24.2 with 2 degrees of freedom. The critical chi-square from the table was 5.99. The calculated chi-square was greater than the critical chi-square at 5% significant level; therefore, this study rejects the null hypothesis and concludes that mobile money transactions have a statistically significant effect on sales revenue of SMEs.

5.0 Summary and Conclusions

The aim of the study was to find out the effects of mobile money transactions on the financial performance of small and medium enterprises. The study established that majority of the SMEs in Nakuru use mobile phone to carry out their financial transactions. This finding are similar with those of Mbiti and Weil (2011), who established that the relatively high user-friendliness and affordability of mobile phones have made it possible for SMEs to adopt and use them widely. The study established that mobile money transaction is frequently used by SMEs to save and receive money as well as to make payments. Furthermore, the study findings indicated that majority of the respondents did not use mobile money to borrow; while some respondent indicated that they rarely or never used it for lending purposes. In relation to sales revenue, majority of the respondents perceived that their sales revenue after the usage of mobile money transaction was good.

Based on the findings, this study recommends that those Small and Medium enterprises that don't use mobile money transactions should adopt this service to enable them improve their performance. This is because those SMEs that were found using Mobile money indicated an improved performance on their sales revenue which is an indicator of good financial performance. Additionally, the study recommends that the mobile money service providers should improve on this service so as to enable the system to produce a receipt for audit trails and

verification purposes. This recommendation is based on the fact that great proportions SMEs use this service to transact their business. A physical verification of any transaction is quite important in case of audit purpose and reconciliation of accounts. By having a system that produces receipt, SMEs will be able to track payments and receipt easier.

6.0 Recommendations for Further studies

Future studies should be conducted to determine the effects of mobile money on the profitability of SMEs. Furthermore, mobile money service providers have come up with new products. Consequently, research should be done to determine how SMEs are utilizing these financial innovations.

References

- Amyx, C. (2005). The Perception Problem: Size Doesn't Matter. *Washington Business Journal*, 1, 1-15.
- Atieno, R. (2009). Linkages, access to Finance and the Performance of Small-scale enterprises in Kenya. *Research Paper No.2009/06*. United Nations University.
- Bangens, L., & Soderberg, B.(2008). *Mobile Banking-Financial Services for the Unbanked*. KISTA, The Swedish Program for ICT in Developing Regions.
- Bowen, M., Morara, M., & Mureithi, S.(200). Management of Business Challenges Among Small and Micro Enterprises in Nairobi-Kenya. *KCA Journal of Business Management*, 2, 16-31
- Chogi, B.(2006). *The Impact of Mobile Phone Technologies on Small and Medium Enterprises*. Paper Presented to Communication Policy Research South on National Regional Innovation Systems, Nairobi. 1-20
- Dalberg.(2011). *Report on Support to SMEs in Developing Countries Through Financial Intermediaries*. Copenhagen, Dalberg.
- Donner, J., & Escobari, M.(2010). A Review of Evidence on Mobile use by Small and Micro Enterprises in Developing Countries. *Journal of International Development*, 22, 641-658.
- Higgins, D., & Kendall, J., & Lyon, B.(2012). Mobile Money Usage Patterns of Kenyan Small and Medium Enterprises. *Innovation, Technology, Governance and Globalization*, 7, 67-81.
- Huang, H.(2008). The Impact of Mobile Devices on SMEs in Auckland, New Zealand. *Unpublished Masters in Computing Project*, Unic New Zealand.
- Jack,W., & Suri, T. (2010). *Bowen at el (2009) of M-PESA*. Nairobi, Central Bank of Kenya.
- Jensen, M.C. (2007). Self-Interest, Altruism, Incentives, and agency theory. *Journal of Applied Corporate Finance*, 7, 40 – 45.
- Jensen, T. (2007). The Digital Provide: Information (Technology), Market Performance and Welfare in the South Indian Fisheries Sector. *Quarterly Journal of Economics*, 122, 879 – 924
- Kanyi, W., & Maharaj, M.(2011). Factors influencing successful use of Mobile Technologies to facilitate E-commerce in small enterprise: The case of Kenya. *The African journal of information system*, 3, 600-623.
- Kenya National Bureau of Statistics.(2005). *Basic Report on Well-Being in Kenya*. Nairobi. Ministry of Planning and National Development.
- Lennart, B., & Björn S (2010). Mobile Money Transfers and Usage among Micro and Small Businesses in Tanzania. *Implications for Practice*, 1-29.
- Malik, M. (2004), *The role of the private sector in Economic Development in Saudi Arabia*, London, Routledge.
- Mbiti, I., & Weil, D.(2011). Mobile Banking: The Impact of M-Pesa in Kenya. *NBER Working Paper No. 17129*, 1-53.
- Nyagori, R.(2012). Factors Influencing Performance of Micro and Small Enterprises: A Case of Kisumu City Bus Park-Kenya. *Unpublished Masters in Planning and Management Project*, University of Nairobi.
- Wambari, A.(2009). Mobile Banking In Developing Countries-A Case Study on Kenya. *Information Technology*, University of Applied Sciences.
- World Bank.(2012). *World Development Report*. Washington. World Bank.

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage:
<http://www.iiste.org>

CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

Prospective authors of journals can find the submission instruction on the following page: <http://www.iiste.org/journals/> All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: <http://www.iiste.org/book/>

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar

