



RESEARCH ARTICLE

EFFECT OF MOBILE MONEY TRANSFER SERVICES ON THE GROWTH OF SMALL AND MEDIUM ENTERPRISES IN INFORMAL SECTOR OF NAIROBI COUNTY, KENYA

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ABSTRACT

The study investigated the relationship between mobile money transfer services and growth of small and medium enterprises in the informal sector of Nairobi County. The study used a cross-sectional survey design and targeted population of 50,000 SMEs in Nairobi County. A sample size of 397 SMEs was by use of stratified sampling technique to identify the respondents from the service, the manufacturing, and the trade sectors. Web-based questionnaire was used to collect data. Descriptive and inferential statistics were used to analyze data. The study found out that there was a strong positive correlation between SME growth and mobile payments, mobile loans, and mobile banking. Regression model revealed that mobile service and loan service have significant effect on the growth of SMEs. The study recommends greater integration of tailor-made mobile money services into the SMEs in the informal sector to bolster performance and improve the absorption and utilization of mobile money transfer services.

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INTRODUCTION

Originally, mobile telephones provided voice and data communication, however, the inclusion of integrated services, such as mobile money transfer, Internet and data services have turned them into important tools for transacting business. Attributes like portability and affordability have increased the adoption rate of mobile phones among SMEs. Initially, SMEs had to access banking facilities to transact business or send and receive payments through costly courier services. Of late, this is no longer the case because SMEs can conveniently remit or receive payments through mobile money transfer at any time or place and save on costs and time (Mas and Radcliffe, 2010). By the fact that mobile money technology allows SMEs to send and receive money via mobile phones, this has brought development to SMEs in informal sector because it supports services such payments, transfers, and mobile wallets and provides linkages between banking and SMEs (World Bank, 2012). The money transfer technology brings together banks and communication service providers that have established a network of agents at the grassroots. In Kenya, the foremost Mobile Money Transfer (MMT) services include M-Pesa, Airtel-Money, Yu-Cash, and Orange Money (Mbiti and Weil, 2011).

However, M-Pesa is the leading mobile money transfer service that accounts for 90% of the Kenyan market share.

Mobile Money Transfer Services

Mobile money can be described as the money that a person can access and use through a mobile phone (Donovan, 2011). It can be used to settle credit or outstanding bills; therefore, it converts a mobile phone into a mobile wallet. On the other hand, MMT, which is referred to as mobile payment, mobile wallet, or mobile money, describes the delivery of financial services or remittance of money via mobile devices or credit/debit cards (Zutt, 2010). It exemplifies a convergence of finance and mobile communication that brings together mobile service providers and financial institutions (World Bank, 2012). A mobile service provider is usually a mobile network operator offering mobile money transfer services. The provider links SMEs' mobile money account with a phone number. In this model, the liquid cash is converted into electronic money or mobile money and is accessible through a SIM card-resident application displayed on a mobile device. The mobile money service provides security and convenience to the banked and unbanked SMEs in the informal sectors who can transfer or receive e-money at remote locations (Davidson and McCarty, 2011). Zutt (2010) asserted that mobile money services support additional features, such as mobile wallet, airtime transfer, and m-banking services.

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The mobile wallet solution allows a user to receive, keep, pay, or transfer money to another person or agency for services received. In contrast, mobile money or airtime transfer feature allows a subscriber to send money or purchase airtime from his/her e-account to another registered user. Mobile banking entails bank-mobile service provider partnerships that enable banking institutions to offer financial services to subscribers via the mobile platform. The uptake of the mobile money technology over the past few years is remarkable. Earlier in 1997, m-commerce, a mobile phone-enabled commerce emerged with the launch of Coca Cola vending machine in a Finnish city. Another major step in mobile money development happened in 1999 with the introduction of SMART money in the Philippines (Wishart, 2006). By the early 2000s, the mobile money solutions were becoming widespread, as more operators rolled out tailor-made solutions in various markets. In Africa, operators in different countries launched MTM banking, M-Pesa, Cel Pay, and Fundamano to facilitate m-commerce. In Kenya, Airtel which was initially called Kencell, was the first mobile service provider to introduce a mobile money service called Sokotele. In early 2007, Safaricom, which is currently the market leader, introduced M-Pesa service as is known today (Wamuyu and Maharaj, 2011).

Other operators like Telkom's Orange and YU also introduced similar solutions, namely, Orange money and Yu-Cash. Nevertheless, Safaricom's M-Pesa is still the main platform for mobile money in Kenya accounting for over 90% of all mobile money transactions. This contributes to about 27% of service revenues in Kenya which is equivalent to Kshs. 55 billion in 2016/2017 financial year (GSMA, 2017). The growth in mobile money usage has been in highly correlated with the increase in mobile penetration in Kenya. By the end of year 2010, Kenya's estimated value of transactions per subscriber was more than Kshs. 38 billion monthly, equivalent to about 20% of the Kenya GDP (Kenya National Bureau of Statistics, 2013). At the moment, the registered mobile money users by the year 2013 stood at over 13 million (Kenya National Bureau of Statistics, 2013). By 2012, the number of mobile money subscribers stood at 26.49 million with 18.4 million of the subscribers being registered for mobile money. This is equivalent to 48% of the Kenya's total population.

Small and Medium Enterprises

Small and Medium Enterprises (SMEs) are described as enterprises with fewer than 250 employees (Meredith, 2001). A small-sized enterprise has fewer than 50 employees, while a medium one has between 50 and 250 employees. In Kenya, the Micro and Small Enterprises (MSE) Bill 2012 defines small enterprises as those firms, trade, service, industry or business activities that have an annual turnover of Ksh 0.5-5 million and have a population of 10 to 50 employees. SMEs in Kenya are characterized by ease of entry and exit, small-scale economic activities, self-employment with a high proportion of family members work as apprentices, limited capital and equipment requirement to start and run, low level of skills requirement, limited access to formal credit, limited focus on value addition and cash based transaction (Waweru, 2007). On the other hand, Schaper and Volery (2004) described an SME owner as a person who creates and runs an enterprise principally to further his/her personal goals. In this case, the business is the primary source of income for individual entrepreneur and consumes a

lot of the owner manager's time and resources. SMEs often gain returns or profits through the provision of services or products in diverse sectors, including agro-processing micro-finance, manufacturing, and service industry, among others. There are some SMEs who rely on owner manager's contributions and small loans/credit facilities based on the table-banking concept. Table banking is similar to a merry-go-round, but entails loaning of member contributions to members who must repay at an agreeable period of time with a small interest (Kariuki and Ngugi, 2014). The small nature of the contributions and loans make mobile money transfer an attractive and less costly solution for receiving member contributions and extending credit without holding meetings.

Growth of the SMEs in Kenya

Sun (2004) defines SME growth as the development process that businesses use to maintain a balanced and stable growth or performance level in terms of sales turn over, profit, or revenue. It entails healthy, continual, and accelerated growth of an enterprise. An enterprise could be defined as an organized profit-driven entity that offers services and products to the market (Meredith, 2001; Schaper and Volery, 2004). Enterprises require capital and resource investment to grow their operations in their target markets. SMEs in DCs are enterprises with less than 250 employees with a small enterprise having fewer than 50 employees (Meredith, 2001; KNBS, 2014). According to the Kenya National Bureau of Statistics [KNBS] (2014) it was estimated that there were over 7.5 million SMEs operating in Kenya. The SME sector, i.e., Juakali, had significantly contributed to the national economy. Its contribution to the Gross Domestic Product (GDP) had grown from 18% in 1999 to 25% in 2009 (Kiraka et al., 2013). The SMEs in the informal sector contributed significantly to the economy of Kenya in terms of employment. Nevertheless, the Economic Survey of 2006 indicated that the SMEs contributed over 50 percent of new jobs created in the year 2005, growing to 92% in 2008 (Bowen et al., 2009). Therefore, the SMEs in the informal sector is critical to Kenya's economic growth and development.

The challenges facing the SMEs in the informal sector range from limited financing opportunities, lack of human resource development, market constraints, and limited access to information (Bowen, Morara, and Mureithi, 2009). From an internal perspective, low creditworthiness, limited management capacity, and lack of collateral makes it difficult for SMEs in the informal sector to obtain credit or loans from financial institutions, which tend to exhibit caution when financing high-risk businesses (Haron et al., 2013). The coming up with affordable prepaid services saw the number of registered subscribers grow tremendously compared to the post-paid regime. Micro-payment solutions were integrated into prepaid services to reach out to the population segment that had limited or nil access to traditional banking services. Wishart (2006) argues that the key driver for mobile money solutions was the desire to develop a cashless transaction system that were considered more secure, had lower handling costs, and were more convenient than cash. Small and Medium Enterprises (SMEs) have adopted money transfer as a strategy to reach populations that do not access traditional bank services in a banking hall. Mobile money transfer has also been adopted to cut down on costs, increase their presence, and overcome the

aforementioned business constraints. For example, the M-Pesa platform presents a viable and cost-effective option for microfinance institutions to extend savings account, credit, and dividends to geographically dispersed low-income populations that ordinarily lack access to banking services (Aduda and Kalunda, 2012).

Issues of Mobile Money Transfer

The introduction of mobile payment services has seen the emergence of new business models that expand the usage of mobile money by SMEs and continue to demonstrate their potential. While many mobile money products are in the early stages of development, their success give compelling evidence that they could be the key to overcoming the obstacles that stifle SME performance, such as the lack of access to finance. The adoption of a payment innovation by Nigerian traditional SMEs was associated with streamlined supply chains due to effective payment coordination (Jagun, Heeks, and Whalley, 2008). In India, the use of mobile money services by the fishing community led to a reduction in price dispersion and better pricing (Jensen, 2007). In developed markets, the best-known payment innovation called Square in the US provides comprehensive business solutions to SMEs besides facilitating payments (World Bank, 2016). These disruptive payment solutions focusing on facilitating transactions between SMEs and customers also decrease operational costs and stimulate the formalization of SMEs, paving way for growth.

In Kenya, most SMEs operate in the informal sector as family businesses are concentrated in urban centers (Wairimu, 2015). Many SME owners do not own bank accounts, which they consider cumbersome, as it would require them to visit banks during critical business hours. For these reasons, mobile money services have grown popular among SMEs and unbanked customers. The rapid penetration of mobile telephony has accelerated the adoption of mobile money services by SMEs due to growth in total number of customers using mobile phones (Kiraka, *et al.*, 2013). SME operators can conveniently transact payments with suppliers and customers via their mobile phones and thus avoid the need to visit banks or additional operational costs, which may contribute to improved performance or growth. Although mobile money transfer has been lauded as a transformative initiative in the SME sector, a critical evaluation of its actual contribution to the growth of SMEs would give informational basis for expanding the concept to other SME subsectors. However, few studies have been conducted to establish a link mobile money services and growth of SMEs in Nairobi County.

Empirical Review

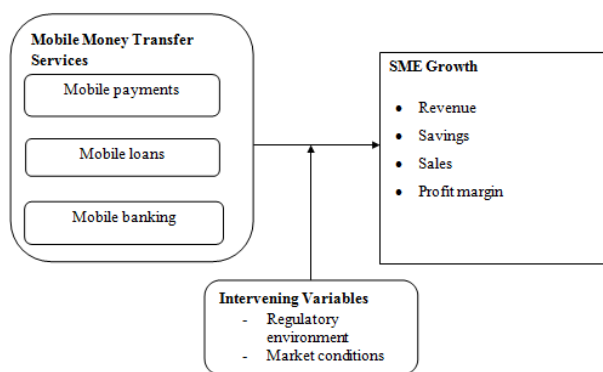
Nyaga and Okonga (2014) examined the impact of MMT on SMEs growth in Naivasha Municipality. Their findings showed that mobile money services impact positively on sales. Further, the effectiveness and reliability of the services contribute to SME growth. The study also found that most SMEs operators do not own bank accounts and are unfamiliar with mobile bank transactions, including loan application. This case study found a business case for mobile money services, and investigated sales as a measure of impact of mobile money services. Wanyonyi and Bwisa (2013) examined the effect of mobile money transfer services on the performance of small merchants

in Kitale municipality in Kenya. They carried out a survey of study surveyed 36 SMEs drawn from agriculture, service, and processing sectors. The key findings of this study show that B2B transfer when making purchases from supplier and C2B transfers when consumers buy from the business and for debt collection for credit sales contributed to improved performance of SMEs. However, this study focused mostly on the direct uses of mobile money transfer by SMEs as opposed to its impact on SMEs growth. Onyango *et al.* (2014) sought to find out the impact of adoption and use of mobile phone technology on the performance of SMEs in Kisii Town, Kenya. A cross-sectional survey research design and stratified sampling were used to identify the SMEs. Simple random sampling method was used to select the respondents and used questionnaires to collect the data. The main findings indicated that mobile phone technology had influenced the performance of SMEs significantly and these included; better response to customers, improved communication with suppliers or customers, ability to store and retrieve customer data fast, and lower operational costs. Although the findings suggest that mobile money services improve business processes and efficiency, it did not evaluate the real indicators of business growth, such as sales, profits, revenue, etc.

Mbiti and Weil (2011) examined how M-PESA is used and its economic impacts on financial access in Kenya. According to the study it was established that increased use of M-Pesa services lowers the likelihood of people to use the informal saving mechanism but it raises the probability of SMEs being banked. The study showed that the velocity of M-Pesa usage ranged between 11.0 and 14.6 present per month. Furthermore, they found that M-Pesa use decreases the price of care posting money transfer services. This study indicates that access to mobile money services creates a saving culture among SMEs.

Conceptual Framework

Based on the literature review, mobile money services namely, mobile payments, mobile loans, and mobile banking have an impact on the growth of SMEs in terms of revenue, savings, sales, and profit margin as illustrated in Figure 1 below. Revenue refers to income from business activity minus the expenses or transaction costs. Revenue growth may come from improved business performance due to access to financial services – banking, loans, and payment – through mobile money services. SMEs using mobile money services make savings related to transaction costs and transportation – courier services, resulting in improved business efficiency. Literature indicates that use of mobile money services contribute to increase on revenue of SMEs. Savings is the complement of credit. Savings, as used in this study, means the storage of client money in a bank or any store of money such as the balance of electronic money within a mobile wallet. In Kenya, majority of SMEs face a challenge of accessing financial and effective use financial product and services as the major obstacle to their growth since formal financial institutions need formal registration of businesses to save and qualify for credit. This study examined whether mobile money services, including mobile banking, leads to improved savings by encouraging SMEs to save towards qualifying for microcredit (mobile loans). Sales growth of the SMEs in the informal sector may depend on improved market penetration through innovative services.



Source: Author (2018)

Figure 1. Conceptual Framework

Mobile payment is a service allowing unbanked people to buy or sell goods and services at a merchant shop or store using their mobile wallet through their phones instead of cash as well as paying utility bills. Mobile payments platforms allow for the sender immediately receive verification data of the recipient as the receiver is getting this payment. SMEs using this service may experience a growth in sales due to the convenience of mobile payment system and the high number of users accessing this service. Literature suggests that mobile money services (mobile payments) contribute to growth in the sales of SMEs.

The convenience, security, and speed at which a transaction is summarized coupled with time savings related to spending less time in waiting lines for bank services contribute to improved business performance. Through mobile money services, SME owner-managers can spend more time in their shops, increase sales volumes, and save on transaction costs, leading to higher profit margins.

METHODOLOGY

The study was a cross-sectional survey targeting population of all the SMEs operating in Nairobi County in Kenya. The stratified random sampling technique was employed where SMEs were stratified into small, medium, and large; strata adopted by the city council of Nairobi. This was based on Kothari (2008) recommendation that stratified random sampling is accurate, easily accessible, and supports cross-data comparison. The sampling approach also increases inclusion of subpopulations that may be left out when using other sampling techniques. An appropriate sample was calculated based on Fishers formula to determine the sample size (Kumar, 2005). The formula is as stated below:

$$n = \frac{N}{[1 + N(e)^2]}$$

Where n = sample size, N = population size and e = error term.

The number of SMEs in Nairobi County as per the Ventures Africa magazine (2013) list stands at 50,000, the population size (n) was taken to be 50,000. Based on this population, the sample size was estimated at the 5% derived level of confidence:

$$n = 50000/[1 + 50000(.05)^2] = 50000/126 = 396.8$$

A sample size of 397 SMEs was used

The study collected primary data by use of a questionnaire. The pilot testing of the questionnaire was done on a few

respondents (about 10 SME entrepreneurs) similar to those in the sample. The aim was to minimize vagueness and lack of clarity in questions, and consequently, improve the validity and reliability of the questionnaire instrument. Further, data from the pilot testing were analyzed to the efficiency and robustness of the selected data analysis method. Descriptive and inferential statistics were used in data analysis as informed by Mugenda and Mugenda (2003) who stated that descriptive statistics enable meaningful description of a distribution of scores or measurements using a few indices or statistics. A correlation analysis was used to estimate the association of the variables while multiple regression model was used to estimate the effect of mobile money transfer services on the SME growth. The regression model is:

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

Where Y (SME growth), X_1 is Mobile payments, X_2 is Mobile loans, X_3 is Mobile banking, $\beta_1 - \beta_3$ are regression coefficients, β_0 is the constant and e is the error term

Data Analysis

Descriptive Analysis

It was found that 44.2% of the SMEs have been in operation for between 1 – 5 years, 32.6% have existed for 6-10 years, 14.9% have operated for 11-15 years, and 8.2% for over 15 years. Of the 389 respondents, 65.3% were male, while 34.7% were female. This shows that more males– being the head of the family in the African setup – than females are involved in SMEs to generate income for household. It demonstrates that male entrepreneurs dominate economic activities in the SME sector in Nairobi County. With respect to the respondents' ages, the results reveal that 16.7% of them are aged between 18 and 24 years, 31.1% fall in the 25-35 age group, 24.7% are aged between 36 and 45 years, 18.8% lie in the 45-55 age bracket, and 9.3% of the respondents are over 55 years. The results demonstrate that most of the respondents (SME operators) are the youth (<35 years) and middle-aged persons (35-45 years old) who constituted 47.3% and 24.7% of the respondents, respectively. These age groups imply that a majority of the young people are involved in small and medium business enterprises and use mobile money services compared to the older age groups. The 18-45 age group is considered a productive age that is more receptive to new technology than other age cohorts in the society are.

Of the 389 respondents, 10.8% had certificate qualifications, 32.6% had degrees, 19.0% diploma, 8.2% higher diploma, 29.5% masters, and 9.8% had no educational qualifications. The results show that most SME operators hold diploma qualifications and higher, with a majority being degree holders. The results show that most SMEs fall in the Kshs. 100,001-350,000 range at 34.4%, followed by those earning Kshs. 10,001-100,000 at 29.6%. SMEs in the Kshs. 350,001-500,000 category constituted 19.5%, while those earning above Kshs. 500,000 constituted 12.1%. A paltry 4.4% of the SMEs had monthly revenue of less than Kshs. 10,000. The average loan repayment period ranged between 1 and 6 months, implying that borrowers of short-term loans from mobile service providers had to repay the money within a maximum of six months. The average repayment duration was 2.18 months.

The average interest payable, in percentage, in addition to the monthly premiums to the mobile money providers. A high interest rate would discourage borrowing, but a lower interest would make this facility attractive to SMEs. From the survey results, the service providers charge an interest rate ranging between 2% and 15%.

Inferential Statistics

Correlation Analysis

Correlation analysis was used to determine the association between mobile money transfer services and SME growth. From the findings, there was a positive correlation between mobile money services and SMEs growth with a maximum correlation factor of 0.647. A positive correlation was found between mobile payments, mobile loans, and mobile banking and SME growth, as shown in the correlation Table 1 below with $r = 0.647, 0.619, \text{ and } 0.615$, respectively. From this table, it is clear that there was positive correlation between SME growth with mobile payments, mobile loans, and mobile banking.

Regression Analysis

A multiple regression analysis was conducted to determine the relative importance of each of the variables. To find out the effect of Mobile Money Services on SME growth in Nairobi County. Results from the statistical package for social science (SPSS) package of the regression model are presented in the tables below. The regression model explains the extent to which changes in the SME grow can be explained by the change in the mobile money transfer services or the percentage of variation in the dependent variable (SME growth), that is explained by the three independent variables investigated namely mobile payments, mobile loans, and mobile banking. From Table 2, it is clear that the three independent variables that were studied can explain 42.9% of variance in growth of SMEs as shown by the R square value of 42.9. This therefore means that other factors not studied in this research account for 57.1% of variance in the dependent variable. Therefore, further research should be done to find out the effect of other factors rather than mobile money services which have impact on SME growth in Nairobi County. Since sig value or p – value is zero that means, it means that we reject the null hypothesis that mobile money transfer services have no effect on growth of SMEs. Based on the regression model results the formula can be restated as follows:

$$Y = 2.443 + 0.617X_1 + 0.416X_2 - 0.370 X_3$$

From this model, mobile payments, mobile loan service, and mobile banking service together have significant effect on SME Growth as p – value becomes 2.443. Results show that a unit increase in Mobile Payment Service variable will lead to a 0.617 increase in SME Growth. A unit increase in Mobile Loan Service will lead to a 0.416 increase in SMEs growth, while unit increase in Mobile Banking service leads to a 0.370 decrease in SME growth. Thus, all mobile money transfer services contribute to SME growth as the significance or p – value is zero. From the results of regression analysis, it is clear that mobile payments have a statistically significant positive effect ($\beta = 0.617, t = 5.345$) on the sales, revenues, and profits

of SMEs, which contribute to the growth of SMEs. This finding revealed that SMEs who use mobile money services for sending and receiving payments have the probability to grow than those who not use the mobile money services. The results are consistent with a study by Chale and Mbamba (2014) who found that sales transaction had significant influence on growth of SMEs. Similarly, Onyango et al. (2014) found that mobile phone technology had impact on the performance of micro and small enterprises. Wanyonyi and Bwisa (2013) observed that sale and debt collection from customers through mobile money services contributed to improve performance of micro enterprises. Therefore, mobile payment services contribute to business growth because consumers are able to pay goods and services easy and quickly and SMEs could sale goods and services anytime and anywhere. The study found that the mobile loan service had a significant positive impact on SME growth ($\beta = 0.416, t = 2.679$). This finding is consistent with the study undertaken by Nyaga and Okonga (2013) that found many players in SMEs sector use the services for saving, to access loans or have bank account. The findings also show that mobile money users are familiar with mobile-bank transactions on loan request and repayment and prefer mobile banking to bank visits when it comes to small loans and advances. Chale and Mbamba (2014) found that saving and credit receiving significantly influenced the growth of SMEs. Similarly, Batisha and Vicente (2012) found that mobile money services substitute traditional saving and remittances. The results indicate that mobile banking has no significant impact on SME growth ($\beta = -0.370, t = 1.920$). It shows that the use the mobile banking service affects bank savings, deposits, and withdrawals, which hinders business growth. This finding implies that mobile money accounts are preferred to traditional banks in making transactions, such as savings, deposits, and withdrawals. Therefore, mobile money services increases the propensity of people to save and operate their bank accounts without physically visiting their banks. This helps to save time lost traveling and queuing in banking halls. These results in SME growth probably because it promotes dedication to SME management and focus.

RESULTS AND DISCUSSION

The purpose of this study was to determine the effect of mobile money services on the growth of SMEs in the informal sector of Nairobi County. The study had a relatively high response rate of 97.99 percent, which could be attributed to follow-ups and the web-based questionnaire format used. Most of the SMEs in Nairobi County were established only recently, with 44 percent of them having been in operation for less than 5 years, followed by those that have existed for 6-10 years (32.6%). Only 8.2 percent of the SMEs had exceeded 15 years of existence. This could be attributed to increased focus by the national and county governments on SMEs. Recent focus resulted in the Micro and Small Enterprise Act (MSE) of 2012 and its operationalization through the setting up of relevant institutional mechanisms. The MSE Act provides for new rules and institutions to support micro and small businesses in Kenya to enable them succeed. It provides legal and institutional frameworks for the promotion, development, and regulation of SMEs. These include Office of the Registrar of MSE associations (to formalize/register SMEs), MSE tribunal (for conflict resolution), and the SME fund – to address issues of financing (GOK 2012).

Table 1. Correlations

		Size of SME	Mobile Payments	Loan Service	Banking Service
Pearson Correlation	Size of SME	1.000	.647	.619	.615
	Mobile Payments	.647	1.000	.910	.943
	Loan Service	.619	.910	1.000	.969
	Banking Service	.615	.943	.969	1.000
Sig. (1-tailed)	Size of SME	.	.000	.000	.000
	Mobile Payments	.000	.	.000	.000
	Loan Service	.000	.000	.	.000
	Banking Service	.000	.000	.000	.
N	Size of SME	389	389	389	389
	Mobile Payments	389	389	389	389
	Loan Service	389	389	389	389
	Banking Service	389	389	389	389

Table 2. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.655 ^a	.429	.425	.81294	.429	96.554	3	385	.000

a.Predictors: (Constant), Mobile Banking Service, Mobile Payment Service, Mobile Loan Service

b.Dependent Variable: SME Growth

Table 3. ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	191.429	3	63.810	96.554	.000 ^b
Residual	254.437	385	.661		
Total	445.866	388			

a. Dependent Variable: Size of SME

b. Predictors: (Constant), Banking Service, Mobile Service, Loan Service

Table 4. Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error				Lower Bound	Upper Bound
1	(Constant)	2.443	.056		43.954	.000	2.334	2.552
	Mobile Service	2.179E-006	.000	.617	5.345	.000	.000	.000
	Loan Service	5.279E-006	.000	.416	2.679	.008	.000	.000
	Banking Service	-4.186E-006	.000	-.370	-1.920	.056	.000	.000

a.Dependent Variable: Size of SME

b.Predictors: Mobile Payment Service, Mobile Loan Service, Mobile Banking Service

The results show that youthful men own a majority of the SMEs in Nairobi. From the results, a high percentage of the SME operators or owners are male aged 25 to 35 years old. The study found that most of the respondents (SME operators) are the youth (<35 years) and middle-aged persons (35-45 years old) who constituted 47.3% and 24.7% of the respondents, respectively. These age groups imply that a majority of the young people are involved in small and medium business enterprises and use mobile money services compared to the older age groups.

The 18-45 age group is considered a productive age that is more receptive to new technology than other age cohorts in the society are. Another demographic characteristic investigated was the educational level of the respondents. The study found that of the 389 respondents, 10.8% had certificate qualifications, 32.6% had degrees, 19.0% diploma, 8.2% higher diploma, 29.5% masters, and 9.8% had no educational qualifications. The results show that most SME operators or owners hold diploma qualifications and higher, with a majority being degree holders. Thus, it can be concluded that post-secondary education is required to start and run an SME in Nairobi and use mobile money transfer services effectively.

The average size of the SMEs investigated, in terms of monthly revenue, had earnings of Kshs. 100,001-350,000, at 34.4%. The next category had earnings of Kshs. 10,001-100,000 at 29.6%. SMEs in the Kshs. 350001-500000 category constituted 19.5%, while those earning above Kshs. 500,000 constituted 12.1%. Only 4.4% of the SMEs had monthly revenue of less than Kshs. 10,000. Therefore, most businesses in Nairobi have a monthly turnover of between Kshs. 100,000 and 350,000. In terms of size, they can be described as small, as opposed to micro enterprises (Kshs. <10,000) and medium enterprises (Kshs. >500,000).

Conclusions and Recommendation

The study findings suggest that there is a strong positive correlation between the use of mobile money services, namely mobile payments, mobile loans, and mobile banking, and the growth of SMEs in the informal sector. The study concludes that mobile money services play a major role in the SMEs in the informal sector by providing a convenient platform for owners to transact business without necessarily visiting their banks. It is also evident from the study results that mobile money services influence SMEs growth in terms of revenue and profits.

With respect to mobile payments, convenience in receiving and sending payments, improves the amount transacted, sales, and revenue, contributing to improved business performance. It can also be concluded that aspects of mobile loan services, such as low interest rates, low premiums, and greater returns on investments, encourage monthly borrowing, with a flexible repayment period. The study also concludes that convenience and improved withdrawal amount and cost savings that come from avoiding journeys to bank or withdraw cash, contribute to business growth. The results showed a strong positive correlation between mobile banking and SME growth. However, there was no significant contribution of banking service to SME growth, which means that mobile money services competes with m-banking services when it comes to deposits, withdrawals, and savings. Most SME operators keep their money in their mobile accounts as opposed to sending it to their bank accounts. In this regard, mobile money services, such as M-Pesa, can complement or compete directly with mobile banking. The results of the study are consistent with previous studies that associate various mobile money services with SME growth.

The advantages of the technology over traditional banking, including low fraud risk, easy traceability of transactions, affordable cash handling costs, convenience, and security add value to SMEs in the informal sector. Furthermore, mobile money services are inexpensive in sending and receiving payments compared to once popular money transfers of telegrams and public transport system. The growth of SMEs can be associated with the popularity of mobile money services owing to myriad of benefits of this technology. The researchers therefore recommend greater integration of mobile money services in SME operations to maximize the benefits of this technology. Finance regulators should develop measurements to evaluate SME growth in various sectors. Most SMEs operate informally and do not maintain books of accounts to track their business turnover, profit margins, employee data, or growth projections. This makes it hard to quantify the real value of SMEs in the informal sector. Improving mobile money services can facilitate the formalization of SMEs in the informal sector and improve efficiency and effectiveness. Cashless transactions are growing rapidly in the Kenyan business environment. Already, Safaricom has formed partnerships with several banks to integrate mobile money services into banking. The study recommends provider-led educational program for SME owner managers in the informal sector to promote the absorption of mobile money services. Other user-friendly services tailored for SMEs can be included in the platforms to improve SME growth. Mobile internet and business resources can be provided to users to strengthen their capacity to run SMEs profitably. The study further recommends greater collaborations of regulators, SME operators, and mobile money service providers to develop SME-tailored products.

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