Mobile Financial Services and Mobile Commerce on Performance of Micro, Small and Medium Enterprises in Kenya: A Case Study of Kitengela, Kajiado County

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Abstract: **Micro, Small and Medium Enterprises (MSMEs) in Kenya face many unique challenges such as reluctance by commercial banks to meet their financial needs like payment and transactional services. The main purpose of this study was to establish the relationship between mobile financial services and mobile commerce services on performance of MSMEs in Kenya, in Kitengela, Kajiado County. The study was anchored on Technology, Organization and Environment (TOE) Framework and supported by Actor Network Theory (ANT) theory. The study employed descriptive research design. The target population was 817 formally registered MSMEs in Kitengela Town dealing in trade, services and manufacturing. The study employed Fisher Model to come up with sample size of 261. The study relied on primary data which was collected using questionnaires. Quantitative data was presented in frequency tables and figures while quantitative data was presented in prose form. The study result shows that mobile financial and mobile commerce services with $R^2=0.488$ which means that around 49% of the performance of MSMEs in Kitengela town is influenced by mobile financial and mobile commerce services.**

Mobile finance and mobile commerce services had a significant positive linear relationship of R=0.699 between mobile finance and mobile commerce services on the performance of MSMEs in Kitengela, Kajiado County. The results also indicated that the overall influence of mobile finance and mobile commerce services on performance of MSMEs in Kitengela, Kajiado County was significant (F =191.918, p < 0.05). The study result shows that there was linear relationship between mobile financial services and mobile commerce services on performance of MSMEs in Kitengela, Kajiado County. The study recommends that mobile money service providers should identify platforms capable of minimal delays and fast responses to increase adoption rates across the country

Keywords: **Mobile Financial Service, Mobile Commerce, Performance, Micro Small and Medium Enterprises**

I. INTRODUCTION

The International Monetary Fund (IMF) (2018) pointed that in modern digital age, mobile money services are the bridges and roads of the traditional, physical economy. They connect businesses with customers and create markets. For this digital market to function, it is vital that businesses and their customers have a means for transferring money through mobile devices. As in 2018, mobile money service adoption made a significant contribution to global growth. Or instance, in Asia, East Asia and Pacific alone added 30 million accounts in 2019, driven primarily by growth in Southeast Asia where new entrants and innovation continue to push boundaries. With government support, U.S. and Chinese the adoption of mobile money services in business sector are expected to reach $1 trillion in value by 2023 (Global Index database, 2018).

Despite the significant projection and growth of mobile money services across the globe, Sub-Saharan Africa remained enduring epicenter of mobile money service, adding over 50 million registered accounts in 2019. This was driven by strong growth in Western Africa (21 million new accounts) and Central Africa (6 million new accounts), as well as steady growth in Eastern Africa (22 million new accounts). The GSMA forecasts that account adoption across Sub-Saharan Africa will remain strong and that the region will surpass the half billion mark by the end of 2020 (GSMA, 2019). Across the world, Sub-Saharan Africa is the leading continents that conduct most of its money transaction through mobile money services. WB (2018) indicated that at least (45.6%) of the mobile money activity conducted across the world happens within the Africa continent with approximately $26.8 billion in transaction value in 2018 alone while this figure excludes bank operated solutions.

Since introduction of mobile money services in Kenya in 2007, there are more than 110,000 M-Pesa agents, 40 times the number of bank ATMS in Kenya. Central Bank of Kenya (2018) statistics indicated that over 40 million people moved $38.3 billion on Kenya's mobile financial rails with M-pesa having at least 95% of the transactions. In year 2020, there was a total of Ksh. 1,087 billion mobile payment within a period of January to march in year 2020 (CBK, 2020). These is a clear indication that mobile money services are used across all the sectors that support the country economy. As such, MSMEs are not excluded to this innovation and thus

they must embrace mobile money services to enhance their performance.

Mobile money services can be broadly categorized into three groups: m-transfers, m-payments and m-financial services. M-transfers involve money transfer from one user to another, normally without any accompanying exchange of goods or services (Jenkins, 2008). These are also referred to as person-to-person (P2P) transfers and may be domestic or international (Jenkins, 2008). M-payments involve money exchange between two users with an accompanying exchange of goods or services. M-financial services are mobile money services in which mobile money may be linked to a bank account to provide the user with a whole range of transactions that they would access at a bank branch. Users access financial-related services like insurance and micro-finance among others via their mobile phones (Jenkins, 2008). Money transfer via SMS texting was the first service offered. Using a basic mobile phone, users could electronically send and withdraw funds. The actual exchange of money--the deposit and withdrawal--occurs through a network of agents that essentially act as ATMs.

Despite their significance, past statistics indicate that three out of five businesses fail within the first few months of operation (Kenya National Bureau of Statistics, 2016). One of the main reasons for this failure is lack of financial inclusion, financial deepening, and lack of cash flow. To cope with financial challenges, SME owners have innovatively responded to changing market dynamics by adopting innovations in their firms aimed at maximizing on their returns, minimize costs as well as enhancing their business performance. One of such innovative model that they have adopted is the mobile money services that are easily available from the telecommunication firms such as M-pesa from Safaricom and Airtel money from Airtel which are major mobile money service providers.

In Kenya, micro-business enterprises have increasingly deployed the use of mobile payments to enhance the quality of their services and increase growth. The pace of transformation in the micro business sector has speeded up with more micro businesses realizing the potential of using the mobile payments in their service delivery (Mbogo, 2010). Additionally, Kendall, Lyon, and Higgins (2012) pointed that Kenyan SME owners use mobile money services to pay utility bills or salaries or suppliers, they are driving higher volumes of both MM adoption and transactions. Ngaruiya (2014) indicated that the inception of mobile phone financial transaction has brought a lot of benefits to MSMEs. 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.

1.1 Statement of the Problem

In most Micro, Small and Medium Enterprises (MSMEs), are now using M-pesa to buy goods and make payment from their suppliers. These mobile money services include cashless distribution where fast-moving consumer goods (FMCG)

companies. Person to person (P2P) money transfers, cash in deposits and cash out withdrawals at M-pesa agents, consumer to business (C2B) payments, business to consumer (B2C) payments and international money transfers are a common aspect mobile money services used in MSMEs, those in Kitengela included. Mobile-phone banking, mobile payments commonly known as "Lipa na M-pesa" and agent banking for instance are common aspects of these firms. However, the effect this adoption has had on their performance has remained

According to Higgin *at el* (2012) lack of proper mode of receipts and payments, debt collection procedures and access to finance, makes MSMEs to be faced with problems associated with liquidity and working capital management. According to a survey carried out by the Kajiado East Constituency development fund and contained in a document titled Kajiado East Constituency Development Fund (CDF) strategic plan 2018-2022, (2017) pointed that 75% of the MSMEs operating in the Kitengela town depend mostly on mobile money services in transaction of their business. The report stated failure of the banks to support and meet the need of the MSMEs in the area as the main reason to rely on mobile services offered by the telecommunication firms which enhance their performance. This phenomenon possesses a negative effect on performance of MSMEs. The introduction of mobile money services has reconfigured how MSMEs conduct their business. This innovation provided an ample and business friendly platform that ease financial transaction among the customer and business as well as providing saving avenue and loans for unbanked business owners.

Local studies done include; Mbogo (2010), Ngaruiya (2014) and Mararo (2018). Despite the contribution of mobile money services in business, no study has been conducted in Kitengela to establish its contribution to MSMEs performance. Given the background of this study, no study has focused on Kitengela perspective, thus the current study sought to bridge this gap by investigating the relationship between mobile money services and performance of MSMEs in Kenya, Kitengela, Kajiado County.

1.2 Study Specific objectives

   i. To determine the influence of mobile financial services on performance of Micro, Small and Medium Enterprises in Kenya, Kitengela, Kajiado County.
   ii. To establish influence of mobile commerce on performance of Micro, Small and Medium Enterprises in Kenya, Kitengela, Kajiado County.

1.3 Scope of the Study

The objective of this study was to establish the relationship between mobile money services and performance of small and medium enterprises in Kenya, Kitengela, Kajiado County. This study was undertaken between October and April 2021 at

MSMEs in Kenya, Kitengela, Kajiado County targeting 261 MSMEs owners.

II. LITERATURE REVIEW

2.1 Theoretical Literature Review

The study was guided by the Technology, Organization and Environment Framework (TOE) and Actor Network Theory (ANT) theory

2.1.1 Technology, Organization and Environment Framework (TOE)

The TOE model has been used together with the TAM one in this study in a complementary manner. The TOE model was first developed by (Fleischer, 1990) in 1990. According to Tornatzky & Fleischer, TOE was developed to reinforce the adaptation of the innovations. The other proponents of the theory, Awa and Liu (2016) also alludes that TOE presents the three major aspects of organizations that are critical towards the implementation of the technology in an organization set up. They hold that the technological aspects of the organizations relate to both the internal and the external factors that affects the organization and that affects the perceived usefulness of the technological adoptions (Fleischer, 1990). These factors include the compatibility, the pilot tests, and the complexity within the learning curve of the organization.

Ismail (2016) a proponent of the theory, holds that the organizational readiness to adopt new technology depends on the characteristics of its resources. He identified some of this organizational readiness to include the finical readiness, the culture of the organization, and the technological readiness of the organization (Fleischer, 1990). He alludes that these factors are critical and responsible for developing the organization strategy that will support the adoption and the implementation of the new technological approaches (Harfoushi, 2016). However, the theory has also received several criticisms on its applicability and implementations in relation to technology adoption. Harfoushi (2016) argues that the theory has delved so much on the external factors including the ICT infrastructures and ICT human resource readiness and failed to mention on the critical capacity building initiatives that are critical to the successful implementation of the new technology. The critics challenge the proponents of the theory for failing to mention the need for the human resource trainings and related empowerments that are critical success factors towards the successful implementation of the technological innovations (Harfoushi, 2016).

The application of the TEO model has been considered significant to the study since the theory identifies that external support systems that will be of help to the MSMEs in accepting the use of mobile money services for the success of the business (Harfoushi, 2016). The need to identify the readiness among the trade partners will also ease the use and the utilization of the mobile money services among the MSMEs which is a critical factor for their success and expansions. The theory also is relevant since it points of the need for the top management support of the implementation of the new mobile money services among the small and medium enterprises.

2.1.2 Actor Network Theory (ANT)

The study will also be premised on the actor network theory (ANT), which was first coined by Latour and Mauguin in 1992. The theory attempts to identify the relationship between the humans and the surrounding social organizations and attempt to distinguish their behaviors towards the natural objects and technological aspects of these objects (Latour, 1981). The theory adopts the passion of anti-essentialists and therefore rejects there being any difference between the human and non-humans. The theory therefore holds that both the technical and the social determinism of the technological implementations and adoption are susceptible to certain inherent flaws and therefore proposes a different social – technical account to be used instead (Latour, 1981).

The proponents of the theory; Callon and Latour 1981; Latour 1986; Law and Callon 1988, assert that both the social technical positions are not purely advantaged in their implementations and applications and argues that both are considered in an equal measure (Latour, 1981). Therefor the theory deals with the social technical divide by attempting to explain that there are no technological innovations that are purely social and those that are purely technical (Latour, 1981). The theory therefore posits that the computer technological applications are heterogeneous in their applications (Wambari, 2009). The theory has identified the use of programming languages and database management software that are most often used in the supermarkets as being heterogeneous in nature. However, the theory has been criticized by other scholars with contrary opinion on its key tenets. Latour (1988) asserts that consideration of the systems as not being social or technical in nature is a simplistic way of viewing technological innovations and proposes that there should be a more complex way of viewing the two. He argues that computer related systems remain to be complex and have taken the official role with regard to the local, national and the global organizations (Wambari, 2009).

The theory is relevant to the study since the adoption of the mobile money services among MSMEs is a complex system that involves both the technological aspects which is considered as being technical in nature and the human related aspects like the attitude of the users to seamlessly adopt the technology and use it for their own good (Wambari, 2009). The MSMEs therefore need to navigate through both the technical and social factors for successful implementations.

2.2 Empirical Literature review

2.2.1 Mobile Financial Services and Performance of the MSMEs

The concept of the mobile financial services concerns the use of the mobile technology in enhancing the flow of money services among the traders in the small and medium enterprises. The introduction of the mobile financial services has contributed towards the reduction in the price variations among the markets (Batista, 2020). The mobile financial services which involve the use of the asset accruals and the premium services, among others, have contributed towards the expansion and growth of MSMEs in Kenya and across the world (Fanta, 2016).

Abdil (2011) did a study on the relationship between the mobile financial innovations and the performance of the MSMEs in Sweden. The study addressed the major questions such as the advantages and the disadvantages of the existing mobile financial models used towards trying to evaluate the SME performance (Abdil, 2011). The study also identified the characteristics of a comprehensive model for measuring SME performance with acknowledgement of the firm's mobile financial innovation activities and how the firm's mobile financial innovation activities can be enhanced in relation to the firm's external environment. The study also tried to address those questions using a conceptual analysis, as well as empirical investigation utilizing a case study approach. The study revealed that there are challenges that the business model must incorporate which involved the non-mobile financial input parameters, such as the firm size and age, in the performance evaluation of the mobile financial models (Abdil, 2011).

Nyaga (2017) conducted a study on the impact of mobile money services on the performance of small and medium enterprises in an urban town in Kenya. The objectives of this study are; to investigate current awareness and uptake of various mobile money services, to determine if mobile money services uptake has any impact on MSMEs growth through increased sales or savings and loan accessibility, establish if mobile money service qualities of low cost, convenience and accessibility result in increased MSMEs performance and establish if mobile money services are considered efficient and reliable by MSMEs in Naivasha Town. The study found that mobile money has made a significant contribution to the SME sector. Majority of the traders rely on it as opposed to the formal banking sector for their day-to-day transactions. Secondly, it is evident that all the respondents in this study had a clear understanding of the basic functions of mobile money services. Mobile money services have a positive impact on sales. Efficiency and reliability contribute more to mobile money utility and MSMEs growth. It is worth noting that majority of the respondents had reservations on the convenience and cost of the service as a result of problems associated with the functionality of the service.

2.2.2 Mobile Commerce Services and Performance of the MSMEs

The concept of the mobile commerce services relates to the use of the mobile money services to aid in the money related traction in business exchange (Fanta, 2016). Although not much literature is available relevant to the use of the mobile commerce services, the initial empirical evidence that are available points to the advantages that are associated with the use of the mobile commerce services. Studies have revealed that the introduction of the M-pesa services in Kenya has significantly led to reduced cost of transactions since there are several money transfer platforms that are competitive and thus maintains the market equilibriums (Batista, 2020). Apparently there has been a significant increase in receiving of remittance through the mobile money platforms a condition that is reported to be contributing towards the financial inclusions among most traders in the country (Batista, 2020).

Frank and Robertson (2019) asserted that often, the financially excluded by the traditional banking system, MSMEs in many developing countries have found mobile money services a sustainable alternative. Despite its potential in propelling inclusive growth, the use and adoption of mobile money by MSMEs has generally been low in developing countries, and one of the reasons has been limited data that supported its impact on financial performance. The study implemented a mixed research paradigm with data collected through the administration of a survey questionnaire and from one-on-one in-depth interviews (Robertson, 2019). A sample of 285 MSMEs responded to the survey, while 12 owners/managing directors were purposively selected to participate in the personal interviews. Version 25 of the Statistical Package for the Social Sciences (SPSS) software was used to analyses the quantitative data, while the qualitative data was analyzed along themes (Robertson, 2019). The results were, after that, triangulated for credibility reasons. The concluding findings indicated that the mobile money payment and receipt services contributed of the order of 73% of the total variance in the turnover of the MSMEs in Douala after they had begun to use the technology. By confirming the positive relationship between the use of mobile money services and the financial performance of businesses, it is hoped that all the relevant stakeholders will see this as a possible solution to the financial challenges that MSMEs face in developing economies (Robertson, 2019).

Nyaga (2013) did a study on mobile commerce services on the performance of MSMEs in the urban towns in Kenya. The study investigated on the current awareness and uptake of various mobile money services among the SME in Kenya, and also investigated whether the mobile money services uptake had any impact on MSMEs growth through increased sales, savings and the loan accessibility (Nyaga, 2013). Mobile money service qualities of low cost, convenience, and accessibility on the performance of the MSMEs. The study was an exploratory in nature and therefore the collected data was analyzed using the Correlation Coefficient to measure

how the variables are related to each other in accordance with the conceptual framework (Nyaga, 2013). The study revealed that the mobile money has made a positive contribution towards the performance of the SME sector since majority of the traders rely on it as opposed to the formal banking sector for their day-to-day transactions (Nyaga, 2013).

2.3 Conceptual Framework

A conceptual framework is a written or virtual product that explains, either in narrative or in graphically form, the main things to be studied, the key elements being variables, concepts and the presumed relationships among them. A conceptual framework is structured from a set of broad theories and ideas that help a researcher in properly identifying the problem they are looking at, frame their research questions and find suitable literature. Therefore, in regards to this framework, the independent variables are mobile payments and mobile money transfer while dependent variable is performance of MSMEs.
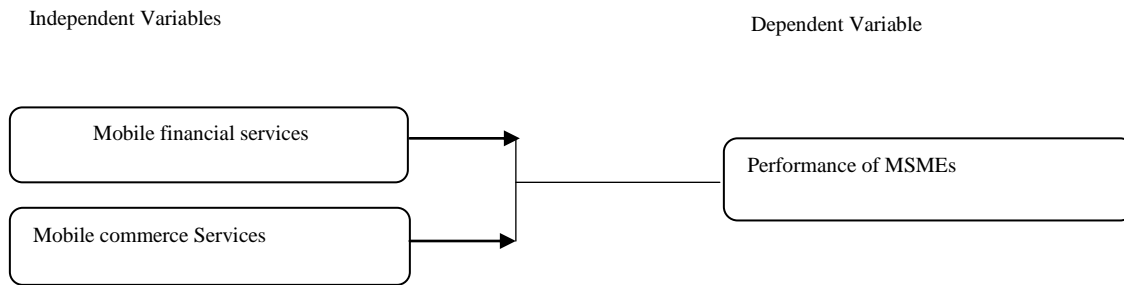
Independent Variables

Dependent Variable

Figure 2.1 Conceptual Framework

III. RESEARCH METHODOLOGY

3.1 Research Design

Research design is an overall strategy deployed by a researcher in order to integrate the different components of a study into a coherent and logical flow. An adequate research design ensures that the research problem is precisely addressed. In this study, a descriptive survey research design shall be adopted. Kothari (2008) noted that deploying a descriptive survey enables a researcher to respond to the 'what' question. On the other hand, McNeil (2018) asserts that although descriptive research design inclines, majorly, towards qualitative techniques, quantifiable data is viable as well.

3.2 Target Population

Target population, according to Ngechu (2004), is a well-defined or set of people, services, elements, events, group of things or households that are being investigated. This definition ensures that population of interest is homogeneous. . The target population of this study were the proprietors of the micro, small and medium enterprises Kitengela dealing in both trade and services. According to Kajiado East Constituency development fund (2018), there are 817 formally registered Small and Medium Enterprises Kitengela Town dealing in trade, services, and manufacturing.

3.3 Sample Population

The sampling frame for any probability sample is a whole list of entire cases in the population from which sample is derived (Cooper, 2003). The sample frame clearly defined as informal traders in this study are all MSMEs operating in Kitengela

township. In order to come up with a representative sample of the target population for this study, we proposed to use the Modified Fisher Model since the population is less than 10,000. Given that the population of interest for the study was 817 (population size N=817), the corrected sample size was obtained as illustrated mathematically using Modified Fisher's Model as below:

Equation 1: $nf = \frac{n}{1+\frac{(n-1)}{N}} = 384/ [1+ (384/817)]$; n =261

3.4 Data Collection Procedure

The primary data was collected through employing of a questionnaire. The feelings, motivations, attitudes, accomplishments, and experiences of individuals are inquired through questionnaire's and that why it is appropriate for the collection of information (Mellenbergh, 2008). The study's questionnaire captured the objectives of the study and the researcher also ensured that the participants were not manipulated as stated by Franker, (2006). Which were distributed with the help three other assistants who were involved by the researcher. The drop and pick later method was used in administering of the questionnaires. The questionnaire adopted a Likert scale questions ranging from 1 to 5 in the 5-point Likert scale, to measure the level of the respondent agreement to specific constructs used to measure the independent variables and dependent variable adopted in this study (Kiess & Bloomquist, 2008).

3.5 Data Analysis and Presentation

The Statistical Packages for Social Scientists (SPSS Version 24.0) was used to code and enter the quantitative data and descriptive statistics were used in analyzing the data. The study also used inferential statistics to establish relationship between mobile money services and performance of small and medium enterprises. Further, to establish the strength of the relationship between the independent and dependent variables the researcher used multiple regressions.

The regression equation is:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

Where: Y is the dependent variable (Performance of MSMEs); β_0 is the regression coefficient; β_1 and β_2 are the slopes of the regression equations; X_1 is Mobile financial services; X_2 is Mobile commerce Services; ε is an error term normally assumed to be 0.

IV. DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Study Response Rate

The study targeted a total of 261 formally registered Small and Medium Enterprises Kitengela Town dealing in trade, services, and manufacturing. However, out of the 261 targeted Small and Medium Enterprises Kitengela Town, the researcher was only able to obtain complete data for 203 Small and Medium Enterprises Kitengela Town representing a response rate of 78%. The response rate of 78% was deemed sufficient for the purpose of data analysis as Mugenda and Mugenda (2003) notes that a response rate of 50% is adequate for analysis and reporting, 60% is good and a response rate of 70% and over is excellent.

Table 4.1 Study Response Rate

Response	Frequency	Percentage (%)
Filled in questionnaires	203	78
Unreturned questionnaires	58	22
Total	261	100

4.2 Reliability Results

The research instrument's reliability was tested through the Cronbach Alpha. The rule of thumb is that a Cronbach's alpha of 0.70 and above is good, 0.80 and above is better and 0.90 and above is best and reflects a high level of internal consistency (Sekaran, 2003). This was the general case in this pilot study where all the predictor variables and the response variable had alpha values of 0.70 and above as indicated in table 4.2. This was the general outcome in this pilot study where all the predictor variables and the response variables had alpha values of 0.70 and above as indicated in table 4.2. All the variables used in this study were found to be reliable since their Cronbach's alpha value exceeded 0.70

Table 4.1 Reliability Results

Variable	No. of Respondents	No. of Items	Cronbach's Alpha	Verdict
Mobile financial services	26	5	0.749	Reliable
Mobile commerce services	26	5	0.752	Reliable

4.3 Gender of the Respondents

The study sought to establish the gender of the respondents who participated in the study. According to the study results that were obtained, it was found out that a slight majority 52% of the respondents were male while 48% were females. The study results suggest that most of the MSMEs operators in Kitengela town, Kajiado County are male though their female counterparts are well represented as well as shown in figure 4.1.
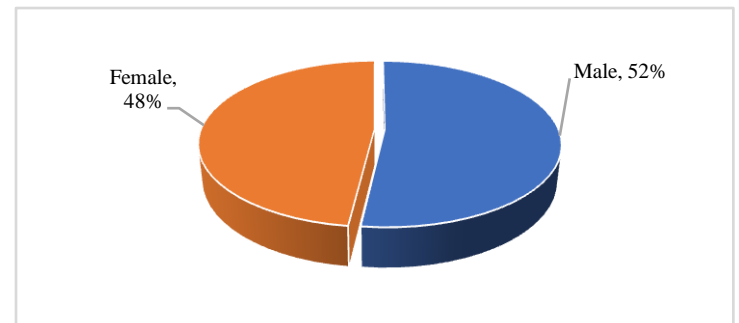

Figure 4.1: Gender of the Respondents

4.4 Descriptive analysis

4.4.1 Mobile Financial Services and Performance of MSMEs

The study requested the respondents to indicate their level of agreement on the statement relating to influence of mobile financial services on performance of MSMEs. From the findings, respondents to a very large extent agreed that sending money influenced the overall performance of MSMEs as indicated by the mean score of 3.588. The findings conform to Mararo (2018) that mobile money enable the SMEs to collect receivables straight from customers and make direct payments to suppliers using their cell phone and without having to close or leave their premises for hours. Respondents to a very great extent further agreed that withdraw of money from mobile phone have enhanced the overall performance of mobile financial services as indicated by the mean score of 3.667. According to Ishengoma, (2017) processing of loan proceeds, withdrawals, and depositing of funds are also done without any challenges experienced. Further, respondents to a large extent agreed that withdrawal of funds from bank and making bank deposit have enhanced the performance of mobile financial services as shown by the mean score of 3.569 and 3.420 respectively. Opare (2018) argued that mobile banking also saves them time on queuing and visiting the bank premise thus concentrating on their businesses and that micro-business operator can make

withdrawals within their business premise and consequently use the same to pay suppliers and utility bills. Lastly, respondents to a moderate extent agreed that access to bank loans enhanced the performance of mobile financial services as illustrated by the mean score of 3.312. the findings agree with Njabu (2016) that in developing countries such as Ghana, Tanzania and Kenya, credit systems have been developed by MNOs which are based upon transactional histories of mobile money, which make it possible to grant microloans to SMEs.

Table 4.2: Mobile Financial Services and Performance of MSMEs

Statement	Mean	STDev
Make deposit	3.420	0.214
Withdrawal funds from bank	3.569	0.188
Sending money	3.588	0.219
Withdraw money from mobile phone	3.667	0.143
Access bank loans	3.312	0.0241

4.4.2 Mobile Commerce and Performance of MSMEs

The study sought to establish the effect of mobile commerce on the financial performance of MSMEs. The study results that were obtained indicated that respondents to a very great extent agreed that checking account balance influenced the performance of MSMEs as shown by the mean score of 4.054. The finding of this study conforms to Mutio (2019) that more than half of the respondents stated that mobile banking helped them in sending money; saving/depositing money, withdrawing money from mobile bank account, receiving money, checking account balance with the bank and paying bills. In addition, respondents to a very great extent agreed that airtime top-ups and loan applications services enhanced the overall performance of MSMEs as shown by the mean score of 3.929 and 3.911 respectively. This is consistent with a study conducted by Mutua (2014), which discovered that micro entrepreneurs may use M-banking credit loans to innovate, increase efficiency, expand into new markets, and create millions of jobs. Further, respondents to a large extent also agreed that saving services influenced the performance of mobile commerce among MSMEs as shown by the mean score of 3.661. The results of the study were in line with Makee (2017) that customers using mobile money services get the advantages of saving money easily, for example, having the capacity to save and borrowing is a cost-proficient and secure way to majority of the small business owners. Lastly, respondents to a moderate extent agreed that insurance premiums remittances services influenced the performance of mobile commerce among MSMEs as indicated by the mean score of 3.542. The findings are in accordance with Donovan (2015) that access and use of more sophisticated financial services through mobile money services insurance prove more beneficial even to micro enterprises.

Table 4.3: Mobile Commerce Services and Performance of MSMEs

Statement	Mean	STDev
Checking account balance	4.054	0.182
Airtime top-ups	3.929	0.828
Savings	3.661	0.149
Insurance premiums remittances	3.542	0.016
Loan applications	3.911	0.112

4.4.3 Aspects of MSMEs Performance

Respondents were requested to provide their level of agreement in regard to the following statement on the various aspects of MSMEs performance. According to the study results that were obtained, it was found out that respondents agreed to a very great extent that using mobile money services had enhanced their customers' satisfaction as indicated by the mean score of 3.962. The study was in line with Abong'o (2016) that there are positive results obtained from mobile money services in service quality such as customer satisfaction, less processing cost, profitability, and customer loyalty in most businesses. Likewise, respondents agreed that to a very great extent also agreed that using mobile money services had also increased their sales turnover as shown by the mean score of 3.915. According to findings by Donner and Escobari (2010) established that mobile phones have helped SMEs to become more productive and to improve their sales thereby improving their financial performance. Result by Wambari (2009) found a similar result that the adoption of mobile banking had enabled SMEs to increase their sales thereby leading to improved financial performance. Respondents to a large extent further indicated that using mobile money services had increased their revenue generation as well as their profitability as illustrated by the mean scores of 3.861 and 3.832 respectively. In a study conducted by Ngaruiya, B. (2014) pointed that after the adoption of mobile money financial transactions, majority of the SMEs have reported an increased sales revenue. Lastly, respondents to a moderate extent agreed that using mobile money services had increased their market share as indicated by the mean score of 2.944. the findings conform to Jensen (2017) 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.

Table 4.4: Performance of MSMEs

Statement	Mean	STDev
Sales turnover	3.915	0.832
Market share	2.944	0.723
Revenue generation	3.861	1.151
Profitability	3.832	0.851
Customer satisfaction	3.962	1.206

4.5 Inferential Analysis

To compute the correlation between dependent variable and the independent variables the study conducted inferential analysis.

Coefficient of determination (R^2) explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (performance of MSMEs) that is explained by all the two independent variables (mobile financial and mobile money commerce services). The two independent variables that were studied, explain only 48.8% of the performance of MSMEs in Kitengela town as represented by the adjusted R^2=0.488. This therefore means that there are other factors not studied in this research that contribute 51.2% of the performance of MSMEs in Kitengela town. Therefore, further research should be conducted to investigate the other (51.2%) mobile money services which tend to influence the performance of MSMEs in Kitengela town.

Table 4.5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.699	.488	.486	.76001

The analysis of variance (ANOVA), as shown in Table 4.7 demonstrates the regression model's relevance. The significance of the variance explained by the regression model is determined using ANOVA in this model. The analysis of variance's F-statistic is 191.918 with a p-value of 0.000. The p-value is less than 0.05, indicating that the parameters of the model predictors are not jointly equal to zero in a significant way. This indicates that at least one of the model's predictors has a significant parameter, implying that the model's predictors (mobile money services variables) have a cumulative effect on the performance of MSMEs in Kenya.

Table 4.6: ANOVA for Model Summary

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	110.855	1	110.855	191.918	.000
	Residual	116.101	201	.578		
	Total	226.956	202			

Table 4.8: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	std. Error	Beta		
(Constant)	1.308	0.342		1.623	3.57-02
Mobile Financial Services	0.785	0.322	0.067	3.542	2.02-02
Mobile Commerce Services	0.620	0.245	0.148	3.458	2.49-02

As per the SPSS results in the table above, the following multiple regression equation was generated:

$$(Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon)$$

$$Y = 1.308 + 0.785 X_1 + 0.62 X_2$$

The regression equation above established that taking all factors into account (mobile financial and mobile commerce) constant at zero, performance of MSMEs will be 1.308. The findings presented also shows that taking all other independent variables at zero, a unit increase in mobile money financial service will lead to a 0.785 increase in performance of MSMEs; a unit increase in mobile commerce services will lead to a 0.62 increase in performance of MSMEs. This infers that a mobile financial service contributes most towards performance of MSMEs followed by mobile commerce service towards performance of MSMEs. This notwithstanding, all the variables were significant as their P-values were less than 0.05.

V. SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary of Research Findings

The first study objective sought to examine the relationship between mobile money financial services and the performance of MSMEs in Kitengela town. According to the study results that were obtained, it was established that sending money influenced the overall performance of mobile financial services to a very large extent. Also, withdraw of money from mobile phone have enhanced the overall performance of mobile financial services to a very large extent.

The second objective sought to examine the the relationship between mobile money commerce and the performance of MSMEs in Kitengela town. According to the study results that were obtained, it was established that checking account balance influenced the performance of mobile commerce among MSMEs. In addition, airtime top-ups and loan applications services enhanced the overall performance of mobile commerce among MSMEs.

Further the study result shows that mobile financial and mobile commerce services with R^2=0.488 which means that around 49% of the performance of MSMEs in Kitengela town is influences by mobile financial and mobile commerce services. Mobile money payment and mobile money transfer had a significance of $P<0.00$ which is less than 0.05, hence, it was clear that there was linear relationship R=0.699 between mobile financial and mobile commerce services and the performance of MSMEs in Kitengela, Kajiado County. The results also indicated that the overall influence of mobile money transfer on performance of MSMEs in Kitengela, Kajiado County was significant (F =191.918, $p < 0.05$).

5.2 Conclusion

On the objective on the relationship between mobile money financial and the performance of MSMEs in Kitengela town,

it was concluded that sending money influenced the overall performance of mobile financial services to a very large extent. Also, it was concluded that withdraw of money from mobile phone have enhanced the overall performance of mobile financial services to a very large extent. It was also concluded that there was linear relationship between mobile financial services and performance of MSMEs in Kitengela, Kajiado County.

On the objective on the relationship between mobile money commerce and the performance of MSMEs in Kitengela town, it was concluded that checking account balance influenced the performance of mobile commerce among MSMEs in Kitengela, Kajiado County. It was also concluded that airtime top-ups and loan applications services enhanced the overall performance of mobile commerce among MSMEs in Kitengela, Kajiado County. It was further concluded that mobile commerce had a statistical significance relationship with the performance of MSMEs in Kitengela, Kajiado County.

5.3 Recommendations

The study recommends that the regulator of mobile phone providers should work towards reducing mobile money services charges between different networks. They need to consider having a uniform platform for mobile money services irrespective of the network the client is using. The current charges paid by MSMEs across the networks are too high and discourage them from transacting across networks. The uniform platform can enable them to transact freely thus increase sales.

Lastly, the study recommends that mobile money service providers should identify platforms capable of minimal delays and fast responses to increase adoption rates across the country. Of particular interest are systems that minimize the risk of losing money, such as providing a method to confirm the business identity one has registered on their systems, verification using business name as opposed to the business mobile number and a faster method of cancelling a faulty transaction when it arises.

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