



**EFFECT OF MOBILE BANKING ON FINANCIAL PERFORMANCE OF SMALL SCALE AND MEDIUM ENTERPRISES IN KAKAMEGA COUNTY**

**Iravonga, J. J., & Miroga, J.**

## EFFECT OF MOBILE BANKING ON FINANCIAL PERFORMANCE OF SMALL SCALE AND MEDIUM ENTERPRISES IN KAKAMEGA COUNTY

Iravonga, J. J.,<sup>\*1</sup> & Miroga, J.<sup>2</sup>

<sup>\*1</sup>MBA Candidate, Jomo Kenya University of Agriculture & Technology [JKUAT], Kakamega Campus, Kenya

<sup>2</sup> Ph.D, Lecturer, Jomo Kenya University of Agriculture & Technology [JKUAT], Kakamega Campus, Kenya

Accepted: October 26, 2018

### ABSTRACT

*This study sought to establish how mobile banking has affected the financial performance of SMEs. The research was conducted as an exploratory research. The target population of study for the research comprised of the SMEs that provide financial services within the Kakamega County. The study used random sampling technique. A sample size of 373 SMEs was used. Semi-structured questionnaires were used for collecting information from SMEs entrepreneurs. Trained research assistants were contracted to collect data from the field using the sample codes. A pilot study was done using twenty five questionnaires. Data capturing was done using Excel software. The data from the completed questionnaires were cleaned, coded and entered into the computer using the statistical package for social sciences (SPSS) for Windows analysis. The findings revealed that SMEs used mobile banking services to send and receive money, check account balance, knowing when to deposit or withdrawal from their bank account. The results also revealed that there was positive relationship between financial performance of SMEs and accessibility ( $R=0.704^{**}$ ), Efficiency ( $R=0.607^{**}$ ) and convenience ( $R=0.524^{**}$ ). However, there was negative relationship between cost of mobile banking services and financial performance of SMEs ( $R=-0.660^{**}$ ). The study concluded that mobile banking services had significant effect on the financial performance of SMEs in Kakamega County as it significantly accounted up to 65.2% ( $R\text{ square}=0.652$ ) variation in financial performance. The study recommended that mobile banking services should be affordable to SMEs through exemption of various taxes imposed by the government so as to improve the growth of SMEs in Kenya. This would enable SMEs to use various mobile banking services such payment of bills, accessing of credit facilities to boost their businesses.*

**Key Words:** Mobile Banking, Services Accessibility, Cost, Convenience, Efficiency

## INTRODUCTION

According to Gartner (2012) and ITU (2014), the global volume of mobile transactions was expected to grow from USD 37.4 billion in 2011 to over USD 1.13 trillion in 2014, while the number of users of mobile money services worldwide was to surpass 141million in 2014, and the number of mobile phones was to be 7 billion, greater than the total population in the globe. This represents a mere 2.1 % of all mobile users worldwide. This implies that there is still much room for growth especially in regions where there is lack of alternative payment methods.

As at the year 2012, there were 25 mobile money services operated by different Mobile Network Operators (MNOs) across Africa (GSMA, 2012). Among these, 15 are in East Africa (GSMA, 2012). Among the five East African countries, Kenya has the leading number of users of mobile money services with 17,800,000 registered users, which represents 71.3 % of the total number of mobile phone users in the country. Tanzania is the second with 9,200,000 users of mobile money which represents 43.4% of the total number of mobile phone subscribers in the country (GSMA, 2012). Uganda has the third largest number of mobile money users in the East African region with 2,100,000 users representing 8.1 % of the total number of mobile phone subscribers. Rwanda and Burundi have 309,127 and 29,000 users of mobile money services representing 8.3% and 2.7% of the total number of mobile phone users in those countries respectively (GSMA, 2012).

Even today, Kenya still has a low fixed telephone penetration rate with only 243,656 fixed lines (CCK, 2010) serving a population of about forty million people and out of this number only 7,439 subscribers are in the rural areas. This makes mobile telephone the first and the only accessible telecommunication infrastructure available and affordable to most of the Kenyan population both at home and in businesses, particularly the SMEs. Mobile telephones traditionally offered voice communication but have

continued to evolve to become all-purpose tools with value added services such as mobile money transfers, Internet and data services which enhances the way small and medium enterprises (SMES) conduct their business operations.

Mobile telephones are also cheaper and more portable than computers which make their adoption much easier. This has successively reduced social-economic disparities within Kenyan small and medium enterprises (SMES) as well as closing the existing digital divide between the rural and urban small and medium enterprises (SMES). Most SMEs entrepreneurs had to travel or use public transport systems to send and exchange documents, access banking facilities or even transact their payments. This is not the case today, as they can e-mail the documents, pay for goods and services through mobile money transfers, use Mobile money transfer services and if one has a technologically advanced telephone, it is now possible to carry out the required tasks at any time and at any place. It is undeniable that the SMEs play a significant role in the Kenyan economy. Thirteen years ago, an economic survey indicated that the SMEs had contributed at least 50% of the new job opportunities established in the year 2005.

Kenya has had its own experience with mobile banking. Mobile banking has reached levels that were unimaginable just a few decades ago. This has resulted from the increased use of mobile phones in Kenya. Mbiti and Weil (2017) argue that the leading mobile banking model in Kenya, namely M-Pesa, grew at a blistering pace since its inception in 2007. The growth is following the expanded use of mobile phones in communication. The use of mobile banking has expanded to these levels due to the simplicity, security, cheapness and the ease with which financial services are sought and provided. The widespread cellular communication and the ability to transfer money instantly, securely, and inexpensively together provide a strong impetus to enormous changes in the

organization of economic activity, family relations, and risk management and mitigation. Morawczynski and Pickens (2009) argue that the ability to remit smaller but more frequent remittances easily, to a wide area and at low cost has popularized mobile banking in Kenya.

Financial performance refers to a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. Performance measurement is defined as the process of quantifying efficiency and effectiveness. Effectiveness is compliance with customer requirements, and efficiency is how the organization's resources are used to achieve customers' satisfaction levels.

To quantify efficiency and effectiveness performance measures should be chosen, implemented, and monitored. SMEs financial performance refer to sales, business transactional activities that reflect on sales like purchases through mobile money services and accessibility of financial services like savings and micro-credits (loans). These performance measures will be based on Rahmat, Megananda and Maulana (2006) study finding.

Access to financial resources is constrained by both internal and external factors. Internally, most SMEs lack creditworthiness and management capacity, so they have trouble securing funds for their business activities such as procuring raw materials and products, and investing in plant and equipment. From the external perspective, SMEs are regarded as insecure and costly businesses to deal with because they lack required collateral and have the capacity to absorb only small amount of funds from financial institutions. So they are rationed out in their access to credit because of high intermediation costs, including the cost of monitoring and enforcement of loan contracts. To overcome some of the constraints, the government and other relevant stakeholders

have designed programs and policies that are market driven and market non-distorting to support SMEs. Government has, for example, created stable macroeconomic conditions, liberalized the economy, and encouraged the growth of micro-financing business. A law has been enacted to guide the development and sustainability of SMEs while at the same time allowing them to collect deposits. Nevertheless, the challenge to SMEs in accessing financial services will also depend on how they themselves increase their creditworthiness.

### **Statement of the Problem**

The timely convenience, simplicity, safety and quickness in operation that have been brought into play by the inception of comprehensive m-banking ideology has enhanced the need for small and medium enterprises in Kenya to shift from their classical or common ways of carrying business to incorporate the mobile transactions in their business (Mbiti, 2011). Mobile phones users can enquire balances, obtain prepaid recharges, mobile loans, virtual, settle bills, utilities, salaries, pay merchants, and send contributions, gifts as well as donations anywhere at any time. Mobile cash transmission services can be utilized to increase proficiency and trade development through low cost, reliable and efficient money service support networks that diminish the risks and needs for cash transactions (Alala, Muisyo & Musiega, 2014). The mobile banking technology innovation is considered easy to use as well as effective and trustworthy with vast capabilities to spread monetary services to the unbanked or those inclining toward less expensive financial packages (Mbogo, 2015). Encouraging the growth, development and financial performance of the local small and medium enterprises is a welcome idea for the varied stakeholders in the sector including the government.

A number of studies conducted on Kenyan SMEs mainly focused on the sector's contribution to the economy in terms of employment, income, and gross domestic product (ICEG, 2016) while other studies focused on access to credit (Aketon, 2017) and government policy and strategy frameworks (ACEG, 2005). However, there was no known research to the knowledge of the researcher that had studied the effect of mobile banking services on small and medium enterprises financial performance in Kenya. This study therefore sought to investigate the effects of mobile banking services on Small and Medium Enterprises' financial performance in Kakamega County.

#### **Research Objectives**

- To assess the effect of mobile banking services accessibility on financial performance of SMEs in Kakamega County
- To determine the effect of mobile banking services cost on financial performance of SMES in Kakamega County
- To determine effect of mobile banking services convenience on financial performance of SMES in Kakamega County
- To assess the effect of mobile banking service delivery efficiency on financial performance of SMES in Kakamega County

#### **Research Hypotheses**

- **H<sub>01</sub>**; There is no significant relationship between accessibility of mobile banking services and financial performance of SMEs in Kakamega County
- **H<sub>02</sub>**; There is no significant relationship between mobile banking services cost and financial performance of SMEs in Kakamega County
- **H<sub>03</sub>**; There is no significant relationship between mobile banking services convenience of mobile banking and financial performance of SMEs in Kakamega County

- **H<sub>04</sub>**; There is no significant relationship between mobile banking service delivery efficiency and financial performance of SMEs in Kakamega County

## **LITERATURE REVIEW**

### **Theoretical Review**

#### **Information Technology Acceptance Theory**

The central focus of Information Technology (IT) Acceptance theory is to understand individual intention and predict users' behavior toward new Information Technology artifacts and new technology innovations. To understand the IT acceptance theory one has to understand several other acceptance theories like as Technology Acceptance Model (TAM) by Davis (1989), Diffusion of Innovation (DOI) by Rogers (1995), Unified Theory of Acceptance and Use of Technology (UTAUT) discussed by Venkatesh, Morris and Davis (2003). TAM tries to predict individuals' intentions toward using a technology based on their Perception of its Ease of Use (POEU) and Perceived Usefulness (PU).

TAM proposes two positions. First, a person accepts technology basing whether they believe the technology is useful perceived usefulness. Secondly, a person accepts technology basing on how the technology seems easy to use by the person regarding the purpose for which they what the technology. TAM, therefore, argues that the actual use of a technology system depends directly or indirectly on the user's behavioral intentions, attitude, perceived usefulness of the system, and perceived ease of the system. TAM also proposes that external factors such as social influence, cognitive instrumental processes and experience. Social influence has to do with subjective norm, voluntariness, and image. Cognitive instrumental processes have to do with job relevance, output quality, and result demonstrability (Davis, 1989).



## **Diffusion of Innovations Theory**

This theory of technology was put forth by Rogers (2003). In the theory, a technology is simply a design for instrumental action that reduces the uncertainty in the cause-effect relationships involved in achieving a desired outcome. The theory of innovations has four key elements. These are: innovation, communication channels, time and social system. According to Rogers (2003) an innovation is an idea, practice, or project that is perceived as new by an individual or other unit of adoption irrespective of when it was invented. Communication is a process through which participants create and share information with one another to reach a mutual understanding. Communication occurs through channels between sources.

A channel is the means by which a message gets from the generator of the message to the receiver. In interpersonal channels, the communication may have a characteristic of homophily or heterophily. In homophily, the focus is on the degree to which two or more individuals who interact are similar in certain attributes, such as beliefs, education, socioeconomic status, and the like. Heterophily refers to the degree to which two or more individuals who interact are different in certain attributes. For innovation to diffuse there must be heterophily. Time is another element in the theory of diffusion by Rogers (2003). The innovation diffusion process, adopter categorization, and rate of adoptions have a time dimension. The last element in the diffusion model is the social system.

## **Empirical Review**

### **Effect of Accessibility of Mobile Banking on Financial Performance of SMEs**

By definition, mobile commerce offers the possibility to conduct electronic business anywhere and at any time. The nomadic nature of this form of commerce opens a wide range of new business offerings of great value to the mobile users. Kumar and Zahn (2003)

note that m - commerce allows an itinerant offering of products and services usually accessible via wired electronic commerce, for example plane tickets, movies schedules, stock price, etc. Kumar and Zahn (2003) further note, geographical related offerings such as location-based products and adoption of mobile commerce initiative Business to consumer orientation Digital nature of the offering Level of ecommerce adoption services are now easy to offer. For instance, Barnes (2002) argues that in an unfamiliar neighborhood, users could search for the location of services such as nearby restaurants, shops, ATMs and public transport through m-commerce.

### **Effect of Convenience of Mobile Banking on Financial Performance of SMES**

The M-Banking service is fast, secure, and very cost-effective. It is opening up new opportunities for businesses all over Kenya as well as supporting person-to-person money transfers, or remittances, which are common in many economies where the bread winner supports an extended family, often many miles away. Njenga (2009) states that although the mobile phone balances may seem low, the fact that there are balances proves that there is storage which can be perceived as acceptance of deposits. This is a significant indication of the high value placed on the convenience associated with the use of the mobile payment services.

### **Service Delivery Efficiency of Mobile Banking on Financial Performance of SMES**

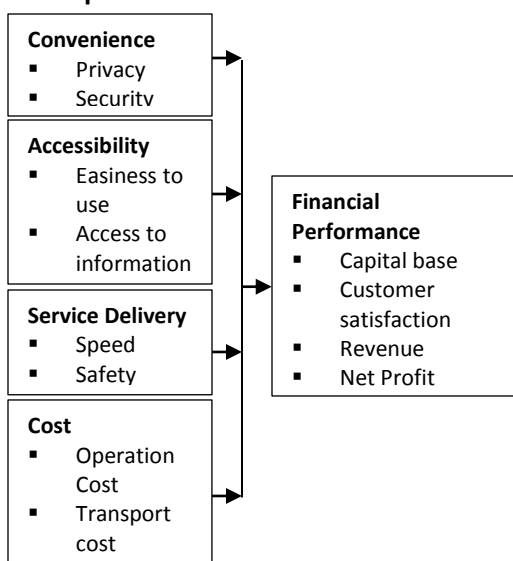
Chouassi (2012), studied can mobile phones really work to extend banking services to the unbanked, empirical lessons from selected sub-Saharan Africa countries. The study established that m-banking can be used for person to person (P2P) transfers including remittances or disaster response; payments such as utility bills, airtime, microfinance and loans; disbursements such as payroll, government benefits,

or NGO operations and incentives for health or education. The mobile phone presents a great opportunity for the provision of financial services to the unbanked. In addition to technological and economic innovation, policy and regulatory innovation is needed to make their services a reality.

### Effect Costs of Mobile Banking Services on Financial Performance of SMES

Kigen (2010) studied the impact of mobile banking on transaction costs of microfinance institutions where he found out that by then, mobile banking had reduced transaction costs considerably though they were not directly felt by the banks because of the then small mobile banking customer base. Kigen (2010) sought to determine the impact that mobile banking bore on transactional costs of microfinance institutions.

#### Conceptual framework



**Independent variables    Dependent Variable**

**Figure 1: Conceptual Framework**

**Source: Author (2018)**

#### Convenience

Mobile financial products allow consumers the opportunity to free themselves of many time

consuming and costly activities. However, it is the interplay between mobile based financial products (such as salary payment) and the ability to withdraw cash for the system which determines the net benefit to consumers (Chakraborty, 2007). Glaessner and Klingebiel (2003) identified that for individuals, climbing the banking ladder is fundamental to greater participation in economic development. Simply reducing the risk of crime by removing the need to carry around cash is significant. Reducing the time taken to use existing services and removing some of the associated costs can also fundamentally transform people’s lives. Whilst there is little systematic data on the use of mobile transactions, the anecdotal evidence is powerful.

#### Accessibility

Accessibility of digital banking has to do with the ease with which customers have access to financial tools, their accounts, ease of making payments from their accounts and access to money available in the accounts using various digital channels namely, online banking facilities, ATMs, POS terminals, mobile banking to mention but a few. Accessibility defines how these channels make a meaningful experience to the customers in terms of access to their funds, access to banking facilities and services and feedback. It determines whether customers find the products to be serving their needs when they want it, in a way that makes their banking convenient (Villers, 2012). Access to information and the ease with which consumers can share views with those they know – or even ‘the world’ – is dramatic. Good experiences can be easily shared online as can negative ones. They also eliminate the need for buildings and office equipment. In South Africa, the DRC, Zambia and Kenya for instance, mobile phone banking is taking services to remote areas where conventional banks have been physically absent. Subscribers can now open

accounts, check their balances, pay their bills, transfer money, and cater for their daily basic needs. In the past 30 years, three (3) products that are seen to have had the most impact on the world are in the ICT sector: the internet, PCs and mobile phones. Of these, the mobile phone has the highest penetration in developing countries (Ondeige, 2010).

### **Service Delivery**

The relationship between mobile banking and operational efficiency can be discussed on two folds. How technology enhances efficiency and effectiveness in service delivery. According to CBK (2014) technology use in the banking industry enhances operational efficiency by reducing the overall costs of service delivery and improving the convenience and ease of access to services by customers. According to Okiro and Ndungu (2013) the use of technology in service delivery in the banking services reduces the costs of accessing services by customers while enhancing the services accessible by the customer without visiting the bank branch. For example, a customer can access their balance, transfer funds, withdraw funds, pay school fees, pay for bills and shopping, borrow from a bank and many other transactions at the comfort of their homes or offices (Nyangosi et al., 2009). Operational efficiency will be enhanced by reducing costs of service delivery and enhancing ease of access to services

### **Cost**

The transaction costs of sending money through the mobile payment technology are lower than those of banks and money transfer companies (Omwansa, 2009). The cost of a payment transaction has a direct effect on consumer adoption if the cost is passed on to customers (Mallat, 2007). Transaction costs should be low to make the total cost of the transaction competitive. The cost of the mobile payments should be affordable to most of the micro

business operators and far below what the banks normally charge for their bank transactions. There are many different mobile handsets which are easy to operate and have the functionalities required for the mobile payment technology.

### **METHODOLOGY**

The research was conducted as an exploratory research. This was because the research was aimed at discovering insights on the role of mobile banking in financial performance SME in Kakamega County. Kothari (2012) defines a research design as the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the purpose of the research with economy in the procedure. The population of study for this research comprised of the 5521 SMEs that provided financial services within the Kakamega County. There were a total of 1857 medium sized and 3664 small sized enterprises offering financial services in the Kakamega County. The researcher sought to examine a sample of 373 respondents drawn from small and medium enterprises in Kakamega County giving. A proportion of the sample size was computed and this proportion was used to determine the number of respondents in each stratum to be examined. Questionnaires were used for collecting information from SMEs entrepreneurs. The questionnaires were semi-structured (open and closed ended questions). The open ended questionnaires were used to collect qualitative data while the close ended ones were used to get quantitative data. Data capturing was done using Excel software. The data from the completed questionnaires were cleaned, coded and entered into the computer using the statistical package for social sciences (SPSS) for Windows analysis. Regression model facilitated description and explanation of the study findings. The regression model used was;  $Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4$



Where Y is the dependent variable (SMEs financial performance)

$\beta_0$  Regression constant. It is the value of Y when  $X_1=X_2=X_3=X_4=0$

$\beta_{1-4}$  is the regression coefficients of independent variables

$X_1$  is Accessibility

$X_2$  is Cost

$X_3$  is Convenience

$X_4$  is Service Delivery Efficiency

The test of significance for the regression model was determined using ANOVA.

## RESULTS

### Mobile Banking Services Accessibility

To assess the extent of mobile banking services accessibility, a set of six statements were formulated. The respondents were asked to indicate the extent of agreement with each of the accessibility of mobile banking services.

**Table 1: Mobile Banking Services Accessibility**

No	Accessibility	SD	D	U	A	SA	Range	Mean	Std Dev
1	Mobile banking services are clear and understandable in accessing information	2.2% (7)	2.5% (8)	5% (16)	27.7% (88)	62.6% (199)	4.0	4.5	.88
2	The design of mobile device application used in mobile banking considers various personal abilities of the user	1.3% (4)	3.8% (12)	6% (19)	24.8% (79)	64.2% (204)	4.0	4.45	.87
3	Mobile banking services give the user full control of banking transaction	1.3% (4)	3.5% (11)	10.1% (32)	21.1% (67)	64.2% (204)	4.0	4.46	.86
4	Interaction with mobile banking services does not require a lot of mental effort	4.7% (15)	6.3% (20)	12.9% (41)	23.9% (76)	50.9% (162)	4.0	4.43	.89
5	It is easy to use mobile banking services to accomplish my banking tasks	0.9% (3)	6.9% (22)	9.1% (29)	54.7% (174)	28.3% (90)	5.0	4.13	1.16
6	Using mobile banking services does not require special training	2.2% (7)	2.5% (8)	5% (16)	27.7% (88)	62.6% (199)	4.0	4.02	.85

From Table 1, majority of the sample respondents 62.6% (199) strongly agreed that mobile banking services were clear and understandable in accessing information and additional 27.7% (88) agreed with a mean of 4.5 and standard deviation of 0.88 indicating that there was some deviation from mean. Similarly, 64.2% (204) of the sampled respondents from sampled SMEs strongly agreed that the design of mobile device application used in mobile banking considers various personal abilities of the user and 24.8% (79) agreed with a mean of 4.45 and standard deviation of 0.87.

In regard to mobile banking services giving the user full control of banking transaction, 64.2% (204) of the respondents strongly agreed and 21.1% (67) agreed with a mean of 4.46 and standard deviation of 0.86 implying that there was some deviation from the mean. Half of the respondents (50.9%) strongly agreed that interaction with mobile banking services did not require a lot of mental effort and 23.9 % (76) of them agreed with a mean of 4.43 and standard deviation of 0.89.

It was revealed that 54.7% (174) and 28.3% (90) of the respondents agreed and strongly agreed respectively that it was easy to use mobile banking services to accomplish their banking tasks. However, a mean of 4.13 and standard deviation 1.16 implies that there is significant deviation from the mean. Lastly, most of the respondents agreed that using mobile banking services did not require special training as indicated by 62.6%(199) of the respondents who strongly agreed and 27.7%(88) who

agreed. A mean of 4.02 and standard deviation of 0.85 implied that there was some deviation from the mean.

### Mobile Banking Services Cost

To assess extent of mobile banking services cost, a set of six statements were prepared. The respondents were asked to indicate the extent of agreement with each of the mobile banking services cost statements. The relevant results were presented in Table 2.

**Table 2: Mobile Banking Services Cost**

No	Cost	SD	D	U	A	SA	Range	Mean	Std Dev
1	Affordable cost of SIM Card	0.0%	6.3%(20)	1.3% (4)	50.9% (162)	41.5% (132)	4	4.2	.98
2	Easy replacement of SIM card	3.8% (12)	11% (35)	5% (16)	57.5% (183)	22.6% (72)	4	3.8	1.0
3	Affordable cost of sending or receiving money	1.3% (4)	4.7% (15)	2.5% (8)	64.8% (206)	26.7% (85)	4	4.1	.76
4	The transaction cost are affordable	7.5% (24)	8.8% (28)	5% (16)	36.2% (115)	42.5% (135)	4	3.9	1.2
5	The operation cost are affordable	11% (35)	9.1% (29)	19.8% (63)	21.4% (68)	38.7% (123)	4	3.6	1.3
6	Affordable cost of accessing bank accounts	3.8% (12)	3.8% (12)	18.9% (60)	19.8% (63)	53.8% (171)	4	4.1	1.1

From Table 2, 50.9% (162) and 41.5% (132) of the respondents agreed and strongly agreed respectively that SIM card were offered at affordable cost with a mean of 4.2 and standard deviation of 0.98 implying that there was significant deviation from mean. Majority of the respondents confirmed that it was easy to replace SIM Card as indicated by 57.5% (183) of the respondents who agreed and 22.6% (72) who strongly agreed with a mean of 3.8 and standard deviation of 1.1. In regard to Affordable cost of sending or receiving money, 64.8% (206) and 26.7% (85) of the respondents agreed and strongly agreed respectively that it was affordable to send and receive money via mobile bank. A mean of 4.1 and standard deviation of 0.76 implied that there was some deviation from the mean. It was also revealed that 19.8% (63) of the sampled respondents agreed it

was affordable to access bank accounts and 53.8% (171) agreed with a mean of 4.1 and standard deviation of 1.1 implying there was some deviation from the mean. However, there was mixed view on transaction cost and operation cost. The study results revealed that 21.4% (68) and 38.7% (123) of the respondents agreed and strongly agreed that operation cost were affordable even though 19.8% (63) of the respondents were undecided. A standard deviation of 1.3 implied there was great deviation from the mean of 3.6. Similarly, 36.2% (115) and 42.5% (135) of the respondents agreed and strongly agreed that the transaction cost were affordable with a mean of 3.9 and standard deviation of 1.2

### Mobile Banking Services Convenience

To determine the extent of mobile banking services convenience, a set of six statements were formulated. The respondents were asked to indicate

the extent of agreement with each of the convenience of mobile banking statements. The pertinent results were presented in Table 3.

**Table 3: Mobile Banking Services Convenience**

No	Mobile banking service convenience	SD	D	U	A	SA	Range	Mean	Std Dev.
1	Using mobile banking would make it easier for me to carry out my tasks	11.3% (36)	1.3% (4)	0.9% (3)	35.5% (113)	50.9% (162)	4.00	4.13	1.25
2	Time taken to transact business with mobile banking is short	13.2% (42)	12.9% (41)	7.9% (25)	17.3% (55)	48.7% (155)	4.00	3.75	1.48
3	There is prompt updates through messages	0.0%	0.0%	3.8% (12)	41.6% (132)	54.7% (174)	2.00	4.46	0.88
4	No additional documents needed to transact except the phone	9.7% (31)	14.2% (45)	20.1% (64)	21.4% (68)	34.6% (110)	4.00	3.56	1.34
5	There is convenient timings as it is a 24 hour service	0.0%	9.7% (31)	18.9% (60)	23.3% (74)	48.1% (153)	3.00	4.0	1.15
6	Using Mobile banking would enable me to accomplish my tasks more quickly	7.5% (24)	10.7% (34)	23% (73)	19.8% (63)	39% (124)	4.00	3.7	1.28

The results in Table 3, 35.5% (113) and 50.9% (162) of the respondents agreed and strongly agreed respectively that using mobile banking would make it easier for them to carry out their tasks with a mean of 4.13 and standard deviation of 1.25. This implied that there was significant deviation from the mean. The results also revealed that 48.7% (155) of the respondents strongly agreed and additional 17.3% (55) agreed that time taken to transact business with mobile banking was short. A mean of 3.75 and standard deviation of 1.49 suggested there was significant deviation from the mean.

Majority of the respondents confirmed that there were prompt updates through messages of which 41.6%(132) of the respondents agreed and 54.7%(174) strongly agreed with a mean of 4.46 and standard deviation of 0.88. It was noted that 21.4%(68) and 34.6%(110) of the respondents agreed and strongly agreed that there were no additional documents needed to transact except the phone

although 14.2% disagreed and 9.7% (31) strongly disagreed with mean 3.56 and standard deviation of 1.15.

The results further revealed that 48.1% (153) of the respondents agreed that using mobile banking offered convenient timings as it was a 24 hour service and 23.3% (74) agreed although 18.9%(60) were undecided with a mean of 4.0 and standard deviation of 1.15. Lastly, 19.8% (63) and 39%(124) of the respondents agreed and strongly agreed respectively that using Mobile banking would enable them to accomplish my tasks more quickly with a mean of 3.7 and standard deviation of 1.28. This suggested that there was significant deviation from the mean.

### Mobile Banking Service Delivery Efficiency

To determine the extent of mobile banking service delivery efficiency, a set of six statements were prepared. The respondents were required to state the extent of agreement with each of the service

delivery efficiency of mobile banking statements. The

relevant results were presented in Table 4.

**Table 4: Mobile Banking Service Delivery Efficiency**

	<b>Service Delivery Efficiency</b>	<b>SD</b>	<b>D</b>	<b>U</b>	<b>A</b>	<b>SA</b>	<b>Range</b>	<b>Mean</b>	<b>Stdev</b>
1	Enhance service quality in your business	0.6% (2)	8.8% (28)	21.1% (67)	35.2% (112)	34.3% (109)	4.00	3.93	.98
2	Enlightening of customers on technological issues	1.3% (4)	14.2% (45)	18.2% (58)	24.8% (79)	41.5% (132)	4.00	3.91	1.12
3	Shortens duration of service delivery	0.9% (3)	11.3% (36)	19.2% (61)	13.2% (42)	55.3% (176)	4.00	4.10	1.12
4	It has helped me to shift from insecure and unsafe ways of savings that I previously used.	1.3% (4)	5.3% (17)	19.5% (62)	13.5% (43)	60.4% (192)	4.00	4.26	1.02
5	Use of mobile banking has increased customer satisfaction in service delivery	4.1% (13)	4.4% (14)	10.1% (32)	51.3% (163)	30.2% (96)	4.00	3.99	.97
6	Mobile money transfer functions are reliable and efficient	3.5% (11)	8.8% (28)	10.7% (34)	61% (194)	16% (51)	4.00	3.77	.93

From the table, 35.2% (112) and 34.3% (109) of the sampled respondents agreed and strongly agreed respectively that mobile banking enhances service quality in their business with a mean of 3.93 and standard deviation of 0.98. This implied, there was significant deviation from the mean. The results also revealed that 41.5% (132) of the respondents strongly agreed that mobile banking had led to enlightening of customers on technological issues while 24.8% (79) of them agreed. A mean of 3.91 and standard deviation of 1.12 revealed that there was great deviation from the mean. In regard to service delivery duration, more than half of the respondents 55.3% (176) strongly agreed that mobile banking had resulted shortening duration of service delivery and additional 13.2%(42) agreed. A mean of 4.10 and standard deviation of 1.12 suggests that there was significant deviation from the mean.

The results also revealed that 13.5% (43) and 60.4% (192) agreed and strongly agreed respectively that mobile banking had helped me to shift from insecure

and unsafe ways of savings that I previously used. A mean 4.26 and standard deviation of 1.02 implied that there was great deviation from the mean. In relation to customer satisfaction, more than half of the respondents 51.3% (163) agreed that use of mobile banking had increased customer satisfaction in service delivery and further 30.2%(96) strongly agreed. A mean of 3.99 and standard deviation of 0.97 implies that there was some deviation from the mean. Lastly, 61%(194) and 16%(51) of the respondents agreed and strongly agreed respectively that mobile money transfer functions were reliable and efficient with a mean of 3.77 and standard deviation of 0.93.

**SMEs Financial Performance**

Financial performance in this study was used as dependent variable in this study. It was measured in terms of return on investments, growth of SMEs, customer satisfaction and net profits. The relevant results were presented in Table 5.

**Table 5: SMEs Financial Performance**

	<b>Financial Performance</b>	<b>SD</b>	<b>D</b>	<b>U</b>	<b>A</b>	<b>SA</b>	<b>Range</b>	<b>Mean</b>	<b>Std Dev</b>
--	------------------------------	-----------	----------	----------	----------	-----------	--------------	-------------	----------------

1	The capital base of the business has consistently increased.	1.3% (4)	2.8% (9)	4.4% (14)	34.6% (110)	56.9% (181)	4.00	4.43	.81
2	The customer services has improved with increase in mobile banking	1.9% (6)	2.8% (9)	4.1% (13)	35.8% (114)	55.3% (176)	4.00	4.39	.84
3	The level of overdue balances have reduced	7.5% (24)	7.5% (24)	11.9% (38)	43.1% (137)	29.9% (95)	4.00	3.80	1.16
4	The cost of doing business has reduced	2.2% (7)	8.5% (27)	8.8% (28)	30.2% (96)	50.3% (160)	4.00	4.17 92	1.04
5	There is increase in revenue as a result of mobile banking	8.5% (27)	9.7% (31)	11.9% (38)	41.5% (132)	28.3% (90)	4.00	3.71	1.21
6	The customer base has increased due to mobile banking	1.9% (6)	3.1% (10)	10.7% (34)	29.9% (95)	54.4% (173)	4.00	4.31	.92

From Table above, 34.6% (110) and 56.9% (181) of the respondents agreed and strongly agreed respectively that the capital base of the business had consistently increased due to utilization of mobile banking services with a mean of 4.43 and standard deviation of 0.81. The results also revealed that 35.8% (114) and 55.3%(176) of the respondents agreed and strongly agreed respectively that customer services has improved with increase in mobile banking with a mean of 4.4 and standard deviation of 0.85.

It was also noted that 43.1% (137) of the respondents agreed that the level of overdue balances had reduced due to mobile banking services and further 29.9%(95) strongly agreed with a mean of 3.8 and standard deviation of 1.2. The cost of doing business

has reduced as indicated by half of the respondents who strongly agreed and 30.2%(96) who agreed with a mean of 4.2 and standard deviation of 1.0. Small majority of the respondents 28.3%(90) strongly agreed that there is increase in revenue as a result of mobile banking and 41.5%(132) of the respondents agreed with a mean of 3.7 and standard deviation of 1.2. Lastly, 29.9%(95) and 54.4%(173) of the respondents agreed and strongly agreed respectively that he customer base has increased due to mobile banking with a mean of 4.3 and standard deviation of 0.92

#### Mobile Banking Services Used

The respondents were also required to state various mobile banking services used. The responses are as shown in Table 6.

**Table 6: Mobile Banking Services**

Mobile Services	Frequency	Percentage
Buying airtime through mobile phone	314	98.7
Saving (depositing) into mobile banking	302	95
Withdrawing from mobile banking	294	92.5
Sending money	318	100
Receiving money	318	100
Checking account balance with the bank	318	100
Checking account balance in the mobile transfer account	318	100
Paying bills	225	70.8



Knowing when I receive deposits into mobile banking	318	100
Knowing when I receive deposits in the bank	318	100
Viewing bank account statement	230	72.3
Accessing Credit Facilities (Loans)	209	65.7

From Table 6, all of the sampled respondents used their mobile for sending money, receiving money, checking account balance with the bank, checking account balance in the mobile transfer account; knowing when they receive deposits into mobile banking and knowing when receive deposits in the bank. Further, 314(98.7%) of the respondents used their mobile phones for buying airtime through mobile phone, saving (depositing) into mobile banking 302(95%) and withdrawing from mobile banking 294(92.5%). However, the following service were used by less than three quarters of the respondents, paying of bills (70.8%), Viewing bank account statement (72.3%) and accessing credit facilities (65.7%).

**Table 7: Correlation Matrix**

	N	Mean	Std Dev.	Accessibility	Cost	Convenience	Efficiency
Accessibility	318	4.47	0.75	1			
Cost	318	1.91	0.72	-.548**	1		
Convenience	318	3.90	0.63	.337**	-.559**	1	
Efficiency	318	3.97	0.91	.475**	-.515**	.642**	1
Performance	318	4.4214	.73561	.704**	-.660**	.524**	.607**

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The results indicated that the mobile banking services accessibility had a positive and significant effect on the SMEs performance ( $r = .704^{**}$ ). However, cost of mobile banking service had a negative and significant on the SMES performance ( $r = -.660^{**}$ ). On the other hand, convenience of mobile banking services has a positive and significant effect on the SMEs performance ( $r = .524^{**}$ ). Lastly, efficiency of service

delivery had positive and significant effect on the SMEs performance ( $r = .607^{**}$ ). This implied that the mobile banking services used in this study were all having a significant positive effect on the performance of SMEs in Kakamega County. However, there was variation in the magnitude of their effect on the financial performance as accessibility had greatest effect followed by cost although it was negative while the rest were positive.

**Table 8: Regression Analysis of Independent Variables and Performance**

R	R <sup>2</sup>	Adjusted R <sup>2</sup>	df	F	Sig.
.808a	.652	.636	(4,317)	146.753	.000 <sup>b</sup>

a. Predictors: (Constant), Accessibility, Cost, Convenience and Service delivery efficiency

b. Dependent Variable: SMEs financial performance

In Table 8, the findings established that the linear relationship between SMEs Performance and the four predictor variables; accessibility, cost, convenience and service delivery efficiency was positive and significant. The coefficient of correlation was 0.808,

( $r=0.808$ ). The coefficient of determination ( $r^2$ ) was 0.652, and this showed that 65.2% of the variations in the performance can be explained by the four predictor variables in the study and the remaining 34.6% of the variations in SMEs financial performance

was explained by other factors not captured in the model.

From the ANOVA results the F test gave a value of  $F(4, 317) = 146.753$ ,  $p < .01$ , which was large enough to

support the goodness of fit of the model in explaining the variation in the dependent variables. It also means Mobile banking services is a useful predictor of performance.

**Table 9: Coefficients of the Independent Variables and Performance**

	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
(Constant)	1.934	.315		6.147	.000
Accessibility	.423	.041	.430	10.334	.000
Cost	-.269	.047	-.263	-5.773	.000
Convenience	.120	.054	.104	2.224	.027
Service delivery efficiency	.162	.038	.201	4.288	.000

Dependent Variable: SMEs Financial performance

From Table 9, all independent variables carried a significant positive predictive power except for cost which had negative power. The intercept value for financial performance was 1.934 this implied that if mobile banking services (Accessibility, Convenience, Cost and Service delivery efficiency) was held at zero or it was absent, the SMEs performance would be significantly 1.934,  $p=0.000$ . This implied that, the financial performance would be positive and significant.

The partial regression coefficient of accessibility was 0.423 this showed that when convenience, cost and service delivery efficiency were controlled, accessibility with a beta of 0.423 was at statistically significant level and was a good predictor of performance through adoption of mobile banking services implying that an increase in mobile banking services accessibility by one unit will result to significant increase in performance by 0.423.

However, the partial regression coefficient of Cost was -0.269 this showed when convenience, service delivery efficiency and accessibility were controlled; cost with a beta of -.269 is at statistically significant level and is a good predictor of performance through adoption of mobile banking implying that an increase

in cost by one unit will result to significant decrease in financial performance by 0.269.

On the other hand, the partial regression coefficient of convenience was 0.120 this showed when service delivery efficiency, cost and accessibility are controlled; Convenience with a beta of 0.120 was at statistically significant level and was a good predictor of SME financial performance through adoption of mobile banking implying that an increase in mobile banking services convenience by one unit will result to significant increase in performance by 0.120,  $p=0.027$

Lastly, the partial regression coefficient of Service delivery efficiency was 0.162. When convenience, cost and accessibility were controlled; service delivery efficiency with a beta of 0.162 was at statistically significant level and was a good predictor of performance through adoption of mobile banking services implying that an increase in Service delivery efficiency by one percent would result to significant increase in financial performance by 0.162. A regression of the four predictor variables against financial performance established the multiple linear regression model.

Financial Performance =  $0.286 + 0.423AC - 0.269CO + 0.120CV + 0.162SDE$

Where **AC**: Accessibility

**CO**: Cost

**CV**: Convenience

**SDE**: Service delivery efficiency

Overall, multiple linear regression indicated that Mobile banking services had significant effect on performance of SMEs in Kakamega County. All the four Mobile banking services identified in this study had strong effect on the performance of SMEs in Kakamega County. The findings of this study concur with various previous studies. Nyaga (2013) established that mobile banking services have a positive impact on sales. Efficiency and reliability contribute more to mobile money utility and SMEs growth in Kenya.

### Testing for Null hypotheses

The first null hypothesis posits **H<sub>01</sub>**: There is no significant relationship between mobile banking services accessibility and financial performance of SMEs in Kakamega County. The alternative hypothesis was **H<sub>A1</sub>**: There is significant relationship between mobile banking services accessibility and financial performance of SMEs in Kakamega County. This hypothesis was tested using  $P < 0.05$ ,  $\beta (\beta \neq 0)$  and  $t \neq 0$ . From the results, the T-test Statistics results was  $t = 17.624$ ;  $P = 0.000 < 0.05$  and Beta Standardized Coefficient results ( $\beta_1 = 0.693$ ) and  $P = 0.000 < 0.05$ . Therefore, the first null hypothesis was rejected as there exists a significant effect of accessibility of mobile banking services on financial performance of SMEs in Kakamega County.

The second null hypothesis posits **H<sub>02</sub>**: There is no significant relationship between mobile banking services cost and financial performance of SMEs in Kakamega County. The alternative hypothesis was **H<sub>A2</sub>**: There is significant relationship between mobile banking services cost and financial performance of SMEs in Kakamega County. The verdict was arriving

by considering  $P < 0.05$ ,  $\beta \neq 0$  and  $t \neq 0$ . From the results, the T-test Statistics yielded  $t = -15.602$ ;  $P = 0.000 < 0.05$  and Beta Standardized Coefficient results ( $\beta = -0.676$ ) and  $P = 0.000 < 0.05$ . Therefore, there was sufficient evidence to reject the second null hypothesis since there exists a significant effect of mobile banking services cost on financial performance of SMES in Kakamega County.

The third null hypothesis posits **H<sub>03</sub>**: There is no significant relationship between mobile banking services convenience and financial performance of SMEs in Kakamega County. The alternative hypothesis was **H<sub>A3</sub>**: There is significant relationship between mobile banking services convenience and financial performance of SMEs in Kakamega County. This hypothesis was tested using  $P < 0.05$ ,  $\beta (\beta \neq 0)$  and  $t \neq 0$ . From the results, the T-test Statistics results was  $t = 10.951$ ;  $P = 0.000 < 0.05$  and Beta Standardized Coefficient results ( $\beta_1 = 0.608$ ) and  $P = 0.000 < 0.05$ . Therefore, the third null hypothesis was rejected as there exists significant effect of Convenience on financial performance of SMES in Kakamega County.

The fourth null hypothesis posits **H<sub>04</sub>**: There is no significant relationship between mobile banking services delivery efficiency and financial performance of SMEs in Kakamega County. The alternative hypothesis was **H<sub>A4</sub>**: There is no significant relationship between mobile banking services delivery efficiency and financial performance of SMEs in Kakamega County. The verdict was arriving by considering  $P < 0.05$ ,  $\beta \neq 0$  and  $t \neq 0$ . From the results, the T-test Statistics yielded  $t = 13.577$ ;  $P = 0.000 < 0.05$  and Beta Standardized Coefficient results ( $\beta = 0.489$ ) and  $P = 0.000 < 0.05$ . Therefore, there was sufficient evidence to reject the fourth null hypothesis since there exists a significant effect of service delivery efficiency on financial performance of SMES in Kakamega County.

## CONCLUSION

On mobile accessibility, the null hypothesis was rejected as there is significant relationship between accessibility of mobile banking and financial performance of SMEs in Kakamega County. The study concluded that mobile banking service accessibility has positive significant effect on financial performance of SMEs in Kakamega County.

On cost of mobile banking services and financial performance the null hypothesis was rejected as there is significant relationship between cost of mobile banking services and financial performance of SMEs in Kakamega County.

On convenience of mobile banking services and financial performance the null hypothesis was rejected as there is significant relationship between convenience of mobile banking and financial performance of SMEs in Kakamega County.

On service delivery efficiency and financial performance the study concluded that mobile banking service delivery efficiency has significant effect on financial performance of SMEs in Kakamega County.

## RECOMMENDATIONS

There is need for mobile companies and other companies offering mobile banking services to design mobile banking applications and services that are easy to use by all customers regardless of their social status. These applications will make users feel they are reaping maximum benefit from mobile banking due to easiness of accessibility which will lead to increase of frequency of usage thereby resulting to increase in performance.

## REFERENCES

Abell, D. (2010). *Defining the Business: The starting point of strategic planning*. Englewood Cliffs, New Jersey: Prentice-Hall Publishers.

The government should come up with regulations which will make the cost of access internet and other mobile services affordable to most customers. This will make sure that most SMEs are not locked out from using mobile banking applications and services as a result of taxations and other levies which government imposes so as to raise revenue.

The study recommended that mobile content provider who are tasked with coming up with applications that run on mobile devices which form platform for mobile banking services should design applications that individual have the ability to customize them based on their ability, privacy and security. Further, the study recommended that there is need for financial institutions requiring little document to complement mobile banking information during mobile banking transactions.

The study recommended the mobile banking services should be more reliable and efficient in terms of mobile network accessibility so that transaction can be conducted at anytime and anyplace.

## Suggestion for Further studies

Further study should be conducted with inclusion of either moderating, intervening or mediation variables to find out what effect they have over and above mobile banking services on financial performance of SMEs such as government policies and regulation. Besides, a study on mobile banking services should be carried out to investigate its effect on the growth of SMEs in Kenya as most studies have not considered role of mobile banking on the growth of SMEs in Kenya.

- Akoten, J. E. (2007). *Breaking the Vicious Cycle of Poor Access to Credit by Micro and Small Enterprises in Kenya*. Nairobi: Institute of Policy Analysis and Research (IPAR), Discussion Paper No. 095/2007.3.
- Anckar. B.. & D. D’Incau (2002). Value creation in mobile commerce: findings from a consumer survey. *Journal of Information Technology Theory and Application*, Vol.4, No.1, pp.43-64.
- Arunga J. Kahora B (2007). *Cell phone Revolution in Kenya*. *International Policy Network*. Business Daily, April 18. 2009. “Minister orders audit of Safaricom M-Pesa service”.
- Agboola, A. A. (2011). Impact of Electronic Banking on Customer Services in Lagos, Nigeria in Ife. *Journal of Economics and Finance. Department of Economics*, 5(1), 8-12
- Barnes, J.S. (2002). The mobile commerce value chain: analysis and future developments. *International Journal of Information Management*. Vol.22. pp.91-108.
- Burhouse, S., Homer, M., Osaki, Y. and Bachman, M. (2014). *Assessing the Economic Inclusion Potential of Mobile Financial Services*, Division of Depositor and Consumer Protection, Federal Deposit Insurance Corporation, USA
- CBK. (2014). Central Bank of Kenya. *Quarterly report on Development in the Kenyan banking Sector* for the period ended 30th June 2014, retrieved on 8th mar 2017 [www.centrabank.go.ke/](http://www.centrabank.go.ke/)
- Chatain, P. L., Coss, R. H., Borowik, K. and Zerzan, A. (2008). *Integrity in Mobile Phone Financial Services: Measures for Mitigating Risks from Money Laundering and Terrorist Financing*, The International Bank for Reconstruction and Development/The World Bank, Washington, USA.
- Dauda, A. (2013). Influence of technological environmental factors on the strategic choice of quoted manufacturing firms in Nigeria's food and beverage industry, *International Journal of Business, Humanities and Technology*, 3(8), 159-169.
- David Porteous (2009). Mobilizing Money through Enabling Regulation. *Innovations: Technology, Governance, Globalization*, 4(3), 75-90.
- Delgado, J., Hernando, I., & Nieto, M. J. (2006). Do European primarily internet banks show scale and experience efficiencies. *European Financial Management*
- Donner, J.(2005). Small Entrepreneurs and Mobiles: An Exploration of the Uses of Mobile Phones by Small Business Owners in Rwanda.
- Donner, J. & Tellez, A. C. (2008). Mobile banking and economic development: Linking adoption, impact, and use. *Asian Journal of Communication*, 18(4), 318- 322. Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology, *MIS Quarterly*, 13(3), 319–339.



- Jepleting, A., Sangoro, O. and Bureti, P. (2013). Effects of mobile banking on customer satisfaction. a case of Equity Bank of Eldoret town, *International Journal Of Innovative Research In Management*, 2(3), 29-40.
- Kumar. S.. & C. Zalin (2003). Mobile communications: evolution and impact on business operations. Vol. 23, pp.515-520.
- Kithaka, E. (2014). Effect of mobile banking on financial performance of commercial banks in Kenya. *Unpublished MBA Project*, University of Nairobi.
- Kigen, K. P. (2010). The impact of mobile banking on transaction costs of microfinance institutions. *Unpublished MBA Thesis*, University of Nairobi.
- Lin, C. Y. and Shih, K. H. (2013). Service quality of mobile banking systems, *Knowledge Management and Innovation*, 19(21), 515-521.
- King'oo, H. (2011). The relationship between electronic banking and financial performance of commercial banks in Kenya. *Unpublished MBA, Thesis*, University of Nairobi.
- Mallat, N. (2007). Exploring Consumer Adoption of Mobile Payments - A Qualitative Study. *The Journal of Strategic Information Systems*, 16 (4), 413-432.
- Mbiti, I. and Weil, D. N (2011). Mobile banking: the impact of M-pesa in Kenya, *National Bureau of Economic Research*, Working Paper 17129.
- Mbogo, M. (2010). The Impact of Mobile Payments on the Success and Growth of Micro-Business: The Case of M-Peas in Kenya. *The Journal of Language, Technology & Entrepreneurship in Africa*, 2(1), 182- 203.
- Muiruri J., & Ngari M., (2014). Effects of Financial Innovations on the financial Performance of Commercial Banks in Kenya. *International Journal of Humanities and Social Science*, vo4 (7)
- Muisyo, J. M., Alala, O. and Musiega, D. (2014). The effects of mobile money services on the performance of the banking institutions: a case of Kakamega town, *The International Journal of Engineering and Science*, 3(4), 16-24.
- Rogers, E. M. (1995). *Diffusion of Innovations*, The Free Press, New York, USA.
- Njenga, A. D. K. (2010). Mobile banking: Usage experiences in Kenya, *Catholic University of Eastern Africa*.
- Omwansa, T. K. and Waema, T. M. (2014). Deepening financial inclusion through collaboration to create innovative and appropriate financial products for the poor, *Centre for Research on Financial Markets and Policy*, Working Paper Series.
- Okiro, K. and Ndung'u J. (2013). The impact of mobile and internet banking on performance of financial institutions in Kenya, *European Scientific Journal*, 9(13), 146-161.

- Omwansa, T. K. and Waema, T. M. (2014). Deepening financial inclusion through collaboration to create innovative and appropriate financial products for the poor, *Centre for Research on Financial Markets and Policy, Working Paper Series*.
- Porteous, D. (2006). *The Enabling Environment for Mobile Banking in Africa*, London: DFID. <http://www.bankablefrontier.com/assets/ee.mobil.banking.report.v3.1.pdf>
- Ritho M., & Jagongo A., (2013). Mobile Banking and Financial Performance of Commercial Banks in Kenya. *International Journal of Finance and Current Business Studies*, 4 (12)
- Siau, K., Sheng, H., Nah, F., & Davis, S. (2004). A Qualitative Investigation on Consumer Trust in Mobile Commerce. *International Journal of Electronic Business*, 2(3), 283-300.
- Simpson, J. (2002). The Impact of the Internet in Banking: Observations and Evidence from Developed and Emerging Markets. *Telematics and Informatics*, 19, pp. 315-330.
- Taiwo, A. A. and Downe, A. G. (2013). The theory of user acceptance and use of technology (UTAUT): a meta-analytic review of empirical findings, *Journal of Theoretical and Applied Information Technology*, 49(1), 48-58.
- Tchouassi, G. (2012). Can Mobile Phones Really Work to extend Banking Services to the Unbanked? Empirical Lessons from selected Sub-Saharan Africa Countries, *International journal of Development Societies*, 1, 70-81.
- Venkatesh, V, Morris, M. G, Davis, G. B. and Davis, F. D. (2003). User acceptance of information technology: toward a unified view. *MIS Quarterly*, 27(3), 425-478, 2003.
- World Bank (2013). *Financial Inclusion Strategies Database*, retrieved on 3rd Mar 2018 from <http://econ.worldbank.org>.
- World Bank (2014). *Global financial development report 2014: Financial Inclusion*, Washington, DC: World Bank.