EFFECTS OF M-PESA ADOPTION ON FINANCIAL PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN MOMBASA COUNTY

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Abstract: **The general objective of this study was to assess the effects of MPESA adoption on financial performance of small and medium enterprises in Mombasa County. The specific objectives were to examine the effects of transaction cost, risk management, mobile payment and mobile finance on small and medium enterprises. Traditional theory of financial innovation, financial constraints theory, transaction cost innovation theory and strategic theory of financial innovation were used for the study. This study was aiming to ascertain effects of M-PESA adoption on financial performance of small and medium enterprises in Mombasa County. The transaction cost, risk management, mobile payment and mobile finance were independent variable and financial performance was dependent variable. The study findings were helpful to investment in small and medium enterprises. To achieve these results, both primary data and secondary data were collected for the study. The target population comprised of 80 small and medium enterprises in Mombasa County. A sample size of 76 small and medium enterprises was drawn from the target population. Primary data was collected using questionnaire and data analysis was done using descriptive statistics. Secondary data was collected, using journals and articles which were used to gather information. Multiple linear regression analysis was used to establish the nature of relationship between dependent variable and independent variables. The study established that transaction cost, risk management, mobile payments and mobile finance had positive significant influence on the financial performance of SMEs. Therefore, the research recommended that mobile money service providers should encourage SMEs traders to adopt the use of MPESA adoption through enhanced advertisement.**

Keywords: **M-PESA, SME, Influence, adoption.**

1. INTRODUCTION

Survey done in 2013, stated that 250 million registered mobile money customers were active in use of mobile phone money transfer system. M-PESA is innovative in the sense that the user can use M-PESA account as a sort of bank account but does not need to have a real bank account to use M-PESA. The success of any digital financial service strategy depends upon its ability to add value for all of the different parties in the partnership ecosystem (Gikunju, 2017).

According to Ericsson Consumer Lab (2013) a research facility that investigates small and medium enterprises trends, predicts that mobile payment was one of the major trends in 2012. Mobile payment can be defined as payments for goods or services enabled through a mobile device such as a mobile phone, a smart phone, a tablet or a personal digital assistant.

The advancement of mobile phone technology in the world is offering opportunities as a way of improving service delivery to small and medium enterprises. Local companies are in-depth carrying research on manner to upgrade

application in money transfer technology. Technology has evolved to expand the growth of economy among small scale farmers entrepreneurship (Kieti, 2012). PESA service was first launched commercially by Safaricom in March 2017. M-PESA is a mobile phone service subscribe to Safaricom customers. The word M-PESA is originated from two combination of letters that 'M' meaning mobile phone and 'PESA' a Swahili word meaning money. Safaricom is dominating overall Africa as an electronic means of payment to its customer (Safaricom, 2016). Not only remitting money M-PESA is also assisting customers to deposit money, borrow loans, and get credit cards. Economists expressed their fear and threat over M-PESA service, which is pulling down all bank services (Makau, 2013).

Today M-PESA adoption is offering multiple services to both rural and urban residences. The M-PESA service is addressing risk management upon, theft from accessing any person account, where each of Safaricom customer is issued with a PIN that distinguish him from another person, thus managing risk (Mas, 2010). Mobile payment is also another benefit from M-PESA services to small and medium enterprises, since small and medium enterprises are no longer querying in banks to deposit or even withdrawal of money (Mbogo, 2010). A study was carried formalizing that M-PESA adoption was a paperless services that involved no documentation of paper signing (Safaricom, 2016).

Morawczynski and pickers (2016) argued that M-PESA service have been a relief to rural areas residences, where banks are untraceable within the areas. Vaughn (2010) carried out a research and identified that some individual prefer transferring their money in their M-PESA account as they travel to upcountry as a last solution for their usage. Plyler *et al*. (2010) argued that M-PESA adoption has aim to expansion and growth of welfare of rural people as a way of increasing money circulation in remote regions.

The growth of M-PESA adoption is remarking numerous questions, on what kind of innovation is this?

2. STATEMENT OF THE PROBLEM

The majority of the SMEs in Kenya operate in the informal sector with most of them being sole proprietorship or family businesses usually employing less than five persons. They are involved in small semi organized and sometimes unregulated activities that are mainly concentrated in urban as well as in some parts of the rural areas. Their need for payment and transaction services are not always served by banks (Omwansa, 2013). This is due to lack of capacity to qualify them to access financial services from commercial banks since they experience low capital base and lack of collateral property to secure loans. Many of these small and medium enterprises operators do not have bank accounts while those who do, find the bank accounts cumbersome to operate as they have to leave their businesses unattended in order to conduct transactions in a bank. They also do not find it very cost effective to embrace banking services because their target customers are mostly the unbanked. Additionally, they lack proper mode of receipts and payments, debt collection procedures and access to finance and this makes them to be faced with problems associated with liquidity and working capital management (Higgin *at el,* 2012). This scenario is likely to have an effect on the growth and performance of the SMEs. The inception of the mobile phone financial transactions has changed how business is being done. It has made financial transactions to be easy and faster and at the same time provided a saving avenue for those without bank accounts. However, Kanyi and Maharaj (2011) observe that despite the exponential growth in the use of mobile money in East Africa, only few studies have focused on its effects on the financial performance of SMEs.

The prosperity and growth of mobile money transfer in Kenya depends to a large extent on the ability of mobile phone companies to provide a service that satisfies small and medium enterprises. Small and medium enterprises satisfaction is vital for ensuring high rate of adoption and continuous use of mobile money transfer among mobile phone subscribers the mobile phone company apart from expanding the coverage of their network they need also to look on interest rate charged to customer who are sending money through mobile services. In order for small and medium enterprises to be satisfied with the use of mobile money transfer services the matter of quality and quantity come into consideration by viewing if associated factor with mobile money services to satisfy users both sender and receiver are being put in place. Receivers of mobile money services also are having different problems including point to receive their service, as most of points are situated in town Centre leaving people in rural areas to travel for long distance for a service which sometimes it does not reflect the value for money if compared with distance traveled, cost incurred during traveling and amount of money received (Munyegera, 2010).

Thus, there was knowledge gap on the extent to which mobile phone subscribers are satisfied mobile money transfer services, contributing factors for customer satisfaction with mobile money transfer services and measures taken by mobile

phone companies to ensure customer satisfaction with mobile money transfer services. It is thus, the objective of this research study is to fill in gap by focusing on mobile money transfer services offered by Safaricom (M-PESA) as a case study.

3. OBJECTIVE OF THE STUDY

General Objective

The main objective of the study was determine effects of M-PESA adoption on financial performance of small and medium enterprises in Mombasa County.

Specific objectives

The specific objectives were to determine:

1. The effects of transaction costs on M-PESA adoption on financial performance of small and medium enterprises in Mombasa County.

2. The effects of risk management on M-PESA adoption on financial performance of small and medium enterprises in Mombasa County.

3. The effects of mobile payment on M-PESA adoption on financial performance of small and medium enterprises in Mombasa County.

4. The effects of mobile finance on M-PESA adoption on financial performance of small and medium enterprises in Mombasa County.

Research Hypothesis

This study sought to address the following pertinent research hypothesis;

H01 Transaction cost has no effects on financial performance of small and medium enterprises in Mombasa County.

H02 Risk management has no effects on financial performance of small and medium enterprises in Mombasa County.

H03 Mobile payment has no effects on financial performance of small and medium enterprises in Mombasa County.

H04 Mobile finance has no effects influence on financial performance of small and medium enterprises in Mombasa County.

4. LITERATURE REVIEW

Theoretical Framework

Traditional Theory of Financial Innovation

The traditional theory of financial innovation was advanced by Alvarez, Fernando; Francesco Lippi (2016), where he suggested two paradigms based on the causal patterns, namely Technology-economic paradigm and entrepreneur paradigm based on two different models of innovation process. Technology – economic paradigm emphasizes on the technological development as the core of the innovation process which was pegged on the random technology advancements. These theories provide different interpretations. They agree that innovation is a radical act which is the introduction of a new element or a new combination of old elements (Ackermann, 2012).This element produces a large growth in turnover and profit for the firm. However, the theories have emphasized different determinants of the innovation act and thus they present different interpretations of what innovation is: an innovation may be determined by scientific research resulting in new technology, by individual entrepreneurship, or by a strategic decision and further development of the innovation throughout the entire company.

Financial Constraints Theory

This theory pointed out that the purpose of profit maximization of financial institution is the key reason of financial innovation. As organizational management in the process of pursuing profit maximization. Though these restrictions not only guarantee the stability of management, they reduce the efficiency of financial institution, so financial institutions strive toward casting them off. Constraint-induced innovation theory discusses financial innovation from

microeconomics, so it is representative. However, it emphasizes innovation in adversity excessively and therefore it cannot express the phenomenon of financial innovation in the trend of liberal finance comprehensively (Matouk, 2010).

Savignac (2013) tried to evaluate simultaneously the probability to have innovative activities and the probability to face financial constraints. She also explained the endogenous nature of the financial constraint variable by linking it to the ex-ante financing structure of companies and economic performance. The empirical study conducted by Savignac showed that financial constraints have significantly reduced the probability of exercising an innovative activity. Similarly, Efthyvoulou and Vahter (2012) found that the lack of funding sources is a significant impediment to the performance of innovation in European countries, while Hottenrott and Peters (2012) indicated that the external financial constraints are more restrictive for research and development and innovative activities.

Empirical Review

In a research carried out by the Department for International Development's (DFID), it is note that policy makers and regulators in developing and emerging economies are embracing the use of information and communication technologies (ICTs) and non-bank retail channels to reduce costs of delivering financial services to clients beyond the reach of traditional banking. The DFID (2008) research was carried out in seven countries, targeting the unbanked poor in South Africa, Kenya, Philippines, India, Pakistan, Russia and Brazil. High dissimilarities were evident in the various countries depending on the continent. However, the policy makers and regulators in these countries studied have a common feature: the unbanked are people without formal bank accounts who operate in a cash economy; they are limited in their ability to take out loans, maintain savings or make remote payments, and these constraints can inhibit their economic opportunities.

Since 2005, Mobile Money Transfer services have been used in a number of ways in developing countries. It is the theory which explains the adoption of money transfer services and its effect to developing countries. A study conducted by Porteous (2006) on the adoption of Mobile Money Transfer services in Africa found out that Mobile Money Transfer s in Africa are in the following forms; transmitting airtime, paying bills and transferring money.

The study by Morawczynski and Pickens (2009) found out that M-PESA users send smaller but more frequent remittances, suggesting that the system might allow informal insurance networks to function more effectively. The inconspicuous nature of M-PESA transfers allows individuals to increase their personal savings, because friends and relatives would be less likely to know about the timing or amount of transfers.

A variety of qualitative studies provide some insights into the characteristics, patterns and potential impacts of M-PESA usage. For example, Morawczynski and Pickens (2009) find that M-PESA users in Kenya use it to send money instead of using transport services or friends and relatives because it is more accessible and affordable, although it carries a high risk of theft. During the study, 7.4% to 53.9% of respondents indicated that they had transferred money to someone else mobile phone. The majority of the transfers conducted were as a favor to family and friends – however there is also significant usage of money pay for goods and services. On the other hand, 4.8% to 68% of respondents surveyed indicated that they had received money from someone else before.

5. RESEARCH METHOD

Descriptive studies reported summary data such as measures of central tendency including the mean, median, and mode, variation, percentage, and correlation between variables. Descriptive research included multiple variables for analysis and might employ methods of analyzing correlations between multiple variables by using tests such as Pearson's Product Moment correlation, regression, or multiple regression analysis (Earlbaum, 2001).

In this study, the target population consisted of 80 Small and medium enterprises. The lists of small and medium enterprises located in Mombasa County constituted the sampling frame.

Primary data was collected using questionnaires which were administered by the researcher. The questionnaires comprised of questions which are meant to answer questions related to the objectives of this study. The questions were closed which enhanced uniformity and standardized the responses. The researcher exercised care and control to ensure all questionnaires issued to the respondents were received.

The study also used secondary data to obtain further information relating to the research questions. Secondary data was obtained from books, internet, journals and newspapers.

A sample of 10% of respondents was involved in the pilot test. The pilot sample size is informed by Simon (2011) who suggests that a sample size of between 10% and 20% of the actual study sample size is adequate for a pilot study. The pilot respondents were drawn from 4 category of group within small and medium enterprises purposely to capture the four strata employed in the sampling technique that is; Mwembe, Kisauni, Likoni and Majengo.

The data collected was processed and analyzed with respect to the study objectives, using both descriptive and inferential statistics. The data was analyzed using Statistical Package for Social Sciences (SPSS). T and F tests were used to test the hypothesis that the independent variables had significant influence on the dependent variable. Correlation analysis was done by computation of Pearson correlation coefficient. Pearson's correlation coefficient was test statistics that measures the statistical relationship, or association, between two variables. It is known as the best method of measuring the association between variables of interest because it is based on the method of co variance (Tabachnick and Fidell, 2007). It gives information about the magnitude of the association, or correlation, as well as the direction of the relationship.

Analysis of Variance (ANOVA) was done to establish whether the whole model is a significant fit of the data. ANOVA is a method for testing the assumption that there is no significant difference among three or more sample means. It tests the assumption about means by comparing two different estimates of the population variances (Hinkelmann and Kempthorne, 2008). ANOVA consists of calculations that provide information about the levels of variability within a regression model and forms a basis for test of significance. Pagano (2004) indicated that ANOVA test was used to determine the impact that the independent variables have on the dependent variable in a regression model.

6. RESEARCH FINDINGS AND DISCUSSIONS

This section presents a discussion of the research findings on effects of M-PESA adoption on financial performance of small and medium enterprises in Mombasa County. The data collected in this study was evaluated, discussed and inferences made, in an effort to address the specific objectives of the study. Descriptive and inferential statistics were used to analyze the data on each variable.

Correlation Analysis

Pearson correlation coefficient was used to determine the relationship between the Mpesa adoption tools and financial performance of SME's. The results are presented in Table 1. The results show that there is positive significant relationship between the independent variables (transaction cost, Risk Management, mobile payment and Mobile Finance) and dependent variables (financial performance)

Table 1 Correlations for MPESA adoption on financial performance of SME'S

		Transaction Cost	Risk Management	Mobile Payment	Mobile Finance	Financial Performance
Transaction Cost	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	60				
Risk Management	Pearson Correlation	.501**	1			
	Sig. (2-tailed)	0.000				
	N	60	60			
Mobile Payment	Pearson Correlation	.542**	.526**	1		
	Sig. (2-tailed)	0.000	0.000			
	N	60	60	60		
Mobile Finance	Pearson Correlation	.531**	.511**	.527**	1	
	Sig. (2-tailed)	0.000	0.000	0.000		
	N	60	60	60	60	
Financial Performance	Pearson Correlation	.519**	.541**	.522**	.517**	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	
	N	60	60	60	60	60

Multiple Regression Analysis

Model Summary

The four independent variables were regressed against financial performance. The purpose was to determine the overall effects of each independent variable on financial performance on SME's based on MPESA adoption when other factors are taken into account.

The model summary represented Table 1 shows the overall correlation between the dependent variable and the independent variables was strong (r=0.882). The R square value (coefficient of determination) was 0.778; this implies that the four predictor variable accounted for 77.8% of the variation in financial performance. The remaining percentage (22.2%) is accounted for by other factors not included in this regression model. These other factors not considered in this study could form the basis of other studies.

Table 2: Model Summary

Model	R	R Square	Adjusted R squared	Std error of the estimate
1	.882[a]	.778	.762	.021

a, Predictors; (constant) transaction cost, risk management, mobile payment, mobile finance

ANOVA Result

The analysis of variance result (ANOVA) in Table 2 revealed that the model was significant (F=11.21; P=.000). This implied that the fitted regression model was appropriate in predicting the values of the dependent variable.

Table 3: ANOVA Results

Model		Sum of squares	Df	Mean square	F	Sig.
1	Regression	150.15	4	37.53	14	.000[b]
	Residual	190.30	71	2.68		
	Total	340.45	75			

Regression Coefficient

A multiple linear regression model was fitted between the dependent variable and the set of the independent variables. The result of the regression model is given by Table 3.

Table 4: Regression Coefficients

Model		Unstandardized Coefficients		Standardized coefficients	T	Sig.
		B	Std Error	Beta		
1	(Constant)	.096	.045		2.13	.011
	Transaction cost	.311	.062	.301	5.02	.000
	Risk Management	.242	.056	.211	4.32	.000
	Mobile Payment	.199	.039	.181	5.10	.000
	Mobile Finance	.162	.061	.233	2.66	.001

a. Predictors; (Constant), Transaction cost, Risk management, Mobile payment, Mobile finance.

b. Dependent variable; Financial performance

The multiple regression model given by equation1 has established that holding all the independent variables (Transaction cost, Risk management, Mobile payment, Mobile finance) constant, other factors influencing small and medium enterprises financial performance will be 0.096 (p=0.011<0.05). This findings also indicates that taking all other

independent variables at zero, a unit increase in transaction cost will leads to 31.1% increase in small and medium enterprises financial performance in Mombasa County, a unit increase in the number of risk management leads to 24.2% increase in the small and medium enterprises financial performance in Mombasa County, on the other hand , a unit increase in the number of mobile payment leads to 19.9% increase in the small and medium enterprises financial performance in Mombasa County. Moreover, the results showed that a unit increase in the number of mobile finance leads to 16.2% increase in the small and medium enterprises financial performance in Mombasa County. The regression coefficients were tested for significance at alpha=0.05. Significance occurs at P-values less than 0.05. From the above results, all the explanatory variables are good predictors for the small and medium enterprises on financial performance in Mombasa County.

The established regression equation was;

$$Y_i = 0.096 + 0.311X_1 + 0.242X_2 + 0.199X_3 + 0.162X_4 \dots\dots\dots\dots\dots\dots\dots (1)$$

7. CONCLUSION AND RECOMMENDATION

From above findings it was concluded that transaction cost measures (cost reduction, affordability, cost planning and cost monitoring) had significant and positive effects on financial performances (return on sales, return on equity, return on investment and profitability) of small and medium enterprises in Mombasa County. The regression results reveal statistically significant positive linear relationship between cost reduction, affordability, cost planning and cost monitoring and return on sales, return on equity, return on investment and profitability of small and medium enterprises in Mombasa County. This was attributed to effect of transaction cost on financial performance of small and medium enterprises in Mombasa County based on MPESA adoption. There was statistically significant effect of financial performance on risk management measures (cost reduction, affordability, cost planning and cost monitoring) and return on sales, return on equity, return on investment and profitability of small and medium enterprises in Mombasa County. It can therefore be concluded that transaction cost greatly had effects on the financial performance of small and medium enterprises in Mombasa County.

It was also concluded that risk management measures (to risk mitigation, risk transfer, risk avoidance and risk planning) has a significant and positive effects on financial performance (return on sales, return on equity, return on investment and profitability) of small and medium enterprises in Mombasa County. The regression results reveal statistically significant positive linear relationship between risk management   (to risk mitigation, risk transfer, risk avoidance and risk planning) and return on sales, return on equity, return on investment and profitability) of small and medium enterprises in Mombasa County.

On the other hand it was concluded that mobile payment measures (accessibility, cash deposit, convenience and security factor) has a significant and positive effects on financial performance (return on sales, return on equity, return on investment and profitability) of small and medium enterprises in Mombasa County. The regression results reveal statistically significant positive linear relationship between mobile payment (accessibility, cash deposit, convenience and security factor) and return on sales, return on equity, return on investment and profitability) of small and medium enterprises in Mombasa County. This was attributed to effect of mobile payment on financial performance of small and medium enterprises in Mombasa County base on MPESA adoption. There was statistically significant effect of financial performance on mobile payment measures (accessibility, cash deposit, convenience and security factor) and return on sales, return on equity, return on investment and profitability of small and medium enterprises. It can therefore be concluded that mobile payment greatly effects on the financial performance of small and medium enterprises in Mombasa County.

The regression results reveal statistically significant positive linear relationship between mobile finance (obtain credit, saving, lower operational cost and fund transfer) return on sales, return on equity, return on investment and profitability) of small and medium enterprises in Mombasa County. This was attributed to effects of mobile finance on financial performance of small and medium enterprises in Mombasa County base on MPESA adoption. There was statistically significant effect of financial performance on mobile finance measures (obtain credit, saving, lower operational cost and fund transfer) and return on sales, return on equity, return on investment and profitability of small and medium enterprises. It can therefore be concluded that mobile finance greatly affects the financial performance of small and medium enterprises in Mombasa County. These findings on small and medium enterprises extended the frontiers of

knowledge by generating valuable insights for both academic and managerial action. Therefore, the results of this study are of interest to owners and managers of small and medium enterprises.

Therefore, it can be recommended that managers should be able to enhance their financial management practices through acquisition of financial information that is relevant for them to make informed financial decisions relating to their businesses. It was noted from the study that risk management was considered a fundamental aspect in planning, any financial innovation; therefore, risk management should be based on risk mitigation, risk transfer, risk avoidance and risk planning.

Small and medium enterprises, although passed on from generation to generation through succession, have unique features but operate just like any other business in the economy with financial goals (that is, maximizing profits or increasing value for the owners). This study would assist policy makers to measure a financial performance on MPESA adoption based on sales volume, profitability, business growth and increased capital. That lead, to a great extent, growth of Small and medium enterprises in future as has been evident in the study area (Mombasa County) and other parts of Kenya.

REFERENCES

[1] Ackermann, J. (2012). Financial innovation: Too much or too little? (M. Haliassos, Ed.). *Cambridge, MA: MIT Press.*

[2] Afrinnovator (2012). Kenya technology, innovation & started report 2012: *a preview Afrinnovator Nairobi.*

[3] Al-Hussein, A. H. & Johnson, R. L. (2013).Relationship between corporate governance efficiency and Saudi banks' performance, *The Business Review, Cambridge 14 (1), 11-17.*

[4] Akcigit, U. and Kerr, W.R. (2012). Growth through heterogeneous innovations. *NBER Working Paper No. 16443.*

[5] Allen, F., Yago, G., & Barth, J. R. (2012). Financial innovation (Collection). New Jersey: *Pearson Education.*

[6] Alvarez, Fernando; Francesco Lippi (2016). "Financial Innovation and the Transactions Demand for Cash". *Econometric.* 77 (2): 363-402,

[7] Apoyo consultoria (2011). *Study on ICT access gaps in Kenya communications commission of Kenya Nairobi.*

[8] Baccaro, L. (2010). Does the global financial crisis mark a turning point for labor? *Socio Economic Review, 8,* 341–376.

[9] Bank,K.(2012).The invisible bank*: How Kenya has beaten the world in mobile banking money transfer.*

[10] Barron, J., Chulkov, D., and Waddell, G. (2011). Top management team turnover, CEO succession type, and strategic change. *Journal of Business Research, 904–910. 64(8), 904-910*

[11] Cisco (2013) Safaricom M-PESA Mobile Money Service. *Available at: adoption forecast.*

[12] Cohen, W. (2012). The entrepreneur and small Business Financial problem solver, New York; John Wiley & sons.

[13] Communications Commission of Kenya (CCK). (2013). *Annual Report 2012-2013,.pdf.*

[14] Creswell, J., (2014). 4th Ed. Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. India: *SAGE Publications*.

[15] Dass, R., and Pal, S. (2011).*Exploring the factors affecting the adoption of mobile financial service among the rural under banked.*

[16] Dodd, P and Sundheim, D. (2011) "The 25 Best Time Management Tools and Techniques: How to Get More Done Without Driving Yourself Crazy" *John Wiley & Sons.*

[17] Donner, (2012). The use of mobile phones by micro entrepreneurs in Kigali, Rwanda: *Changes to social and business networks Information Technologies and International Development 3 (2):3-19*

[18] Donovan,K.(2011). Mobile money in the developing world. The impact of M-PESA on development, freedom and domination. Edmund A. *Walsh school of Foreign Service, Georgetown University.*

[19] Efthyvoulou, G., and Vahter, P. (2012). Financial constraints and innovation performance: Are all firms similar? *University of Birmingham, 2012, 1-23.*

[20] Graham, F. (2010) M-PESA: Kenya's mobile wallet revolution. *Available at: http://www.bbc.co.uk/news/business-11793290.*

[21] GSMA (2014) Mobile money in Cote d'Ivoire: A turnaround study, *GSMA, February 2014.*

[22] Hellsten, L. M. (2012). What do we know about time management? A review of the literature and a psychometric critique of instruments assessing time management. *Time Management 3-28.*

[23] Higgins, D., and Kendall, J., & Lyon, B. (2012). Mobile Money Usage Patterns of Kenyan Small and Medium Enterprises. Innovation*, Technology, Governance and Globalization, 7, 67-81.*

[24] Hottenrott, H., & Peters, B. (2012). Innovative capability and financing constraints for innovation: More money, more innovation? *Review of Economics and Statistics, 94(4), 1126- 1142.*

[25] Inter-media (2013) Mobile money in Tanzania; use barriers and opportunities. The financial inclusion tracker surveys project, *inter media, February 2013.*

[26] International financial corporation (IFC). (2010) M Money channel distribution case Kenya. *Retrieved March 20, 2014*

[27] Jack, W. and Suri, T. (2010) 'The Economics of M-PESA'. MIT Sloan, Unpublished paper. *Available at: http://www.MIT.educ//M-PESA.pd f [Accessed June 2014].*

[28] Jenkins, B., (2008). Developing mobile money ecosystems. Hinton, DC: *IFC and the Harvard Kennedy School.*

[29] Kothari, C., and Garg, G., (2014).Research Methodology. *New Delhi: New Age International (P) Ltd. Publishers.*

[30] Kusimba, S, H. Chaggar, E. Gross and G. Kunyu (2013) "Social networks of mobile money in Kenya," institute for money, Technology & Financial inclusion, *working paper 2013.*

[31] Lewis, C. (2017). Communication for rural innovation: *Rethinking agricultural extension*. Oxford: Wiley.

[32] Madhok, A. (2002), "Reassessing the fundamentals and beyond: Ronald Coarse, the transaction cost and resource-based theories of the firm and the institutional structure of production", *Strategic Management Journal,* 23(6), 535-550.

[33] Makau, L. K. (2013). Customer service recovery processes: A case study of Kenya Commercial Bank (KCB) Group (*Unpublished MBA Project, University of Nairobi).*

[34] Makin, P. (2010) 'Regulatory Issues around Mobile Banking' OECD, Consult Hyperion. *Available at: http://www.coed.org/cit/4d/43631885.pd f [Accessed June 2014].*

[35] Markeline, (2012). Vodafone: *Becoming a valuable and recognizable brand.*

[36] Mas, (2010). Three keys to M-PESA success; Branding, channel management and pricing. *Journal of payments strategy & systems 4(4), 352-370.*

[37] Riksbanken, (2011). *The impact of the financial crisis on Sweden's economy and financial sector is analyzed in this study.* From the financial stability analysis, banks are resilient to credit risk and could face difficulties with respect to liquidity risk.

[38] Rogers, E. M. (2010). *Diffusion of innovations* (4th edition.). New York: The Free Press and Simon and Hustler.

[39] Simon ST, Higgins-on IJ, (2010). Benedictines for the relief of breathlessness in advanced malignant and non-malignant diseases in adults. *Cochran Database System Rev 2010 Jan 20;*

[40] Stuart Hanna buss, (2016) "The complete guide to business risk management (3rd edition)", *Reference Reviews, Vol. 30 : 5, 24-25,*

[41] Watson, J. (2011). *The potential impact of accessing advice on SME failure rates*. Research paper, Small Enterprise Association of Australia and New Zeal-and, 16th Annual Conference, University of Ballard, Australia.

[42] W inn, J., K (2016). *Mobile payment and financial inclusion; Kenya, Brazil and India as case studies*;