

# **Technological Innovation as entrepreneurial Determinant affecting Savings Mobilization among Micro and Small Enterprises in Kenya**

**Fred Gichana Atandi**

Senior Lecturer, Jomo Kenyatta University Of Agriculture And Technology, Nairobi, Kenya.

E-mail: fredatandi06@yahoo.com

**Professor Henry M. Bwisa**

Department Of Entrepreneurship and Technology Leadership and Management in the School Of Entrepreneurship and Procurement

E-mail: bwihem@yahoo.com

**Doctor Maurice Sakwa**

Senior Lecturer, Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya.

Department Of Entrepreneurship and Technology Leadership And Management In The School Of Entrepreneurship And Procurement.

E-mail: sakwa98@yahoo.com

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## **Abstract**

The research study aimed at finding the effect of technological innovation on savings mobilization among MSEs in Trans Nzoia county Kenya. Studies from developed world have indicated that the use of technological innovations in savings mobilization improves performance of MSEs leading to better savings mobilized, also, MSEs with superior technological resource will have a competitive advantage leading to entrepreneurial growth of their MSEs and also enhances the efficiency of an enterprise and builds the confidence of entrepreneurs in discharging their responsibilities. The research used mixed research design to conduct the study among 339 MSEs who are registered with KNCCI Trans Nzoia county. Stratified sampling was used to categorize MSEs into three strata's namely service manufacturing and commerce or trade. Pilot study tested the instruments reliability and validity which met the threshold 0.70. Correlation among the technological innovation factors was found to be significant. The major findings of the study indicated technological innovation influences introduction of variety of new product and services offering to customers, drastically reduces the cost of savings mobilization and makes financial products and services appealing/attractive. The study concluded that financial institutions to consistently innovate new technologies of delivering their products and services The study also concludes that gender, level of education and number of dependants positively affects technological innovations which influences savings mobilization among MSEs. The study recommends that prior to the financial institutions

introduction of technological innovations, they should create functional infrastructures to operate effectively.

**Key words:** Technological innovation, savings mobilization, Micro and small enterprises, Entrepreneurial Determinant.

## **Introduction**

Technological innovation in providing financial services are essential in achieving competitive advantage, it allows for lower costs and opens up a set of new opportunities that allow businesses to perform better in differentiated ways (Beltratti and Stulz,2011). In recent years, financial institutions have undergone significant changes, many of them directly related to the progress driven by ICT, in Portugal, banking sector has heavily invested in technological innovation, its having advanced European payment systems and the users of electronic payments systems has increased significantly, technological innovation has provided customers with a higher level of trust and efficiency (Pinto and Ferreira, 2010). Studies by; (Pinto and Ferreira, 2010; Beltratti and Stulz, 2011) observed that technological innovation improves on performance of MSEs and those MSEs with superior technological resource will have a competitive advantage in business performance compared with their competitors. It also enhances the efficiency of an enterprise and builds the confidence of entrepreneurs in discharging their responsibilities

Noelia *et al.* (2014) conducted a study on the factors that matter for financial inclusion in Peru, the study indicated that high cost of delivering services to rural, remote and poor areas geographical distance was perceived as a barrier by 23.7% of individuals, with women giving this reason more frequently than men, 28% and 18.7% respectively. Kibet *et al.* (2009) found that higher transport costs to saving institutions had a negative impact on the saving habits of teachers in rural areas. Quarshie J. (2011) conducted a study in Ghana on improving efficiency of savings mobilization, the study observed that the nearness of financial institutions not only encourages saving and deposits, but reduces the cost and risks associated with cash movement and distance to banks predicts saving behavior of rural consumers and the close distance will have positive impact in reduction of transportation cost which encourages saving. Studies conducted by (Ashraf *et al.*2009; Cohen,,2010;Quarshie, 2011;Flory,2011; Brune *et al*,2013;Noelia *et al*, 2014) found that the distance to the bank encourages or discourages on savings with FFI's especially on savers who are operating in rural areas. However with the provision of alternative formal savings mobilization channels, it will be expected that MSEs will not have a problem saving with FFI's even though not all MSEs have signed for modern savings channels. The underlying fact is that the MSEs can be better off if it is cheaper to open and operate a bank account. The use of technological innovations like m-banking, agency Banking, online banking among others will remove or reduce the distance to the bank and encourage more MSE's to save with financial institutions.

Jeff *et al.* (2009) defined entrepreneurship as a way of thinking, reasoning, and acting that is opportunity obsessed, holistic in approach, and leadership balanced for the purpose of value creation. Entrepreneurship drives innovation and technical change, and therefore generates

economic growth (Schumpeter, 1934). Entrepreneurial action is the process through which supply and demand are equilibrated (Kirzner, 1997). Entrepreneurship is an important process by which new knowledge is converted into products and services (Shane & Venkataraman, 2000). Entrepreneurship is doing things that are not generally done in the ordinary course business routine, that is, not doing different things but doing things differently (Bwisa, 2011).

The various definitions on entrepreneurship as given by different experts captures common characteristics of what entrepreneurship entails (Schumpeter, 1934; Kirzner, 1997; Jeff *et al.* 2009; Shane & Venkataraman, 2000; Bwisa, 2011). It's imperative that from the foregoing studies, entrepreneurial determinants of savings mobilization are innovative and growth oriented factors which can influence savings mobilization among the MSE's to save their income with financial institutions or are favorable and enabling terms and conditions, products and services which are to be provided by the financial institutions to influence the MSEs mobilize their savings with them for entrepreneurial growth of their MSEs.

### **Statement of The Problem.**

Technological innovation in providing financial services are essential in achieving competitive advantage, it allows for lower costs and opens up a set of new opportunities that allow businesses to perform better in differentiated ways (Beltratti and Stulz, 2011). In recent years, financial institutions have undergone significant changes, many of them directly related to the progress driven by ICT, in Portugal, banking sector has heavily invested in technological innovation, its having advanced European payment systems and the users of electronic payments systems has increased significantly, technological innovation has provided customers with a higher level of trust and efficiency (Pinto and Ferreira, 2010).

Studies by; (Pinto and Ferreira, 2010; Beltratti and Stulz, 2011) observed that technological innovation improves on performance of MSEs and those MSEs with superior technological resource will have a competitive advantage in business performance compared with their competitors. It also enhances the efficiency of an enterprise and builds the confidence of entrepreneurs in discharging their responsibilities. Like credit, saving helps MSEs to turn a sequence of small sums into useful lump sums and in real situations MSEs prefer to save rather than borrow because it is low cost and gives them more control over their lives. It has generally been agreed that technological innovations will affect savings mobilization among the MSEs for them to reap the benefits of accumulated savings to MSEs growth. Ngugi *etal.* (2010) observed that savings serve as invaluable reserves in improving the MSEs well being, insuring against times of shocks, improve on investments to exploit opportunities for faster entrepreneurial growth and help them cope in times of crisis that can easily drive the MSEs into destitutions among other reasons motivating them to save with FFI's.

Studies conducted by; (FinAccess, 2009; Ngugi *etal.* 2010; Ayyagari & Maksimovic, 2011; Muthia *etal.* 2011; KIPPRA, 2012; Dupas and Robinson, 2013) indicate that despite the benefits arising from saving mobilization as documented in various literatures and empirical studies reviewed from developed countries, technological innovations as an entrepreneurial determinant influencing savings mobilization among MSEs in developing countries and in Trans Nzoia county

as an alternative of availing adequate and low cost financial resources to support the MSE's entrepreneurial growth has not been conducted.

### **General objective of the study**

The general objective of this research study was to find out the effect of technological innovation on savings mobilization among micro and small enterprises in Trans Nzoia county ,Kenya.

### **Literature Review**

#### **Schumpeterian Innovation Theory**

Joseph Schumpeter developed important ideas on innovation as a source of economic change and technological innovation as a source of business cycles (Schumpeter, 1942,1947). To Schumpeter, innovation consists of any one of the following five phenomena; introduction of a new good or service. Introduction of a new method of production, opening of a new market, conquest of a new source of supply of raw materials or half-manufactured goods and implementation of a new form of organization. Joseph Schumpeter in (1949) advocated a very dynamic theory on entrepreneurship. Schumpeter postulated that entrepreneurship is the catalyst at the center of economic development and underscored innovation as central to entrepreneurial activity; he also recognized that development is a process of disturbance and change instigated by the entrepreneurs (Beta, Jones and Latham, 2010). The Schumpeterian entrepreneur is an innovator who brings about change through the introduction of new technological processes or products, introduces a new production process, introduces a new product into the market, finds a new source of raw material or opens a new market (Deakins & Freel,2009b). Schumpeter (1939) defined technological innovation as a new combination of means of production as a change in the factors of production (inputs) to produce products (outputs) .Schumpeter put the entrepreneur and, later, the large firm at the center of the innovation process. Schumpeter (1934) argued that innovation is an endogenous process that makes it possible for economic agents to obtain a surplus over costs, or entrepreneurial profit. In his theory, enterprises compete with one another to gain market share and improve their ability to increase profit through the use of new methods of production. The result was that competition for capital across industries created a tendency toward equilibrium, whereas competition for capital within an industry created a tendency toward disequilibrium. Schumpeter (1939) argued that new combinations of technical alternatives should be large enough to disrupt the existing set of technical alternatives and diffusion becomes more important in his business cycles where he emphasized the temporal nature of entrepreneurial profit and the importance of competition in spreading technology over the course of the cycle. Schumpeter was more interested in innovation clusters and swarms of innovative activity and less interested on the issue of whether enterprises below the technology frontier can also search for and learn to combine available resources in similar ways. (Schumpeter,1934,1939,1942,1947,1949;Deakins&Freel,2009b;Beta,Jones & Latham,2010)

have shown that entrepreneurship is not a static activity but rather a continuous process of introducing new products and services as new opportunities present themselves. The entrepreneurs who operate the MSEs are will be more motivated when the financial institutions they mobilize their savings are equally entrepreneurial through introduction of innovative ways which provide favorable business environment to propel MSEs to do even better in the operations of their MSEs. This theory focuses more on innovative activities of entrepreneurs rather than on the motivation behind innovation.

### **Motivational Theory**

Studies by McClelland (1961) emphasized that any society that has a higher level of motivation will have a higher number of active entrepreneurs. According to McClelland's theory, individuals with a high need to achieve are those who like to solve their own problems, set targets and meet those targets. The theory states that individuals who have a strong need to achieve become entrepreneurs and succeed better than others. Accordingly an entrepreneur, the following characteristics such as original and innovative, takes individual responsibility, plans on long term basis, aware of the results of his acts and are moderate risk avoider. Zhao *et al.* (2010) observed that motivation can be defined by the total factors, internal and external, that stimulate the desire and energy in people to be continually interested and committed to a job, role or subject, or to make an effort to attain a goal and therefore entrepreneurial motivation represents the sum of factors that influence a person to engage into entrepreneurial activities. Grigore (2012) emphasized that motivation energizes, leads and supports the action. A person that is driven by a high need of achievement has the following qualities, an orientation towards the future, reliance on their own ability an optimistic rather than a pessimistic outlook, a strong task orientation, restlessness, driven and energetic, responsible and persistent in pursuit of aims, willingness to work long and hard when necessary to complete tasks (Caird, 2013). Kirkwood and Walton (2010) argued that motivation literature emphasizes individuals' initiative and persistence in behaviors through beliefs that such behaviors will result in a certain desired outcome. Social conditions such as the potential profit, favorable environmental factors, and cognitive conditions such as knowledge and/or experience and skills contribute to the calculated decision to be motivated to engage in entrepreneurial actions. Motivation paves the way for entrepreneurs to acquire certain knowledge, skills, and abilities that are essential for successful outcomes such as their potential for discovering, evaluating, and exploiting profitable opportunities to create market, social, or monetary value (Tipu&Arain, 2011; Ucbasaran, Westhead, Wright, & Flores, 2010). Several studies (Yeboah, Kumi and Awuah,2013;Ooi and Ahmad,2012;Fatoki, 2010) identified the obstacles to entrepreneurial intention into exogenous factors (high interest rate, high labour cost, strict government regulations, tight labour market, high taxes, lack of government support and strong competition) and endogenous factors (stress, fear of failure, lack of business skill, lack of planning and long-sighted and excessive risk, high operating expenses, lack of working capital/ investment, fund and lack of good suppliers. Fatoki, (2010) found that the obstacles to entrepreneurial intention amongst graduate students in South Africa were inadequate capital,

inadequate support from the government, economy, and crime. Furthermore, Fatoki and Chindoga (2011) added that exogenous factors such as the fear of failure, lack of business skills and lack of willingness to take risk were obstacles to youth entrepreneurship in South Africa. Studies by (McClelland,1961;Singh &Drnovsek,2009;Edelman &Yli-Renko,2010; Fatoki,2010; Fatoki and Chindoga,2011;Tipu&Arain, 2011;Eijdenberg and Masurel,2013) observed that motivational theory captures the factors behind entrepreneurial behaviors. These factors are both internal within an entrepreneur and those that are external without an entrepreneur, studying these factors which attract entrepreneurs to get involved into entrepreneurial activities is an important undertaking since perhaps those are the same entrepreneurial factors which will influence savings mobilization among the MSEs in financial institutions.

## **Research Methodology**

### **Research design**

A research design is the logic that links the data to be collected and the conclusions to be drawn on the initial questions of the study (Yin, 2009). This study used a mixed method research design which comprised both qualitative and quantitative approaches. Namusonge (2010) observed that this research design is suited for gathering descriptive information where the researcher wants to know about people or attitudes concerning one or more variables through direct query.

### **Population of study.**

A population is considered to be any group of people, events, or items that are of interest to the researchers that they wish to investigate (Kothari, 2008). The researcher identified 2216 MSEs registered with the KNCCI Trans nzoia county .

### **Sampling Frame**

Saunders *et al.* (2012) argued that sampling frame has the properties that the researcher can identify every single element and include any in the samples. It included the owner's managers and the CEOs of MSEs operating in Trans Nzoia County.

### **Sample and sampling Technique**

Moazzam(2014) indicated that a sample is some part of a larger body specially selected to represent the whole while sampling is then taking any portion of a population or universe as representative of that population or universe. Stratified sampling was used where the target population was categorized into distinct groups service, manufacturing and commerce and trade. Random sampling was used to ensure that each element in each stratum had an equal chance of being in the study sample. The sample size of this study was found to be 339 respondents distributed as follows services 52, manufacturing 52 and commerce and trade 235.

## **Pilot Test**

Nunes *et al.*(2010) pilot studies are instrumental in the framing of questions, collection of background information, refinement of a research approach or tailoring efficient research instruments. Simon M.K. (2011) a pilot study sample size between 10-20% of the actual study is representative. The pilot study was done on 147 Equity bank clients, some of the target population for pilot test were registered members of KNCCI Kitale. The number of MSEs who participated in the pilot study were 31, from each sector the following MSEs were piloted, manufacturing 6 commerce and trade 14 while from service sector 11MSEs were piloted.

## **Data Processing and Analysis**

Hair *et al.* (2010) data analysis is a process which involves drawing conclusions and explaining findings in words about a study. The descriptive statistics for the variables in the study were computed to calculate frequency and percentages for those variables which were qualitative in nature. A quantitative technique was used to collect numerical data either on independent and dependent variables influencing savings mobilization among MSEs. In analyzing quantitative data, the researcher specify the amount of error permissible by indicating the level of significance [ $\alpha$  - ( $\alpha$ )] and the degrees of freedom (df) as is appropriate. A commonly used value of alpha is .05 (or 95%.) The qualitative approach allowed the respondents to 'tell their story' thus giving the researcher an opportunity to probe and seek clarifications (Yin, 2009).

**Table 1.1 Results for Technological Innovation Reliability**

Factor Analysis	Component	
	Loadings	Remarks
I frequently use technological innovations for savings mobilization at my financial institution	.891	Retained
Savings technological innovations from my financial institutions is faster, reliable and convenient compared that of competitors	.882	Retained
My financial institutions savings mobilizations costs	.871	Retained
Technological innovations of my financial institution has made you a royal customer to the institution	.868	Retained
Using technological innovations to mobilize my saving has led to entrepreneurial growth of my enterprise	.841	Retained
Technological innovations from my financial institutions has made their products and services become more appealing and superior to that of competitors	.840	Retained
My savings mobilizations has improved since I embraced the use of technological innovations to save	.821	Retained
Saving mobilization using technological innovations from my financial institution has influenced my introduction of new product offerings to my customers	.997	Retained

**Extraction Method: Principal Component Analysis.**

**a. 2 components extracted.**

Results for Technological Innovation Reliability Results

All values on technological innovation were retained as they were above the recommended 0.5 loading level using factor analysis . Predictive validity was used to examine the extent to which technological innovation was a good predictor of the dependent variable (level of Savings Mobilized). If correlation was >.80 or <-.80 for variables inversely related, the relationship strength was considered strong enough to measure validity of variables

**Table 1.2 Results for technological innovation Validity**

Correlations		Technological Innovations	Level Of Savings Mobilized
Technological	Pearson	1	.930**
Innovations	Sig. (2-tailed)		.000
	N	312	312
Level Of Savings Mobilized	Pearson	.930**	1
	Sig. (2-tailed)	.000	
	N	312	312

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

Predictive Validity Value = 0.930 (Result = Valid)

**Table 1.3 Correlation in technological innovation**

Crosstab count		Bio data		Total		
		What is you gender				
		Male		Female		
Saving mobilization using technological innovations from my financial institution has influenced my introduction of new product offerings to my customers	Strongly disagree	59		29		88
	Disagree	55		8		63
	undecided	31		15		46
	Agree	63		36		99
	Strongly agree	14		2		16
Total		222		90		312
<b>Chi-Square Tests</b>		Value	df	Asymp. Sig. (2-sided)		
Pearson Chi-Square		13.853 <sup>a</sup>	4	0.008		
Likelihood Ratio		15.435	4	0.004		
Linear-by-Linear Association		0.239	1	0.625		
N of Valid Cases		312				

a. 1 cells (10.0%) have expected count less than 5. The minimum expected count is

**Crosstab**

Count

			What's your level of education?					
			Informal	Primary	Secondary	Diploma	Degree	Total
Saving mobilization using technological innovations from my financial institution has influenced my introduction of new product offerings to	Strongly disagree	22	48	14	0	4		88
	Disagree	32	27	2	0	2		63
	undecided	11	14	15	0	6		46
	Agree	33	32	8	14	12		99
	Strongly agree	6	4	6	0	0		16
Total		104	125	45	14	24		312

**Chi-Square Tests**

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	80.355 <sup>a</sup>	16	0.000
Likelihood Ratio	81.459	16	0.000
Linear-by-Linear	6.627	1	0.010
N of Valid Cases	312		

a. 9 cells (36.0%) have expected count less than 5. The minimum expected count is .72.

**Crosstab**

Count

		What is the number of dependants in your family?			Total
		1-3	4-6	7-9	
Saving mobilization using technological innovations from my financial institution has influenced my introduction of new product offerings to my customers	Strongly	34	40	14	88
	Disagree	44	15	4	63
	undecided	16	28	2	46
	Agree	43	46	10	99
	Strongly	10	0	6	16
Total		147	129	36	312

**Chi-Square Tests**

	Value	df	Asymp.Sig.(2-sided)
Pearson Chi-Square	41.863 <sup>a</sup>	8	0.000
Likelihood Ratio	45.303	8	0.000
Linear-by-Linear Association	0.001	1	0.971
N of Valid Cases	312		

a. 1 cells (6.7%) have expected count less than 5. The minimum expected count is 1.85.

**Crosstab**

Count

		What is you gender		Total
		Male	Female	
Savings technological innovations from my financial institutions is faster, reliable and convenient compared that of competitors	Disagree	1	0	1
	undecided	25	3	28
	Agree	118	65	183
	Strongly	78	22	100
Total		222	90	312

**Chi-Square Tests**

	Value	Df	Asymp.
Pearson Chi-Square	11.144 <sup>a</sup>	3	0.011
Likelihood Ratio	12.31	3	0.006
Linear-by-Linear Association	0.059	1	0.808
N of Valid Cases	312		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is .29.

**Crosstab**

Count

		What is the number of Total dependants in your family?			
		1-3	4-6	7-9	
Using technological innovations to mobilize my saving has led to entrepreneurial growth of my enterprise	Disagree	0	1	0	1
	undecided	15	10	8	33
	Agree	96	67	19	182
	Strongly	36	51	9	96
Total		147	129	36	312

**Chi-Square Tests**

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14.842 <sup>a</sup>	6	0.022
Likelihood Ratio	14.065	6	0.029
Linear-by-Linear Association	0.052	1	0.82
N of Valid Cases	312		

a. 4 cells (33.3%) have expected count less than 5. The minimum expected count

**Crosstab**

Count

		What is the number of Total dependants in your family?			
		1-3	4-6	7-9	
Technological innovations from my financial institutions has made their products and services become more appealing and superior to that of competitors	undecided	19	8	9	36
	Agree	90	69	17	176
	Strongly agree	38	52	10	100
Total		147	129	36	312

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.135 <sup>a</sup>	4	0.004
Likelihood Ratio	14.293	4	0.006
Linear-by-Linear Association	0.401	1	0.526

**N of Valid Cases** 312

**a. 1 cells (11.1%) have expected count less than 5. The minimum expected**

The findings above revealed that there was a significant relationship between gender and saving mobilization using technological innovations from their financial institutions which influenced their introduction of new product offerings to their customers ( p=0.008), this implies that when innovations are examined with a gender lens, a powerful, untapped strategy emerges to transform women’s lives. We identify core levers essential for innovation to catalyze meaningful change for women in financial institutions. Successful technological innovations break boundaries and engage in broad-based partnerships. As innovations evolved,

motivations for more productive and efficient outcomes coming led motivations to realize women’s intrinsic human rights. The findings above revealed that there was a significant relationship between level of education of entrepreneurs saving mobilization using technological innovations from their financial institution which influenced their introduction of new product offerings to customers (p=0.000). This implies that level of education of the customer influence the use of technology in saving mobilization. Those with higher level of education get the use of technology easy and have ability to start and operate the technology with the help of instruction available from the providers of the product. The findings above revealed that there was a significant relationship between family dependants and saving mobilization using technological innovations from their financial institution which influenced their introduction of new product offerings to customers (p=0.000). This implies that when family members have knowledge about the use of technology innovations from their financial institutions, they can mobilize other family members to save using the new technology.

**Table 1.4 Results for Level of Education and Savings mobilization**

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	133.531 <sup>a</sup>	72	0
Likelihood Ratio	116.973	72	0.001
Linear-by-Linear Association	3.294	1	0.07
<b>N of Valid Cases</b>	<b>312</b>		

a. 75 cells (78.9%) have expected count less than 5. The minimum expected count is .09.

The study findings indicated there was a significant relationship between level of education Versus savings mobilization (p=0.041). The study findings have shown that majority of those with informal level of education have mobilized more savings than other level of education perhaps because they were responsible in making financial savings decisions within family and business and therefore those with informal education influenced savings mobilization.

**Table 1.5 Relationship between technological innovation and saving mobilization**

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1431.897 <sup>a</sup>	399	0
Likelihood Ratio	778.1	399	0
Linear-by-Linear Association	3.411	1	0.065
<hr/>			
N of Valid Cases	312		

The results indicated that there is significant relationship between saving mobilization and technological innovations ( $p=0.000$ ). This could be interpreted to mean that technological innovation is providing financial services essential competitive advantage, it allows for lower costs which increase the savings and opens up a set of new opportunities that allow businesses to perform better in differentiated ways. Technological innovation improves on performance of MSEs and those MSEs with superior technological resource will have a competitive advantage in business performance compared with their competitors.

**Discussion Of Findings**

The findings of the study revealed that majority of the respondents were of the opinion that savings technological innovations from their financial institution were faster, reliable and convenient compared that of competitors. This implies that majority of the entrepreneurs could have adopted only those technologies innovations that they understood their operations. Here faster and reliable encourages saving as compared from the competitors. Lack of technologies innovations, higher transport costs to saving institutions had a negative impact on the saving habits of customers in rural areas. Nearness of financial institutions to customers not only encourages saving and deposits, but reduces the cost and risks associated with cash movement and distance to banks predicts saving behavior of rural consumers and the close distance will have positive impact in reduction of transportation cost which encourages saving. The use of technological innovations like m-banking, agency Banking, online banking among others will remove or reduce the distance to the bank and encourage more MSE’s to save with financial institutions.

The study’s findings agree with the study conducted by Noelia et al. (2014) which revealed that factors that matter for financial inclusion in Peru, the study indicated that high cost of delivering services to rural, remote and poor areas geographical distance was perceived as a barrier by 23.7% of individuals, with women giving this reason more frequently than men, 28% and 18.7% respectively. Kibet et al. (2009) found that higher transport costs to saving institutions had a negative impact on the saving habits of teachers in rural areas. These findings agree with findings of Quarshie (2011) who conducted a study in Ghana on improving efficiency

of savings mobilization, the study observed that the nearness of financial institutions not only encourages saving and deposits, but reduces the cost and risks associated with cash movement and distance to banks predicts saving behavior of rural consumers and the close distance will have positive impact in reduction of transportation cost which encourages saving. These findings agree with studies conducted by (Ashraf et al.2009;Monique Cohen,2010;Quarshie, J.2011; Flory,2011; Brune et al,2013;Noelia et al.2014) found that the distance to the bank encourages or discourages on savings with FFI's especially on savers who are operating in rural areas. However with the provision of alternative formal savings mobilization channels, it will be expected that MSEs will not have a problem saving with FFI's even though not all MSEs have signed for modern savings channels. The underlying fact is that the MSEs can be better off if it is cheaper to open and operate a bank account. The use of technological innovations like m-banking, agency Banking, online banking among others will remove or reduce the distance to the bank and encourage more MSE's to save with financial institutions.

### **Conclusions**

Technological innovation does affect savings mobilization among the MSE's. It influences introduction of variety of new product and services offering to their customers which are effective, efficient and reliable satisfying their needs. When financial institutions innovate savings technologies, the cost of savings mobilization reduces drastically and frequency of savings is likely to increase. Technological innovation from financial innovations makes their financial products and services appealing/attractive and creates royal clients thereby affecting their savings mobilization. The study therefore concludes that financial institutions to consistently innovate new technologies of delivering their products and services to their respective clients since technological innovations saves on time, convenience and improves on efficiency of an enterprise. The study also concludes that gender, level of education and number of dependants positively affects entrepreneurial determinants influencing savings mobilization among micro and small enterprises in Trans Nzoia county.

### **Recommendations**

This study recommends that prior to the financial institutions introduction of technological innovations which will be handled by their wide range of clientele with diverse knowledge, skills and capabilities, they should create functional infrastructures to operate effectively and avoid any disappointment which arises when technology fails to deliver as promised and most MSE's are found to be too cautious in trying new technologies in accessing their treasures/finances and instead prefer to travel to financial institutions premises and transact from there. The study further recommends that financial institutions to design products and services which takes into consideration gender, level of education and the number of dependants in the entrepreneurs household which influences the decision to mobilize savings with financial institutions

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## **Corresponding Author**

Roselyne Nyambane

Research Consultant

**Kenya**

E-mail: roselynenyambane@yahoo.com

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