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The influence of entrepreneurial innovation on the performance of small and medium enterprises in Iten town, Kenya

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Abstract
An important aspect of economic growth in any nation is the entrepreneurs who promote change and initiate development activities. The study investigated the relationship between entrepreneurial knowledge and the performance of Small Medium Enterprises (SMEs) in Iten town in Elgeyo Marakwet County, Kenya. Based on the study, this paper examines the effect of entrepreneurial innovation on the performance of small and medium enterprises. The study was guided by Schumpeter's Theory of Innovation. It adopted a correlational research design and targeted 783 SMEs operating in Iten town. The research also sampled 143 respondents using Nassiuma's (2000) model. Stratified simple random sampling technique was employed to select a sample representative of the total population. The main tool used for collecting data was a questionnaire. The collected data were analysed using both descriptive and inferential statistics. Pearson correlation was computed to establish the association between the study variables. Pearson correlation findings indicate a strong positive association between innovation and SME performance (r=0.702). Multiple regression analysis was computed to test the hypotheses to determine the relationship between dependent and independent variables. The findings of the study revealed that innovation (β=0.205, $p<0.05$) had a significant effect on SME performance. It is recommended that managerial training programmes should be promoted in the country by key stakeholders working in the SME sector. Further, the Government should intervene in providing training centres that will give entrepreneurial training to the SME owners.

Keywords: influence, entrepreneurial innovation, performance, small, medium enterprises, SME, Iten town, Kenya

Introduction
The significant addition to an economy by SMEs is not limited to developing countries, where rare financial resources not only curb the size of enterprises, but also in developed economies, including leading economies of the world such as the United States of America, China and Europe.
According to Beck and Cull (2014) [2], the majority of businesses around the world are included in the category of micro, small or medium-sized enterprises (SMEs). More than 95 percent of enterprises in the world can be considered as SMEs. Of the total employment in the world those who works in SMEs have been more than 50 percent. The vital role of SMEs in contributing a large portion of GDP and economic activity has been well recognized in many countries.
The small and medium-sized enterprises (SMEs) have given much attention in the recent entrepreneurship researches due to their vital contributions in the economy of every country. The appearance of SMEs is very important especially in all developing countries where they assist economic growth; improve income distribution, productivity, efficiency and economic structure during the economic downturn (Abdullah & Manan, 2011) [1].
Small and medium-sized enterprises (SMEs) have become more important for the whole world because of their flexible and compatible structures (Kayadibi, Polat & Fidan, 2013) [5]. These SMEs play a significant role in economies by providing a large portion of production in the rapidly changing world due to their adaptability features. SMEs show major contribution in the development of a county's economy, its political stability as well as social uplifting. SMEs are flexible in nature. They can be established for all kind of activities of every business and are considered as a back bone of country's economy.

Innovation and Performance
Kim-Soon, Ahmad, Kiat and Sapry (2017) [7], in their research of SMEs embracing innovation in enhancing their business competitiveness, report that innovation is vital force for firm competitiveness and is embedded in the organizational structures, processes, products and services within a firm. Their empirical study investigated the relationships between the products, process, marketing and organizational innovations of SMEs with its innovative, operation and financial performances. Firm innovation explained a total of 39.4% of financial performance, 48.4% of operational performance and 57.5% of innovative performance. Firm innovation is strongly and positively related to firm innovative performance. If SMEs focus on organizational innovation they will be able enhance their firm performance.
Twaliwi and Isaac (2017) [18] have carried out a study in Abuja, Nigeria, on the impact of innovation on the performance of small and medium enterprises. The major problem that small and medium scale enterprises in Gwagwalada-Abuja have is that they do not have developed new business, new product, new market and new process to market their businesses in order for them to achieve

performance in terms of sales volume. Their study looked into how innovation marketing, processing innovation and product innovation) enhances performance (sales volume) of SMEs. Other findings showed that there was a significant relationship between product innovation, process innovation, marketing innovation and performance (sales volume) of SMEs in Gwagwalada-Abuja. The study recommended that SMEs in Gwagalada-Abuja should try to improve on their businesses or adopted new innovation practices in their businesses since it significantly contributes to the performance of SMEs in Gwagalada-Abuja.

Martinez, Vega and Vega (2016) [11], in a study in Mexico where they sampled 350 SMEs to which a poll was sent to top managers and owners, found out that innovation has a positive impact on performance of SMEs. Bukhamsin (2015) [3] has investigated the relationship between organisational innovation capability and firm performance. He conducted a survey of Irish SMEs. Mohd and Syamsuriana (2013) [13] evaluated the impact of various innovation dimensions on the performance of SMEs. A total of 284 samples were collected from SMEs in the food and beverage, textiles and clothing and wood-based sub-industries throughout Malaysia. The data were analysed using a hierarchical regression analysis. The findings showed that innovation influenced SMEs performance significantly. SMEs and policy makers that innovation is a critical factor in today's entrepreneurial activities. The researchers did not mention the total population and they did not use SPSS to analyse data.

Kosgei and Maru (2015) [9] has researched on learning orientation and innovativeness on SMEs in Uasin Gishu County Kenya. The paper drew from an explanatory survey of 333 entrepreneurs who are founders of SMEs in the Uasin Gishu County in Kenya. Data was collected using a closed-ended questionnaire. They used Pearson's Product Moment correlation coefficient to determine the linear relationship between the learning orientation and Innovativeness while multiple regression was used to test the effects of learning orientation constructs on Innovativeness. Results indicated a significant and positive effect of the entrepreneur's innovation and performance.

Rukevwe (2015) [16] investigated how innovation affects business performance in small and medium-sized enterprises (SMEs) in an up-and-coming market, like Nigeria. The study used a survey design method. Innovation was measured with sub variables of product and process, market and administrative innovations. Firms' performance was measured with sub scale of production, market and financial performance. A sample of 200 SMEs operating in the Lagos and Ibadan area were selected using convenient sampling techniques. The questionnaires used in the was five point Likert scale. Data was analysed using SPSS. The study demonstrated that there was strong positive correlation among factors used to measure innovation and innovation has influence in business performance.

The researcher could have used regression analysis since the ANOVA does not indicate the effect of the relationship between the variables instead it only shows the average mean of two or more independent variables. Kiraka (2013) [8] also conducted a study on "Innovation and Small, Micro and Medium Enterprises in Kenya" and found out that growth was more significant in those SMEs that embraced innovation and came up with new ideas. He however noted that not all innovative activities were fruitful, some faced rejection from the markets where consumers maintained status quo and were always afraid to try new products and hence stuck to what they already believed in hence convincing them to purchase the improved product or service was a major challenge.

Masood, Sadia, Muhammad and Saman (2013) [12] explored the effects of innovation types including product, process, marketing and organizational innovation on different aspects of performance such as innovative, production, marketing and financial performance in Pakistani manufacturing companies. The results revealed that there is a positive effect of innovation types on SMEs performance. The researchers however could have used regression analysis to analyse the data. The population of the study was not defined and sample was just assumed to 150 without indicating the method that was used to derive the sample size.

A study in Sweden on the relationship between innovation and performance found that there is close relationship between innovation output and the level of value added per employee, the level of sales per employee and sales margin for innovations new to the firms compared to cases where innovations are new to the market. On the contrary, the growth rate of productivity increases only with innovations new to the market when manufacturing firms are considered. The positive relationship between innovation and employment growth and innovation and productivity growth for service firms is independent of the degree of novelty of the innovations (Loof & Heshmati, 2005) [1].

Khin, Seng, Mohammad, Ying and Yeap (2016) [6], in their study on relationship between innovation and SMEs business performance, used a descriptive study on 60 Malaysian SMEs survey. The correlation analysis resulted from this study showed that there is indeed a positive relationship between innovation and SMEs business performance. Ndubisi and Iftikhar (2012) [14] in their study on relationship between entrepreneurship, innovation and performance in Pakistan in the study investigates whether there is (or not) any moderating effect of organisation size in the hypothesized relationships. A total of 124 SMEs provided the data for the study.

The data was analysed using factor and hierarchical multiple regression analyses. The results indicated a significant direct relationship between entrepreneurship, innovation and quality performance. Specifically, the three dimensions of entrepreneurship namely, risk-taking, proactiveness and autonomy are significantly associated with innovation and quality performance. Innovation is directly related to performance and mediates in the entrepreneurship-performance link. These relationships do not differ between small and medium-size enterprises; thus size is not a key factor in explaining the contributions of entrepreneurship to innovation and performance of SMEs.

Statement of the Problem

Entrepreneurial knowledge is one of the important assets of small and medium size organizations in global competition. Although most of the entrepreneurs do not consider knowledge importance adequately, this source can be considered as one of the important factors of success of small

and medium-size organizations and undoubtedly one of the sources of sustainable competitive advantage. Presently, the organizations mostly focus on knowledge and attempt to hire empowered minds instead of empowered hands (Gomezelj, 2008) [4].

According to Walter, Balunywa, Rosa, Sserwanga, Barabas and Namatovu (2004) [19], entrepreneurship focuses on the start-up of new firms and ventures. In order for SMEs to thrive and perform to their full potential, various factors have to operate in harmony. Entrepreneurial knowledge and capacity factors can be major determinants of entrepreneurial performance. This has not been the case because many entrepreneurs focus on getting capital and human resources and forget entrepreneurial knowledge is critical to performance of SMEs.

The present study focused on various aspects of entrepreneurs' knowledge. The key goal of successful businesses is creating entrepreneurial knowledge to keep competitive advantage. To create new businesses, individual unique skills and knowledge are required and human capital is of great importance. Based on the training and common criteria, education work experience is important.

Given the importance of SME to the Kenyan economy the evidence that they are exposed to failure, there is need to conduct empirical enquiry to investigate the factors affecting the performance of SMEs in Iten and how to manage those factors. A number of SMEs in Iten have not been able to celebrate their third birthdays and if they do they do not experience growth in terms cash flow, number of employees, inventory and market share.

SME face critical constraints that inhibit their growth, competitiveness and performance. To investigate this problem, there are questions that need answers: does innovation improve SMEs? Do SME's perceive managerial skills differently? Do they have sufficient knowledge about training and how effective training is done? The study sought to evaluate how innovation affects the performance of SME. Entrepreneurial knowledge is important for sustainability of SME in Iten town.

Materials and Methods

The study adopted a correlational research design. The target population comprised of all small and medium enterprises located within Iten. The population frame of SMEs provided by the Elgeyo Marakwet County Licensing office contained 783 small and medium enterprises that had acquired business licenses as at 2016. The study targeted all employees and managers/co-owners of these SMEs. The researcher used both stratified and simple random sampling techniques. Stratified sampling ensures that specific groups are represented, even proportionally, in the sample(s), by selecting individuals from strata list. The sample size of the study was determined by the use of Nassiuma's (2000) model, whose formula is:

$$n = N (cv^2) / \{cv^2 + (N-1) e^2\}$$

Where:
n = sample size
N = target population
cv = co-efficient of variation which is taken as 0.3
e = Tolerance at desired level which is taken at 0.02 or at 98% confidence level.

Nassiuma (2000) asserts that a coefficient of variation in the range of 21%≤C≤30% and a standard error in the range of 2%≤C≤5% is usually acceptable. Thus the sample size was:

$$n = 783 * (0.3)^2 / \{(0.3)^2 + (783-1) (0.02)^2\}$$
$$n = 783 * 0.09 / \{0.09 + (782* 0.0004)\}$$
$$n = 70.47 / \{0.09 + 0.4028\}$$
$$n = 70.47/ 0.4928$$
$$n = 142.99$$
$$n =143$$

An employee questionnaire was the main tool used for data collection. The questionnaire contained both open and closed-ended questions. The closed-ended questions were rated on a five-point Likert scale. The questionnaire was divided into five sections. The first section focused on the employees' demographic characteristics, the second section focused on the effect of innovation on performance of SMEs, the third section focused on the effect of managerial skills on performance of SMEs, the fourth section focused on the effect of entrepreneurial training on performance of SMEs while the fifth section collected data on the effect of risk-taking propensity on performance of SMEs.

The collected data were coded and entered into SPSS for analyses. The data were analysed using descriptive and inferential statistics. Descriptive statistics were analysed thematically and presented in form of frequencies, percentages and means. Pearson correlation analysis was computed to establish the nature of the association of the variables. Multiple regression analysis was computed to test the causal relationship between entrepreneurial knowledge and performance of SMEs. The findings of the study were presented in form of tables, graphs, charts and direct quotations.

Results and Discussion

Influence of Innovation on Performance of SMEs

The study sought to examine how innovation affects the performance of SMEs in Iten town. Responses to this question were sought by the use of a five-point Likert scale in which Strongly Agree (5); Agree (4); Undecided (3); Agree (2); and, Strongly Disagree (1). A summary of the results was as presented in Table 1 below.

Table 1: Influence of Innovation on Performance of SMEs

Statement	5	4	3	2	1	Mean
Our agility to take initiative in every situation has improved our performance	34	67	12	12	10	3.763
Introduction of new products, services and administrative techniques has improved our performance in our business	25	98	3	5	4	4.26
Introduction of improvements and innovations in our business has improved performance	27	83	5	10	10	3.79
Development of employees' ideas for the purpose of business improvement has improved our performance	39	71	7	10	8	3.91

Innovation strategies are aligned with our firm's core mission and values.	12	38	24	37	20	2.8
Our firm usually develops creative solutions to difficult problems that improve our performance	16	79	8	20	12	3.49
Aggregate mean						3.67

From Table 1, it is apparent that majority of the respondents (aggregate mean, 3.67) were of the opinion that innovation had positively influenced performance of their businesses. Of significance is the fact that most of the respondents (mean, 4.26) indicated that introduction of new products, services and administrative techniques had improved their business performance. These were followed by those who indicated that development of employees' ideas for the purpose of business improvement in their respective SMEs had improved their performance (mean, 3.91). However, most of the respondents were either undecided or just did not know whether innovation strategies in their respective businesses were aligned to their core mission and values.

When asked to provide their opinions on whether innovation influences business performance, most of the respondents (95.6%; 129) affirmed the relationship between innovation and business performance. Notable responses are outlined as hereunder:

> … doing business without employing innovative strategies is disastrous to business performance…one will not have a competitive edge over other entrepreneurs …. (Personal Communication, Butchery owner at Iten, 2017).
>
> … there is a very strong association between being innovative and business performance…. the more you are innovative in terms of introducing new products in the market, the more your business will perform (Personal Communication, An Ecopreneur at Iten, 2017).

Pearson Correlation

In order to establish the nature of association between study variables, a Pearson correlation analysis was computed. A summary of the analyses is presented in Table 2 below.

Table 2: Pearson Correlation

Correlations						
		SME performance	**x_1**	**x_2**	**x_3**	**x_4**
SME performance	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	135				
Innovation (x_1)	Pearson Correlation	.702	1			
	Sig. (2-tailed)	.040				
	N	135	135			

Results of correlations indicated in Table 2 show that the Pearson correlation coefficient between innovation and SME performance was 0.702, showing a strong positive association between innovation and SME performance.

Hypotheses Testing

The proposed hypothesis stated that there is a significant relationship between innovation and SME performance. Results of the regression coefficients presented in Table 3 below revealed that innovation (β=0.205, $p<0.05$) had a significant effects to SME performance.

From Table 3, the p-value for innovation was 0.01, which was less than 0.05. The researcher therefore accepted the alternative hypothesis. This implied that there is a significant relationship between innovation and SME performance of business enterprises in Iten town.

Table 3: Regression Coefficients[a]

Model		**UnstandardizedCoefficients**		**Standardized Coefficients**	**T**	**Sig.**	**Collinearity Statistics**	
		β	**Std. Error**	**Beta**			**Tolerance**	**VIF**
1	(Constant)	2.487	.339		7.347	.000		
	Innovation	.193	.059	.205	3.264	.001	.963	1.038

The results of the study are in line with findings of studies conducted by Soon, Ahmad, Kiat and Sapry (2017) [7] in their research of SMEs embracing innovation in enhancing their business competitiveness and found that innovation is a vital force for firm competitiveness and is embedded in the organizational structures, processes, products and services within a firm. Further buttressing this finding is Martines, Vega and Vega (2016) [11] who found out that innovation has a positive impact on performance of SMEs.

Conclusion and Recommendations

The study established a significant relationship between innovation and performance of SMEs in Iten town. The ultimate goal of innovation is to improve business performance. Given that presently, the business environment is continually changing, innovation becomes a competitive advantage when it is based on the understanding of customers' needs to guarantee high quality of life of the people and harness a dynamic sector to make certain that expansions are solid based and beneficial than ever.

Based on the findings of the study, it is recommended that public and organizational policies should be designed in ways that addresses horizontal concerns and which generates better and viable inducement for innovation activities which can

then be taken up by SMEs. Besides, the government and other non-governmental organizations should help to develop SMEs by putting more effort to change the owner managers' perception of training from being a 'cost' to being an 'investment'. Only by having this new perception will the demand for training increase among SME owners and in turn become more proficient for performance of SMEs.

References

1. Abdullah M, Siti AM. Small and medium enterprises and their financing patterns: Evidence from Malaysia. Journal of Economic Cooperation and Development. 2011; 32:1-18.
2. Beck T, Cull R. Small- and Medium-Sized Enterprise Finance in Africa. Africa Growth Initiative Working Paper. 2014, 16.
3. Bukhamsin M. Investigating the relationship between organisational innovation capability and firm performance with Irish SMEs (MSc in Computing Dissertation). Dublin Institute of Technology, 2015.
4. Gomezelj D. Critical entrepreneur knowledge dimensions for the SME performance. Industrial Management & Data Systems. 2008; 108(9):1182-1199.
5. Kayadibi S, Polat R, Fidan Y. Small and Medium-Sized Business in Malaysian Economy: Case of Turkish Entrepreneurs in Kuala Lumpur. Business Economy. 2013; 31:265-281.
6. Khin EWS, Seng TL, Mohammad N, Ying WC, Yeap LW. Innovation and Business Performances: SMEs Case Study. Asian Journal of Management Sciences & Education. 2016; 5(1).
7. Kim-Soon, Ahmad AR, Kiat CW, Sapry RM. SMES Are Embracing Innovation for Business Performance. Journal of Innovation Management in Small & Medium Enterprises. 2017, 1-17.
8. Kiraka MK. Micro, small and Medium Enterprise Growth and Innovation in Kenya. Nairobi: Longhorn Publishers, 2013.
9. Kosgei NK, Maru LC. Learning Orientation and Innovativeness of Small and Micro Enterprises. International Journal of Small Business and Entrepreneurship Research. 2015; 3(5):1-10.
10. Loof H, Heshimati F. The Impact of Public Funds on Private R&D Investment: New Evidence from a Firm Level Innovation Study. Discussion Papers 11862, MTT Agrifood Research Finland, 2005.
11. Martinez Serna MC, Vega Martinez JE, Vega Martinez J. The Impact of Learning Orientation on Innovation and Performance in SME´S in México. International Review of Management and Business Research. 2016; 5(1):48-64.
12. Masood UH, Sadia S, Muhammad SN, Saman N. Effects of Innovation Types on Firm Performance: An Empirical Study on Pakistan's Manufacturing Sector. Pakistan Journal of Commerce and Social Sciences. 2013; 7(2):243-262.
13. Mohd MR, Syamsuriana S. The Impact of Innovation on the Performance of Small and Medium Manufacturing Enterprises: Evidence from Malaysia. Journal of Innovation Management in Small & Medium Enterprise. 2013, 1-16.
14. Nassiuma DK. Survey sampling: Theory and methods. Njoro, Kenya: Egerton University Press, 2000.
15. Ndubisi N, Iftikhar K. Relationship between entrepreneurship, innovation and performance: Comparing small and medium-size enterprises. Journal of Research in Marketing and Entrepreneurship. 2012; 14(2):214-236.
16. Rukevwe JO. Effect of innovation on the performance of SMEs organizations in Nigeria. Management. 2015; 5(3):90-95.
17. Schumpeter J. Theories of Innovation. Paris: Dallos Library, 1935.
18. Twaliwi ZC, Isaac OM. Impact of Innovation on the Performance of Small and Medium Scale Enterprise in Gwagwalada, Abuja. International Journal of Entrepreneurial Development, Education and Science Research. 2017; 4(1):31-45.
19. Walter T, Balunywa W, Rosa P, Sserwanga A, Barabas S, Namatovu R. Global Entrepreneurship Monitor, Uganda Executive Report 2004. Kampala: Makerere University Business School, 2004.