

## EFFECT OF INNOVATIVENESS ON PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN NAKURU COUNTY, KENYA

**Sila Kiprotich**

PhD Student, School of Business and Economics, Moi University  
P.O. Box 3900, Eldoret, KENYA  
ksila32@gmail.com

&

**Dr. Joyce Komen**

Senior Lecturer, School of Business and Economics, Moi University  
P.O. Box 3900, Eldoret, KENYA  
joycekomen@yahoo.com

### ABSTRACT

Access to new markets remains a major challenge to the performance of Small and Medium Enterprises in Kenya. The study sought to establish the effect of innovativeness on the performance of small and medium enterprises. The study adopted Explanatory research design that enabled the understanding of the traits and mechanisms of the relationship and association between independent and dependent variables. The sample was obtained using coefficient of variation. Using this formula a sample of 214 SMEs was selected. The results indicated that innovativeness was found to have a positive and significant effect on the performance of SMEs. It was established that SMEs that innovate successfully increase their chances of survival and growth. As a result, firms need to lay emphasis on product development, technological leadership and innovation. Firms should also favor experimentation and original approaches to problem solving rather than initiating methods that other firms have used for solving their problem. Finally, it is most preferable for firms to design its own unique new processes and methods of production.

**Keywords:** Innovativeness, performance, small and medium enterprises.

### INTRODUCTION

Access to new markets remains a major challenge to the performance of Small and Medium Enterprises in Kenya. While several factors that may affect the likelihood of small enterprises to access new markets have been identified in literature the role of entrepreneurial orientation is not well understood (Matanda, 2010). Since it is time consuming and difficult for SMES to develop all the resources necessary to successfully commercialize a business idea alone, they normally rely on external contacts for accessing scarce and specialized resources that the firm needs in order to become established and to grow (Gaudici, 2013). Innovativeness is one of the fundamental instruments of growth strategies for Small and Medium Enterprises. It reflects a fundamental willingness to depart from existing technologies and venture beyond the current state (Baker and Sinkula, 2009). Through innovativeness, firms are able to creatively initiate and support new ideas, experimentation, creative processes and exploitation of new markets (Kropp and Zolin, 2005; Li, 2012; Li et al., 2008; Mengue and Auh 2006; Miller and Friesen, 1982). In addition, establishments which fail to innovate will die (Kuratko & Hodgetts, 2007). Innovation has been identified as the element that helps a particular firm to get one step ahead of competitors by the introduction of new products and diversifying its product range thus it is a factor which contributes positively to business performance (Hult *et. al.*, 2004, Kreiser *et. al.*, 2002).

Hughes & Morgan 2007 conceived that the performance of Greek SME's links positively with innovativeness of product which has been introduced (Avlonitis & Salavou, 2007) affirming that innovation has a positive impact on performance of Small and Medium Enterprises. Meta-analysis also found that a consistent relationship existed between innovation and performance (Rauch et. al, 2004 and Davis, 2007). A study on the impact of innovation in the Australian industry acknowledged innovation as the most important dimension for firm survival (Coulthard, 2007).

In the case of SMEs in Malaysia, innovation was found to have a significant effect on perceived business performance among 182 SME's in the manufacturing sector (Iffi, 2007). Another study, also on Malaysian SME's found positive relationship between CEO innovativeness and adoption of advanced manufacturing technology (AMT).

Innovation is broadly seen as an essential component of competitiveness, embedded in the organizational structures, processes, products and services within a firm. (Fouda, 2007). Lumpkin and Dess (2006) suggest innovation is a willingness to depart from existing technologies or practices and venture beyond that current state of the art and that this willingness often results in new products and services. The logic of innovation is well-illustrated in Kim and Mauborgne's (2005) Blue Ocean Strategy. They propose that blue oceans are uncontested market spaces where the innovative firm moves to a new strategic position having no competitors. In contrast, red oceans type if the presence of firms competing for the same customers, with firms attacking the strategic positions of rivals.

Particularly important is that innovators create new value and often stimulate new demand in an existing industry. Kim and Mauborgne (2005) illustrate this creation of new demand with the actions of Callaway, a premium golf products manufacturer. Rather than focusing on the needs of current golfers, Callaway investigated why some physically-active adults rejected golf as their sport of choice. Callaway found that non-golfers viewed the game as too difficult to master. Callaway then introduced a series of golf clubs designed to afford new golfers opportunity to achieve reasonable proficiency fairly easily.

## **METHODOLOGY**

The study adopted Explanatory research design that enabled the understanding of the traits and mechanisms of the relationship and association between independent and dependent variables (Thornhill et al., 2000 and Orodho, 2003).

The study was carried out in Nakuru Municipality in Nakuru County, Kenya. The study targeted 4000 licensed SMEs established in Nakuru Central Business District (CBD) (Municipal records, 2012). The respondents were SMEs owners.

The sample was obtained using coefficient of variation. Nassiuma, (2000) asserted that in most surveys, a coefficient of variation in the range of  $21\% \leq C \leq 30\%$  and a standard error in the range  $2\% \leq e \leq 5\%$  was usually acceptable. Using this formula a sample of 214 SMEs was selected.

## **Data Analysis and Presentation**

The researcher conducted initial data analysis using simple descriptive statistical measures such as, mean, standard deviation and variance to give glimpse of the general trend.

However, correlation analysis was used to determine the nature of the relationship between variables at a generally accepted conventional significant level of  $P=0.05$  (Sekaran, 2003). In additional Multiple regression analysis was employed to test the hypotheses. Multiple regression analysis was applied to analyze the relationship between a single dependent variable and several independent variables (Hair et al., 2005).

## RESULTS AND FINDINGS

Innovativeness enables SMEs to gain competitiveness and achieve excellent business performance. In most cases, SMEs that innovate successfully would increase their chances of survival and growth. Consequently, the researcher found it necessary to establish if this was the case with SMEs in Nakuru County. The findings are shown in table 1. From the findings, 51.7% (105) of the respondents affirmed that their firm favors experimentation and original approaches to problem solving rather than initiating methods that other firms have used for solving their problem (mean = 4.31). Also, 63.5% (129) of the respondents strongly agreed that their firm lays a strong emphasis product on research and development, technological leadership and innovation (mean = 4.29). Further, 37.4% (76) of the respondents strongly agreed that their firm lays a strong emphasis product on research and development, technological leadership and innovation (mean = 3.8).

On top of that, 28.6% (58) of the respondents agreed that their firm prefers to design its own new processes and methods of production, 21.2% (43) of the respondents were neutral and 14.8% (30) of the respondents strongly disagreed. A mean of 3.34 revealed that the respondents were generally neutral. In addition, 28.6% (58) of the respondents disagreed that in their firm, a change in product and service lines has been mostly of a minor nature as compared to being quite dramatic. On the same, 22.2% (45) of the respondents strongly agreed and 19.7% (40) of the respondents were neutral. Furthermore, 48.3% (98) of the respondents strongly disagreed that in the last five years, their firm has marketed no new lines of products or services as compared with very many new product lines or services. Innovativeness summed up to a mean of 3.4811, standard deviation 0.73947, Skewness -0.43 and kurtosis -0.537. From the findings, it is evident that innovativeness has made it possible for SMEs to creatively initiate and support new ideas, experimentation, creative processes and exploitation of new markets. It has also made SMEs to depart from existing technologies and venture beyond the current state.

**Table 1: Innovativeness**

			SD	D	N	A	SA	Mean	Std. Deviation	Skewness	Kurtosis
I <sub>1</sub>	My firm lays a strong emphasis product on research and development, technological leadership and Innovation	f	20	0	10	44	129	4.29	1.222	-1.886	2.449
		%	9.9		4.9	21.7	63.5				
I <sub>2</sub>	In the last five years, my firm has marketed no new lines of products or services as compared with very many new product lines or services	f	98	0	21	35	8	2.08	1.277	0.806	-0.745
		%	48.3	20.2	10.3	17.2	3.9				
I <sub>3</sub>	In my firm, a change in product and service lines has been mostly of a minor	f	58	11	40	49	45	3.06	1.527	-0.21	-1.421
		%	28.6	5.4	19.7	24.1	22.2				

nature as compared to being quite dramatic.

I <sub>4</sub>	My firm favors experimentation and original approaches to problem solving rather than initiating methods that other firms have used for solving their problem	f	0	10	23	65	105	4.31	0.859	-1.107	0.46
		%	0	4.9	11.3	32	51.7				
I <sub>5</sub>	My firm prefers to design its own unique new processes and methods of production	f	10	34	18	65	76	3.8	1.243	-0.776	-0.61
		%	4.9	16.7	8.9	32	37.4				
I <sub>6</sub>	My firm prefers to design its own new processes and methods of production	f	30	29	43	43	58	3.34	1.407	-0.33	-1.164
		%	14.8	14.3	21.2	21.2	28.6				
<b>INNOVATIVENESS</b>								<b>3.4811</b>	<b>0.73947</b>	<b>-0.43</b>	<b>-0.537</b>

From the results, the most significant relationship exists between innovativeness and SME performance with a correlation coefficient value of 0.661 (significant at  $\alpha = 0.01$ ) which indicates that innovativeness contributes up to 66.1% of the change in SME performance. Risk-taking was shown to contribute 41.7% of the change in SME performance as indicated by the correlation coefficient value of 0.417 which is significant at  $\alpha = 0.01$ .

Hypothesis postulated that innovativeness has no significant effect on SME performance. However, study findings showed that innovativeness had coefficients of estimate which was significant basing on  $\beta_3 = 0.566$  ( $p\text{-value} = 0.000$  which is less than  $\alpha = 0.05$ ) hence we fail to accept the hypothesis and conclude that innovativeness has a significant effect on SME performance. This indicates that for each unit increase in innovativeness, there is up to 0.566 units increase in SME performance. The effect of innovativeness is stated by the t-test value = 10.169 which point out that the effect of innovativeness is over 10 times that of the error associated with it.

**Table 2: Moderating effect of social networking on the relationship between Innovativeness and SME performance**

	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	1.485	0.253		5.876	0		
Innovativeness*social networking	0.049	0.015	0.385	3.225	0.001	0.174	1.747
R Square	0.51						
Adjusted R Square	0.5						
F	51.501						
Sig.	.000						
Durbin-Watson	1.533						

a Dependent Variable: SME performance

## CONCLUSION AND RECOMMENDATION

Innovativeness was found to have a positive and significant effect on the performance of SMEs. It was established that SMEs that innovate successfully increase their chances of survival and growth. Further, respondents noted that their SMEs lay a strong emphasis on research and development, technological leadership and innovation hence they have been experiencing improved performance. Innovativeness has also enabled firms to enhance their growth by venturing beyond the current state and creatively initiating and supporting new ideas.

As a result, firms need to lay emphasis on product development, technological leadership and innovation. Firms should also favor experimentation and original approaches to problem solving rather than initiating methods that other firms have used for solving their problem. Finally, it is most preferable for firms to design its own unique new processes and methods of production.

## REFERENCES

- Avlonitis, G. J. and H. E. Salavou (2007), "Entrepreneurial orientation of SMEs, product innovativeness, and performance," *Journal of Business Research*, 60, 566-75.
- Baker WE, Sinkula JM (2009). The complementary effects of market orientation and entrepreneurial orientation on profitability in small businesses. *J. Small Bus. Manage.* 47(4):443-464.
- Coulthard M (2007). The role of entrepreneurial orientation on firm performance and the potential influence of relational dynamism. *J. Glob. Bus. Technol.* 3(1):29-39.
- Davis, J.L. 2007. *Firm-Level Entrepreneurship And Performance: An Examination And Extension Of Relationships And Measurements Of The Entrepreneurial Orientation Construct*. Doctorate Thesis. The University Of Texas At Arlington.
- Fouda, H. 2007. *The Relationship Between Entrepreneurial Orientation Dimensions And Performance In Small Canadian ICT Firms*. Master's Thesis. Carleton University, Ottawa Canada.
- Hair, J.F. Jr. et al. (2005). *Multivariate data analysis*. Upper Saddle River: Pearson Prentice Hall.
- Hughes, M. & Morgan, R. E. (2007) Deconstructing The Relationship Between Entrepreneurial Orientation and Business Performance at The Embryonic Stage of Firm Growth. *Industrial Marketing Management*. 36,651-661.
- Hult, G. T. M., Hurley, R. F., & Knight, G. A. (2004). Innovativeness: Its antecedents and impact on business performance. *Industrial Marketing and Management*, 33, 429-438.
- Iffi Fitriah, (2007) Innovation intensity: Its Antecedents and effects on business performance of small and medium enterprises (SMEs) in the Malaysian manufacturing sector. PhD thesis, Universiti Malaysia Sabah.
- Kreiser, P.M., Marino, L. D., & Weaver, K. M. (2002). Assessing the relationship between entrepreneurial orientation, the external environment, and firm performance scale: A multi-country analysis. *Frontiers of Entrepreneurship Research*.
- Kropp F, Lindsay NJ, Shoham A (2008). Entrepreneurial orientation and international entrepreneurial business venture startup. *Int. J. Entrep. Behav. Res.* 14(2):102-117.
- Kropp F, Zolin R (2005). Technological entrepreneurship: the role of small business innovation research. *Programs Acad. of Market. Rev.* Retrieved Dec. 5, 2012, from <http://www.amsreview.org/articles/kropp07-2005.pdf>

- Kuratko, D.F. and Hodgetts, R.M. 2007. *Entrepreneurship: Theory/Process/Practice: & 7<sup>th</sup> Edition*. Thomson South-Western, Thomson Corporation, Canada.
- Li Y, Zhao Y, Tan J, Liu Y (2008). Moderating effects of entrepreneurial orientation on market orientation-performance linkage: evidence from Chinese small firms. *J. Small Bus. Manage.* 46(1):113133.
- Lumpkin, G. T. & Dess, G.G. 2001. Linking Two Dimension Of Entrepreneurial Orientation To Firm Performance : The Moderating Role of Environment And Industry Life Cycle. *Journal of Business Venturing.* 16. 429-451.
- Mengue N, Auh S (2006). Creating a firm-level dynamic capability through capitalizing on market orientation and Innovativeness. *J. Acad. Market. Sci.* 24:63-73.
- Miller, D. (1983). "The Correlates of Entrepreneurship in Three Types of Firms," *Management Science*, 29 (7), 770-791.
- Miller, D., & Friesen, P. H. (1982). Innovation in conservative and entrepreneurial firms: Two models of strategic momentum. *Strategic Management Journal*, 3, 1-25.
- Nassiuma, D. K. (2000), " *Survey Sampling; Theory and methods.*" Nairobi University Press, Nairobi.
- Orodho, J. A.P.H.D (2005). *Elements of Education and Social Science Research Methods*. Bureau of Educational Research. Institute of Research and Development. Kenyatta University, Nairobi Kenya.
- Rauch A, Wiklund J, Frese M, Lumpkin GT (2004). Entrepreneurial orientation and business performance: cumulative empirical evidence. Paper presented at the 23rd Babson College Entrepreneurship Research Conference. Glasgow, UK.
- Sekaran, U. (2003). *Research methods for business a skill building approach* (4th ed.). New York, NY: John Wiley & Sons, Inc.