



(RESEARCH ARTICLE)



## Role of innovativeness in medium-size enterprises competitiveness: A case study of Kenyan medium-sized enterprises

Isaiah Olale Onyango \*, Patrick Karanja Ngugi and Samson Nyang'au Paul

*Department of Entrepreneurship, Technology, Leadership and Management, School of Business and Entrepreneurship, Jomo Kenyatta University of Agriculture and Technology, Kenya.*

International Journal of Science and Research Archive, 2023, 09(01), 455–461

Publication history: Received on 01 May 2023; revised on 10 June 2023; accepted on 13 June 2023

Article DOI: <https://doi.org/10.30574/ijrsra.2023.9.1.0462>

### Abstract

Innovativeness has been termed as the most crucial of the elements in today's globalized and competitive environment. Firms focusing on innovativeness achieve not only competitiveness but also are able to sustain them for a longer period of time. The relevance of Mid-sized enterprises' competitiveness and their sustainability cannot be overemphasized for Kenya's macroeconomic development, especially in this competitive global economy. Despite the concerted effort with a focus on Mid-sized enterprises, researchers question the role of innovativeness in promoting the competitive advantage of the Kenyan economy and the role of innovativeness in the ultimate competitiveness of Mid-sized enterprises. Thus, the focus of this study was to fill the gap. A descriptive and exploratory research design was used. The study used the stratified random sampling technique to ensure representation according to the various sectors. Statistical Package for Social Sciences (SPSS) was used for analysis. The results show enough evidence that innovativeness positively and significantly influences the competitiveness of Mid-sized enterprises in Kenya. The study provides managers with information regarding the processes of shaping strategy and decision-making, which has implications for management stressing the importance of encouraging EO capabilities and focusing efforts on innovativeness to improve firm competitiveness advantage.

**Keywords:** Entrepreneurial Orientation; Innovativeness; Competitiveness; Medium-sized enterprises

### 1. Introduction

Innovativeness is an important tool that provides opportunities for new ideas and the building of new markets (Boak, 2022). According to Birkinshaw, J. *et al.* (2016), there is a remarkably increasing interest in firm competitiveness based on innovativeness and competitive advantage. In addition to the mounting competition, the capability to lead the innovativeness and manage the process to innovativeness become extremely important to governments and organizations alike. This is because of the impact, and limited inadequate resources to spearhead future growth. According to Osano, H. (2019), innovativeness is like a natural renewable source that is accessible to all restricted only by human effort.

In order for firms to retain a competitive advantage in today's global economy require organizations to pursue innovativeness (Chabbouh and Boujelbene, 2022). Hence the question in this regard looks at 'how to innovate' which continues to draw researchers' attention. Clausen, et al (2013) focused on this challenge by attending to the question and using past theory to identify four modes of innovativeness that is, open exploration, closed exploration, open exploitation, and close exploitation. Kang, and Park (2018), suggested that Mid-sized enterprises have limited innovativeness as compared to larger enterprises. However, Kang, and Park (2018) negated this by highlighting that Mid-sized enterprises are more innovative due to their heterogeneous character but are restricted in innovative capacity due to their financial and human resources. Andersen, (2021) identified various factors that affect the

\* Corresponding author: Isaiah Olale Onyango

relationship between innovativeness and SME competitiveness. They viewed that new Mid-sized enterprises benefit more from innovativeness than mature organizations mainly due to their flexibility to accept change in their business environment.

On the importance of innovativeness in Mid-sized enterprises' competitiveness, this study focused on Kenyan Mid-sized enterprises. Kenya is one of the fastest growing economies of Africa and largely on Mid-sized enterprises that contribute 40 percent to the national GDP (CBK, 2020). The relevance of Mid-sized enterprises competitiveness and their sustainability cannot be overemphasized for Kenya macro-economic development especially in this competitive global economy. Despite the concerted effort with focus on Mid-sized enterprises, researchers question the role of innovativeness in promoting competitive advantage of the Kenyan economy and the role of innovativeness in the ultimate competitiveness of the Mid-sized enterprises. According to Glavas, and Radic, (2019), the fear being a country becomes victim of middle income trap evidenced from the visible downfall competitive advantage. Thus, the focus of this study was to determine the role of innovativeness towards Mid-sized enterprises competitiveness.

---

## 2. Review of literature

Entrepreneurs use innovativeness to take advantage of change as an opportunity to start a new business or provide a new service. It qualifies to be focused on as a discipline, to be learned trained on, and practiced. Firm owners need to deliberately target the different sources of innovative and creative ideas, the dynamics, and their signs that reflect opportunities for effective innovation. They need to know and to apply the principles of successful innovation (Cui and Song, 2022).

Innovativeness reflects a firm's ability to engage in new ideas and creative processes that may result in new products, markets, or technological process (Rauch et al., 2009). Covin and Miles (2011) argued that innovation is a crucial part of a strategy and that entrepreneurship cannot exist without it. Galbreath, Lucianetti, Thomas, and Tisch, (2020) suggested that innovativeness plays a significant role in solving business problems and challenges regardless of market turbulence, which in turn provides firms with the ability to succeed. Similarly, the literature emphasized the importance of innovation in creating a firm's competitiveness that will lead to superior competitiveness. By increasing commitment to innovative products or processes, firms can renew their operations in marketplace and improve their profitability (Kang, Shinhyung, and Park, 2018). Nonetheless, the effect of innovativeness on firm competitiveness in the existing literature is inconclusive.

Further, innovation is an essential part of a strategy and that entrepreneurship cannot exist without it. The innovative ability of firms to renew their market offers becomes crucial when product and business model life cycles are shortening Galbreath, Lucianetti, Thomas, and Tisch, (2020) suggested that innovativeness plays a significant role in solving business problems and challenges, which in turn provides firms with the ability to succeed. Similarly, literature emphasized the importance of innovation in creating a firm's competitiveness that will lead to superior competitiveness

Glavas and Radic, (2019) highlight that successful entrepreneurs believe their achievements lie within their control and power and that they can determine their outcomes. To them, entrepreneurs possess the following characteristics; self-reliant innovator; adaptive and resilient; and have a strong desire to know how well they are performing. Moretti, and Biancardi, (2020, trying to examine the importance of entrepreneurial qualities amongst small business owners and non- business owners, found creativity to be one of the strongest characteristics that distinguish small business owners from non-small business owners.

According to Hu, *et al.*, (2022), the necessary conditions for accomplishing a successful innovation are: the existence of a clear strategy; the availability of all essential resources for the innovation effort; the realistic evaluation of individual's innovation potential; the detailed knowledge of market demand, the anticipation of future needs; the evaluation of innovation projects criteria; the maintenance of a close contact with beneficiaries; and the settings for limited periods of accurate objectives to which all innovating efforts should be dedicated to. In the local perspective Osano, (2019) carried out a study on corporate entrepreneurship and organizational competitiveness theoretical perspectives, approaches and outcomes. His findings suggested that firm competitiveness as a result of corporate entrepreneurship results from development of new products and services, improvement of old ones; new and improved processes and systems which improve efficiencies. The author argued that firms with high corporate entrepreneurial intensity experience better competitiveness in form of competitiveness and profitability.

Small firms have been reputed to be more flexible and non-bureaucratic, hence adopting more quickly to innovation (Nooteboom, 2004). According to Price et al. (2013), large firms recognize the importance of innovation in small firms. This view can be seen in various research supporting the notion that Mid-sized enterprises perform better if they engage

in innovative activities (Vermeulen et al. 2005; Westerberg & Wincent, 2008; Qian & Li, 2003; Verhees & Meulenberg, 2004) such as Research and Development (R&D) and increased productivity (Block, 2012). For instance, a prominent study by Bruderl and Preisdorfer (2010) highlighted the importance of innovation in small firms. They discovered that in predicting firm competitiveness, one important factor that cannot be overlooked is innovation. Sirelli (2010) also stated that the underlying rationale of small firm's is to encourage innovation, which in turn will lead to a better economic competitiveness, higher competitiveness, more jobs and higher wages. In this vein, it has become imperative for Mid-sized enterprises to be innovative not only to differentiate themselves but also attain some level of firm success (McGrath, 2011; Zahra et al., 2004). One can, therefore, postulate that innovativeness can lead to SME competitiveness.

### 3. Methodology

The study employed a descriptive and exploratory research design. Descriptive and exploratory research design used in preliminary and exploratory studies, to allow researchers to gather information, summarize, presents data and interpret it for the purpose of clarification (Creswell 2003). Study's target population (N) was 352. The target population for the study comprised of top the Mid-sized enterprises in Kenya between the years 2016 - 2019. This yielded small mid-sized enterprises after eliminating those that had been repeated. The population was heterogeneous since it comprised of Mid-sized enterprises operating in varied industries as per the KPMG Kenya and Nation Media Group awards of 2016 - 2019. These included education, ICT, construction, engineering, health, manufacturing, retail, hospitality, energy, financial, automotive, real estates, services and logistics. The selection of the mid-sized was justified by the fact that there has always been a missing middle in Kenya.

The sampling frame was the top mid-sized enterprises in Kenya in the year 2016 - 2019. The units of observation were a top manager in the mid-sized enterprises who reported to the CEO. The sample was obtained using Nassiuma's (2000) sample size formula. Using this formula, the sample arrived at was 138 employees which represented 38.9% of study target population. As a general rule, sample sizes of around  $n = 30-50\%$  are considered sufficient for the Central Limit Theorem (CLT) to hold (Chang et al., 1970; Gope, 1999). This study used stratified random sampling technique. Stratified random sampling technique was used as it ensures that all the small mid-sized enterprises are well represented.

## 4. Results and discussion

### 4.1. Innovativeness and Competitiveness of Mid-sized enterprises

**Table 1** Descriptive Analysis on Innovativeness

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Dev.
Willingness to support creativity leads to increase competitiveness	1	2	2	84	9	3.994	0.329
Technological adoption leads to increase competitiveness	2	2	4	77	13	3.994	0.297
Research and development is improves profitability	1	1	3	84	8	3.988	0.328
Introduction of new products or services lead to increased volume sales	2	1	2	87	6	3.955	0.344
Technological adoption leads to improved profitability	3	3	5	81	5	3.836	0.314
Research and development is key to Competitiveness	4	2	6	82	5	3.83	0.318
<b>Aggregate Score</b>						<b>3.933</b>	<b>0.322</b>

The objective of the study was to establish the relationship between innovativeness and competitiveness of Mid-sized enterprises in Kenya. Respondents were asked to give the extent to which they agreed or disagreed with the statements on innovativeness. Table 1 presents the findings obtained. Based on the findings, the aggregate mean value was 3.933, an indication that on average, the respondents agreed on the statements. They specifically agreed that willingness to support creativity leads to increase competitiveness ( $M = 3.994, SD = 0.329$ ); that technological adoption leads to increase

competitiveness (M= 3.994, SD= 0.297; and that research and development is improves profitability (M= 3.988, SD= 0.328). They were also in agreement that introduction of new products or services lead to increased volume sales (M= 3.955, SD= 0.344); that technological adoption leads to improved profitability (M= 3.836, SD= 0.314); and that research and development is key to Competitiveness (M= 3.830, SD= 0.318).

The findings clearly show that through innovation, business enterprises are in a good position to improve their performance and competitiveness. The findings agree with Covin and Miles (2011) who argued that innovation is a crucial part of a strategy and that entrepreneurship cannot exist without it. It also agrees with Naranjo-Valencia, CalderónHernández, Jiménez-Jiménez and Sanz-Valle (2018) who suggested that innovativeness plays a significant role in solving business problems and challenges regardless of market turbulence, which in turn provides firms with the ability to succeed. Therefore, if enterprises increase the level to which they are innovative, then they have a better shot at improving their performance.

**4.2. Innovativeness on Competitiveness of Medium Sized Enterprises in Kenya**

A univariate analysis was conducted to establish relationship between innovativeness and competitiveness of Mid-sized enterprises in Kenya. The null hypothesis stated:

**H<sub>0</sub>:** *There is no significant relationship between Innovativeness and the competitiveness of Mid-sized enterprises in Kenya*

As indicated in Table 2, the r-squared for the relationship between innovativeness and competitiveness of Mid-sized enterprises was 0.236; this is an indication that at 95% confidence interval, 23.6% variation in competitiveness of Mid-sized enterprises can be attributed to changes in innovativeness. Therefore innovativeness can be used to explain some changes in competitiveness of Mid-sized enterprises in Kenya. However, other than innovativeness, there are other factors that can be used to explain the remaining 76.4% competitiveness of Mid-sized enterprises in Kenya.

**Table 21** Model Summary for Innovativeness on Competitiveness

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.486 <sup>a</sup>	0.236	0.228	0.24900

Constant -Predictors: Innovativeness

From the analysis of variance findings in Table 3, the study found out that the regression model was significant at 0.001 which is less than the selected level of significance (0.05). Therefore, the data was ideal for making a conclusion on the population parameters. The F calculated value was greater than the F critical value (29.694>3.940), an indication that innovativeness significantly influences competitiveness of Mid-sized enterprises in Kenya. The significance value was less than 0.05 indicating that the variable innovativeness was significant in predicting competitiveness of Mid-sized enterprises in Kenya.

**Table 3** Analysis of Variance for Innovativeness on Competitiveness

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.841	1	1.841	29.694	0.001
	Residual	5.952	96	0.062		
	Total	7.793	97			

a. Dependent Variable: Competitiveness  
b. Constant -Predictors: Innovativeness

The coefficients or beta weights for each variable allows the researcher to compare the relative importance of each independent variable. In this study the unstandardized coefficients were used to fit the regression equations. From the results the regression model was;

$$Y = 1.820 + 0.525 X_2$$

The above regression equation revealed that holding innovativeness to a constant zero, competitiveness of Mid-sized enterprises in Kenya will be at a constant value of 1.820. The findings also show that innovativeness is statistically significant in explaining competitiveness of Mid-sized enterprises in Kenya ( $\beta = 0.525$ ,  $P = 0.000$ ). This indicates that innovativeness positively and significantly relates with competitiveness of Mid-sized enterprises. The findings also suggest that a unit increase in innovativeness would lead to an increase in competitiveness of Mid-sized enterprises in Kenya by 0.525 units. Based on the findings, we reject the null hypothesis and conclude that there is significant relationship between innovativeness and the competitiveness of Mid-sized enterprises in Kenya. The findings concurs with Sirelli (2010) that the underlying rationale of small firm's is to encourage innovation, which in turn will lead to a better economic competitiveness, higher competitiveness, more jobs and higher wages. It also agrees with Bruderl and Preisdorfer (2010) that in predicting firm competitiveness, one important factor that cannot be overlooked is innovation.

**Table 4** Beta Coefficients for Innovativeness on Competitiveness

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.820	0.195		9.333	0.000
Innovativeness	0.525	0.051	0.527	10.294	0.000

a. Dependent Variable: Competitiveness

#### 4.3. Test of Hypothesis

The hypothesis tested was:

***H<sub>0</sub>: There is no significant relationship between Innovativeness and the competitiveness of Mid-sized enterprises in Kenya***

The p-value finding from the simple regression analysis was used to test the hypothesis. The acceptance/rejection criteria was that, if the p value is greater than 0.05, we fail to reject the  $H_0$  but if it's less than 0.05, the  $H_0$  is rejected. The null hypothesis was that there is no significant relationship between innovativeness and the competitiveness of Mid-sized enterprises in Kenya. From the results presented in Table 4.40, the p-value for innovativeness was 0.000 which is less than the selected level of significance (0.05). Also the calculated t-value (10.294) was greater than critical t-statistic of 1.96. Based on the findings, we reject the null hypothesis.

The alternative hypothesis was therefore adopted that there is significant relationship between innovativeness and competitiveness of Mid-sized enterprises in Kenya. The findings agree with Covin and Miles (2011) who argued that innovation is a crucial part of a strategy and that entrepreneurship cannot exist without it. It also agrees with Naranjo-Valencia, CalderónHernández, Jiménez-Jiménez and Sanz-Valle (2018) who suggested that innovativeness plays a significant role in solving business problems and challenges regardless of market turbulence, which in turn provides firms with the ability to succeed. Therefore, if enterprises increase the level to which they are innovative, then they have a better shot at improving their performance.

## 5. conclusion

The objective of the study was to establish the relationship between innovativeness and competitiveness of Mid-sized enterprises in Kenya. The study found that innovativeness has positive influence on competitiveness of Mid-sized enterprises in Kenya. It was also found that willingness to support creativity leads to increase competitiveness and technological adoption leads to increase competitiveness and profitability. Also, research and development improves profitability. The study further found that introduction of new products or services lead to increased volume sales and that research and development is key to competitiveness.

Therefore, through innovation, business enterprises are in a good position to improve their performance and competitiveness. Innovativeness is thus a crucial part of a strategy and that entrepreneurship cannot exist without it. Innovativeness also plays a significant role in solving business problems and challenges regardless of market turbulence, which in turn provides firms with the ability to succeed. Therefore, if enterprises increase the level to which they are innovative, then they have a better shot at improving their performance.

The null hypothesis tested was that there is no significant relationship between innovativeness and the competitiveness of Mid-sized enterprises in Kenya. The study revealed that innovativeness is statistically significant in explaining competitiveness of Mid-sized enterprises in Kenya. The influence was found to be positive. This means that unit increase in innovativeness would lead to an increase in competitiveness of Mid-sized enterprises in Kenya. Based on the findings, the study concluded that innovativeness positively and significantly relates with competitiveness of Mid-sized enterprises in Kenya.

### *Recommendation*

The results of the study do indicate that the innovation is essential if companies want to grow and become more competitive in relation to their national and international competitors. This would not only help the firms to gain market share but would also help them sustain themselves in the longer run especially with the anticipated of the East African Economic integration single market. The survival of Kenyan mid-size enterprises will depend on their ability to innovate as they will face enormous challenge from other member countries firms. It is suggested that the future studies should take into account external factors like sources of government funding and incentives systems, external collaborative linkages between firms and research and academic institutions that could help build the capacities and capabilities of the firms to attain growth and competitive advantage.

---

## **Compliance with ethical standards**

### *Acknowledgments*

I thank my co-authors for their expert advice and constant encouragement.

### *Disclosure of conflict of interest*

The authors declare that they have no conflict of interest.

---

## **References**

- [1] Andersén, J. (2021) A relational natural-resource-based view on product innovation: The Influence of Green Product Innovation and green suppliers on differentiation advantage in small manufacturing firms, *Technovation*, 104, p. 102254. Available at: <https://doi.org/10.1016/j.technovation.2021.102254>.
- [2] Birkinshaw, J. et al. (2016) How do firms manage strategic dualities? A process perspective, *Academy of Management Discoveries*, 2(1), pp. 51–78. Available at: <https://doi.org/10.5465/amd.2014.0123>.
- [3] Boak, G. (2022) Action learning and innovation, *Action Learning: Research and Practice*, 19(3), pp. 228–229. Available at: <https://doi.org/10.1080/14767333.2022.2130721>.
- [4] Chen, Q., Wang, C.-H. and Huang, S.-Z. (2019) Effects of organizational innovation and technological innovation capabilities on firm performance: Evidence from firms in China's Pearl River Delta, *Asia Pacific Business Review*, 26(1), pp. 72–96. Available at: <https://doi.org/10.1080/13602381.2019.1592339>.
- [5] Cui, F., & Song, J. H. (2022, September 23). Impact of Entrepreneurship on Innovation Performance of Chinese SMEs: Focusing on the Mediating Effect of Enterprise Dynamic Capability and Organizational Innovation Environment. *Sustainability*, 14(19), 12063. <https://doi.org/10.3390/su141912063>
- [6] Chabbouh, H., & Boujelbene, Y. (2022, January 10). Open innovation, dynamic organizational capacities and innovation performance in SMEs: Empirical evidence in the Tunisian manufacturing industry. *The International Journal of Entrepreneurship and Innovation*, 146575032110660. <https://doi.org/10.1177/14657503211066014>
- [7] Frese, M. (2020) An action theory approach to the psychology of entrepreneurial actions and entrepreneurial success, *The Psychology of Entrepreneurship*, pp. 182–209. Available at: <https://doi.org/10.4324/9781003137573-11>.
- [8] Glavas, A. and Radic, M. (2019) Corporate Social Responsibility: An overview from an organizational and psychological perspective, *Oxford Research Encyclopedia of Psychology [Preprint]*. Available at: <https://doi.org/10.1093/acrefore/9780190236557.013.90>.
- [9] Galbreath, J., Lucianetti, L., Thomas, B., & Tisch, D. (2020, February 26). Entrepreneurial orientation and firm performance in Italian firms. *International Journal of Entrepreneurial Behavior & Research*, 26(4), 629–646. <https://doi.org/10.1108/ijeb-07-2019-0457>

- [10] Hu, W. et al. (2022) Entrepreneurial passion and entrepreneurial success—the role of Psychological Capital and Entrepreneurial Policy Support, *Frontiers in Psychology*, 13. Available at: <https://doi.org/10.3389/fpsyg.2022.792066>.
- [11] Jiang, W. et al. (2018) How workplace incivility influences job performance: The role of image outcome expectations, *Asia Pacific Journal of Human Resources*, 57(4), pp. 445–469. Available at: <https://doi.org/10.1111/1744-7941.12197>.
- [12] Kang, Shinhyung, & Sangmoon Park. (2018, April). A Relationship between Innovation Capability and Performance: Differences in Firm Development Stages. *Asia-Pacific Journal of Business Venturing and Entrepreneurship*, 13(2), 91–100. <https://doi.org/10.16972/apjbve.13.2.201804.91>
- [13] Lee, Sang-Suk. (2016, April). A Study on Entrepreneurship, Competitiveness of SWOT, and Performance in Hidden Champion Firm. *Asia-Pacific Journal of Business Venturing and Entrepreneurship*, 11(2), 21–33. <https://doi.org/10.16972/apjbve.11.2.201604.21>
- [14] Moretti, F., & Biancardi, D. (2020, January). Inbound open innovation and firm performance. *Journal of Innovation & Knowledge*, 5(1), 1–19. <https://doi.org/10.1016/j.jik.2018.03.001>
- [15] Osano, H. M. (2019, July 30). Global expansion of SMEs: role of global market strategy for Kenyan SMEs. *Journal of Innovation and Entrepreneurship*, 8(1). <https://doi.org/10.1186/s13731-019-0109-8>
- [16] Onwe, C. C., Ogbo, A., & Ameh, A. A. (2020). Entrepreneurial orientation and small firm performance: The moderating role of environmental hostility. *Entrepreneurial Business and Economics Review*, 8(4), 67–84. <https://doi.org/10.15678/eber.2020.080404>
- [17] The relationship between innovation and internationalization of smes: A review of theoretical perspectives (2022) *Research Handbook on Innovation in International Business*, pp. 6–33. Available at: <https://doi.org/10.4337/9781800882942.00008>.
- [18] The relationship between innovation and internationalization of smes: A review of theoretical perspectives (2022) *Research Handbook on Innovation in International Business*, pp. 6–33. Available at: <https://doi.org/10.4337/9781800882942.00008>.
- [19] Rosenbusch, N. et al. (2018) Innovation offshoring, Institutional Context and Innovation Performance: A meta-analysis, *Journal of Management Studies*, 56(1), pp. 203–233. Available at: <https://doi.org/10.1111/joms.12407>.
- [20] Suryosukmono, G., Praningrum, P. and Pareke, F.J. (2022) Linking person-job fit and perceived organization support to increase public employee performance: The role of Innovative Behavior in workplace, *Asia Pacific Management and Business Application*, 010(03), pp. 275–290. Available at: <https://doi.org/10.21776/ub.apmba.2022.010.03.3>.
- [21] Teece, D.J. (2018) Dynamic capabilities, *The Palgrave Encyclopedia of Strategic Management*, pp. 444–452. Available at: [https://doi.org/10.1057/978-1-137-00772-8\\_689](https://doi.org/10.1057/978-1-137-00772-8_689).
- [22] Tonnessen, T. (2005) Continuous innovation through companywide employee participation, *The TQM Magazine*, 17(2), pp. 195–207. Available at: <https://doi.org/10.1108/09544780510583254>.
- [23] Wadhwa, A., Phelps, C. and Kotha, S. (2016) Corporate Venture Capital portfolios and firm Innovation, *Journal of Business Venturing*, 31(1), pp. 95–112. Available at: <https://doi.org/10.1016/j.jbusvent.2015.04.006>.