

Entrepreneurial innovation processes and firm performance in Kenya: A case of SMES in Nairobi County

2020; 2(1): 48-58

ISSN 2311 7575

Entrepreneurial innovation processes and firm performance in Kenya: A case of SMES in Nairobi County**John Musyoki Kiilu**

*Administrative Officer, Makueni County Assembly and Master of Management and Leadership student,
Management University of Africa, Kenya, Tel +254726593786,*

Email: jkiilu10@gmail.com, Author

Kithae, P. Peter

Director, Research Development and Innovations

Management University of Africa, Kenya, Tel +254721 493984,

Email: pkithae@mua.ac.ke, Corresponding Author

Abstract

Despite their contributions to income and employment creation, small and medium enterprises (SMEs) in general are currently faced with many problems. These SMEs are facing tough business environment characterized by competition and dynamic change in customers' demands and preference. As a consequence, most SMEs do not survive up to their fifth birthday. The study therefore sought to establish the effect of innovation on performance of entrepreneurship businesses with a focus on Small and Medium Enterprises in Nairobi City County. The specific objectives that guided the paper were to establish the influence of product innovation on performance of Small and Medium Enterprises in Nairobi City County, to determine the influence of process innovation on performance of Small and Medium Enterprises in Nairobi City County and to establish the influence of market innovation on performance of Small and Medium Enterprises in Nairobi City County. It employed a descriptive research design. The target population was about 10,000 SMEs in Nairobi City County. Fisher's formula was used to calculate a sample of 106 SMEs. Stratified random sampling technique was used to select the sample and questionnaires were the main instrument for data collection. Regression analysis results showed that product innovation, process innovation as well as market innovation all were positive and had statistically significant relationship with performance of entrepreneurship businesses in Nairobi City County. The study recommends that SMEs firm should produce new products and services that are specifically tailored to suit market needs, adopt a step by step technique when designing product and services for guaranteed quality and that they need to pursue market innovation strategies that focus on product customization and customer intimacy in delivering their products and services while at the same time cultivating relationships with a small number of captive customers.

Keywords: *Innovation, entrepreneurship businesses, Nairobi City County*

Author contributions

John Musyoki Kiilu conceived, researched, designed review, prepared the manuscript, performed the literature review, analyzed the data and wrote the paper. Dr. Kithae provided the intellectual input, designed and approved guidelines that was followed in the study, did corrections, proof reading and revisions and submitted the revised manuscripts.

Conflicts of Interest: The authors declare no conflicts of interest.



Peter Paul Kithae, PhD

Authors biographies

Dr Peter Paul Kithae is currently the Director, Research, Development and Innovations of the Management University of Africa; the honorary treasurer for the Kenya Red cross Society, Upper Eastern Kenya Region and a Senior Consultant with the Total Quality Management firm of Consultants. Among Dr. Kithae's published work include a Print book on "Technology adoption and its effect on performance of Youth-Led Micro and Small Enterprises, printed in June, 2015, a paper on the Extent the government has shaped MSE's destiny towards achievement of Kenya's vision 2030; A paper on the Effect of quality improvement practices on micro and small enterprise performance and another on Unleashing Potentiality of Our Youth through

Entrepreneurship Training: A Must for Realization of Kenya's Vision 2030 among others. Dr Kithae is a career civil servant who has successfully worked as a Chief Youth Officer for three years and later as a Principal Youth Officer for two years in charge of Youth Development services in Makueni and Kirinyaga counties respectively. He has attended a lot of seminars and workshops and has facilitated a number of them. Among these are project planning and management, performance contracting, capacity assessment training and disaster preparedness and response. He is a renowned educationist, having been a senior Lecturer at the Management University of Africa for over three years, a part-time lecturer at the University of Nairobi, Embu Campus for four years and a lecturer of Entrepreneurship, management and Business Studies in various tertiary institutions for over 18 years. Dr Kithae has also been a Senior Examiner and Team leader for Business Studies with the Kenya National Examinations Council for over 10 years and a Senior Examiner for Research methods with the Kenya Institute of Management for over five years.



Mr. John Musyoki Kiilu

Administrative Officer, Makueni County Assembly.

Mr. John Musyoki Kiilu is currently a Master of Management and Leadership Student at the Management University of Africa with a bias in Management and Leadership.

Mr. Kiilu is a career Civil Servant who has successfully worked as an Administrative Officer in charge of Administrative Services in Makueni County Assembly for five years.

Introduction

According to a report by the World Bank (World Bank, 2015), Small and Medium Enterprises (SMEs) in Africa have been hailed as the engine of economic growth. Formal SMEs are reported to contribute up to 45 percent of total employment and up to 33 percent of national income (GDP) in emerging economies. When informal SMEs are included, this percentage is higher. SMES are an essential part of the economic fabric of developing countries (Dalberg, 2011). Small and Medium Enterprises represent a large number of businesses in a country that generate wealth and employment (Oirere, 2015). They are widely considered vital to a country's competitiveness. SMEs are hailed for their pivotal role in promoting grassroots economic and equitable sustainable development. In developing countries, SMEs are important not only because they create employment but also because they employ unskilled workers, who are overly abundant in these countries. According to Ndesaulwa and Kikula (2016), innovation entails firms developing new products or new production processes to better perform their operations, in which case the new products could be based on the new processes.

Small firms have had an extensive role to play in the increase of innovation and the reduction of the productivity gap. In Kenya the gross domestic product was worth 79.24 billion dollars in 2013 (KNBS, 2016) and SMEs were estimated to have contributed about 45% of the GDP. In addition to this, the sector employs about 85% of the Kenyan workforce. Kenya's Vision 2030 projects that SMEs will be used as a key economic tool to foster growth and development as well as a lever in the enhancement of the country's global competitiveness (Ong'olo, & Awino, 2013).

Like many other developing countries, Kenya has recognized the importance of SMEs for economic development and poverty alleviation. SMEs are more innovative than larger firms, due to their flexibility and their ability to quickly and efficiently integrate inventions created by the firms' development activities (OECD, 2015). Research supports the notion that SMEs that engage in innovation activities are better performers (Mbizi, Hove, Thondhlana & Kakava, 2013; Oke, 2015). Studying SMEs can enhance our understanding of their needs in respect to growth and development. Such understanding would enable scientists, practitioners, and policy-makers to formulate sound support strategies for SMEs.

Despite their contributions to income and employment creation, SMEs in general are currently faced with many problems (Saunila, 2014). Among these are harsh conditions leading to some of them failing to survive and grow to become large corporate entities. One of the key means to overcome such harsh conditions is innovation. It has also been said that most of SMEs fail to innovate. After all, business performance is dependent on a wide range of factors that are not susceptible to simple conception. An empirical survey carried out by the Cambridge Small Business Research Centre provides useful insights into this SME innovative behaviour in the UK (CSBRC, 2014). In his study, Hii (1998) argue that innovation can yield positive benefits for businesses, and that innovation can be equated to business performance.

Statement of the problem

Small and Medium Enterprises engage in innovative business practices in order to match with turbulent business environment. Innovation is meant to reduce operation cost, improve service delivery and satisfy customers' needs. Through innovation a small firm is able to adapt to market changes and meet new demands. Thus SMEs adopt innovations in order to improve their overall performance and competitiveness in the industry. A survey carried out in 2016 by the Kenya National Bureau of Statistics (KNBS) indicated that 400,000 MSEs are dying annually (Republic of Kenya, 2015). In the last five years 2.2 Million micro enterprises have been closed, 2016 inclusive (Lee, Sameen & Cowling, 2015). Most of these enterprises are normally closed because of increased operating costs, declining income and losses incurred from the business, an indication that the country's state of economy is not as impressive as it should be (Haku & Wario, 2014). It is for this reason that the study sought to establish the influence of entrepreneurial innovation on performance of small and medium enterprises in Nairobi City County.

Objectives of the study

The general objective of the study was to establish the effect of entrepreneurial innovation on performance of

entrepreneurship businesses with a focus on Small and Medium Enterprises in Nairobi City County. The specific objectives were to establish the influence of product innovation on performance of Small and Medium Enterprises in Nairobi City County, to determine the influence of process innovation on performance of Small and Medium Enterprises in Nairobi City County and to establish the influence of market innovation on performance of Small and Medium Enterprises in Nairobi City County.

Literature review

While explaining the importance of innovation on firm performance, Schumpeter (1934) in the Theory of Innovation argued that entrepreneurs create the opportunity for new profits with their innovations. In turn, groups of imitators attracted by super profits would start a wave of investment that would erode the profit margin for the innovation. Schumpeter (1934) emphasized the role of entrepreneurship and the seeking out of opportunities for value generating activities which would expand and transform the circular flow of income, but it did so with reference to a distinction between invention or discovery on one hand and innovation, commercialization and entrepreneurship on the other (Lee, Sameen & Cowling, 2015). The separation of invention and innovation marked out the typical nineteenth century institutional model of innovation, in which independent inventors typically fed discoveries as potential inputs to entrepreneurial firms. Schumpeter drew a clear distinction between the entrepreneurs whose innovations create the conditions for profitable new enterprises (Schumpeter, 1939). Though Schumpeter emphasized the importance of innovation on firm growth, the theory only predicted short term gains associated with innovation. The theory did not predict the long term benefits of innovation to the enterprises.

Entrepreneurial innovations of SMEs require sufficient resources. However, as it is often known, resources are limited and scarce. As a result, the few resources must be allocated efficiently and prudently. In the Resource-Based Theory postulated by Wernerfelt in 1984, the way a firm allocates its resources determines its performance. In its original form, resource based view emphasizes on the internal resources of the firm as the source of performance and competitive advantage, rather than the external environment. In the context of the study, an SME will require sufficient resources to drive innovation. Efficient use of resources drives innovation, technology growth as well as research and development (RD). In this study, Resource-Based Theory was chosen to guide the study. Product innovation, process innovation and market innovation forms the major elements of entrepreneurial innovation. As a result, the performance of SMEs firms in Nairobi City County is discussed in tandem with these.

Product innovations represent the development of new products to meet the needs of the customer. Such innovations are reflected in new products to the end user (Herrera, 2015). With new product in the market, the performance of an SME will tend to improve. The products should be tailored towards customers' needs. Comison and Lopez (2014) in their study established that product innovation was important for an organization to be able to create a competitive edge in the changing environment. Comison *et al.*, (2014) argued that through product innovation enhanced firms competitive advantage. However, the study measured the effects of product in the context of competitive advantage and not firm performance as measured by the current study.

Process innovation allows running of the firms' operations so as to increase its effectiveness and efficiency. Innovation is a major drive that encourages ease of flow of information and fast delivery to the intended persons (KarimSuhag, Solangi, Larik, Lakho & Tagar, 2017). Improving process innovation capability, particularly through the innovation and optimization of the product development process, enables an SME to expedite its product research and development, reduce its research and development (R&D) costs, and enhance its capability to innovate products (Yu, Zhang, Lin & Wu, 2017). Kuratko (2007) defined process innovation as idea creation that ultimately leads to an introduction of new products and services in the market. According to Anderson, Bakar and Ahmad (2015) argue that process innovation is one of the ways through which an organization gains competitive advantage. A study by Martin and Namusonge (2014) established that process innovation on the influence of innovation on small and medium established that process innovation, product and technological innovation are critical to the performance of SMEs firms. However, the study did not explain the role of market innovation in enhancing the performance of SMEs companies.

Market innovation deals with the market mix and market selection in order to meet a customer's buying preference (Abdilahi, Hassan & Muhumed, 2017). Continual market innovation needs to be done by focusing more on the needs of

the customer. In this respect, any market innovation has to be directed at meeting customers' demand and satisfaction (Ismail, Omar, Soehod, Senin & Akhtar, 2013).

Market innovation deals with the market mix and market selection in order to meet a customer's buying preference. In addition, market innovation ensures the SMEs are able to tap new markets and ease accessibility of their products and services (Rahman, Yaacob & Radzi, 2016). Market innovation affects sales since it leads to increase in market share or growth which results to high firm performance. In a study by Njogu (2014), on the effect of innovation on the financial performance of small and medium enterprises in Nairobi County, it was established that there is a significant relationship between market innovation and financial performance of manufacturing SMEs in Nairobi County. However, the study did not indicate level of performance brought by market innovation.

Entrepreneurial innovation is seen as a means that aids in promoting opportunities for new businesses to grow in the market. It has been proven to have a significant increase in SMEs as well as expansion of businesses due to implementation of innovation (Rosli & Sidek, 2013). Firms focusing on innovation achieve not only competitiveness but also are able to sustain them for a longer period of time. Innovation is an important tool that provides opportunities to new inventions and building of new markets (Kuhn & Marisck, 2010). Furthermore, due to mounting competition, the capability to innovate and manage the innovation processes is extremely important to SMEs financial growth (Birkinshaw, 2011). Globally, small and medium enterprises growth is viewed as engines of economic growth. Globally, SMEs are responsible for about 75% of employment in any country (Olughor, 2015).

In Malaysia, SMEs strive to innovate to keep the changing business environment (Harry & Mita, 2016). The importance of SMEs growth and their sustainability cannot be overemphasized for Malaysian economic growth and development (Al-Ansari, 2014). The government of Malaysia encourages SMEs firms to innovate by producing new products and services to meet customer demands (Harry & Mita, 2016).

Nigeria, like several developing countries, recognizes the importance of SMEs for economic growth and development. SMEs due to their flexibility and ability to promptly and effectively integrate inventions are more innovative than large firms (Akinwale, Adepoju & Olomu, 2017). Small and medium enterprises in Nigeria engage in innovation activities to enhanced performances (Olughor, 2015). Despite the importance attached to SMEs, the innovativeness of Nigerian SMEs is faced with myriad of challenges including lack of access to appropriate technology and absence of Research and Development to boost the sector (Salisu & Bakar, 2018).

In Kenya, SMEs play a key role in economic development and job creation. In 2016, 80 percent of jobs created were dominated by these enterprises. The Kenya government is thriving to promote the SMEs by providing funds and reducing the startup costs. Small and medium enterprises are considered major driving force of economic growth and source of employment to millions of Kenyans (Subrahmanya et al, 2010). Innovation is key to the growth of SMEs as it provides firms with a competitive edge over other firms in the industry (Martin & Namusonge, 2014). However, most SMEs lack innovation capability to drive sustainable business growth. As a result of the lack of innovation, most SMEs in Kenya are underdeveloped.

Despite the importance of SMEs, most SMEs are faced with challenges related to innovation and growth. According to Beck and Demircuc-Kunt (2006) SME firms still experience various difficulties to boost developmental growth, particularly in financing. Innovation, research and development remain underdeveloped in the SME sector. These challenges have limited their ability, competence, sustainability as well as creating an impact which is negative to the performance of SMEs (Harry & Mita, 2016). Technology change poses a big challenge to the growth of small and medium enterprises. Most of these enterprises are not able to adopt new technology due to its high initial and installation costs. Piatier (1984) also states that lack of government support is a major innovation barrier. Necadova and Scholleová (2011) identified the challenges to innovation as the lack of specialist and skills, high cost for innovation, very long payback periods for investments done, lack of finances, poor or lack of technologically advanced equipment, very high standards and legislation, lack of consumer response, consumers that are resistant to change, high fear of risk, market ignorance and the infrastructure of the business (Reid, 2003).

Conceptual framework

The study sought to establish the effect of innovation on performance of entrepreneurship businesses with a focus on Small and Medium Enterprises in Nairobi City County. The independent variables in this study included product innovation, process innovation and market innovation. The study sought to establish how the independent variables

(product innovation, process innovation and market innovation) influence the dependent variable (performance of SMEs firms). Product innovation measures the level of introduction of new products that has been brought about by the innovative strategies that have been adopted and the significant improvements in the functional or user characteristics of existing traded by SMEs firms. Process Innovation was measured by establishing the extent of significant changes in the techniques, equipment and/or production software used by the small and medium firms. Market innovation describes new ways of marketing that include online marketing, e-business, online promotion and development of new markets.

This relationship may be shown as in Figure 1. In figure 1, product innovation, process innovation and market innovation are predicted to have a positive effect on the performance of SMEs measured using sales, profitability and income growth.

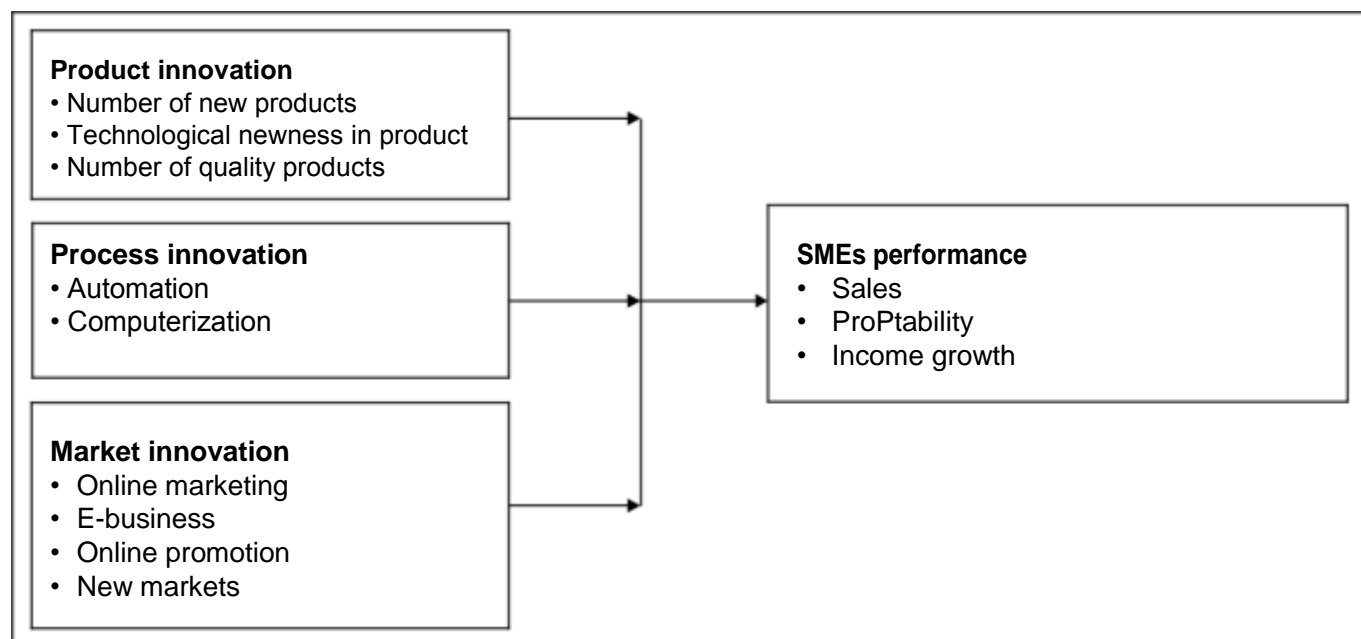


Figure 1: Conceptual framework

In line with the above literature review, the following hypothesis were developed for testing

Hypotheses of the study

The study tested the following hypotheses

- H0₁:** Product innovation does not have a statistically significant effect on performance of Small and Medium Enterprises in Nairobi City County.
- H0₂:** Process innovation does not have a statically significant effect on the performance of Small and Medium Enterprises in Nairobi City County.
- H0₃:** Market innovation does not have a statically significant effect on performance of Small and Medium Enterprises in Nairobi City County.

Research methodology

This research study made use of a descriptive research design which involved collecting data that describes events and then organizes, tabulates, presents, and provides a description for the data. Descriptive studies seek to answer the questions of whom, what, and how. According to Cooper and Schindler (2006), the descriptive design involves collection of data, which is the first step in answering the questions of the current status of the study subject. One of the advantages of descriptive research design is that it is used widely to describe attitude, characteristic, values and behaviour. Descriptive research design is also appropriate since it can be used to explain the relationship or a phenomenon that exists between variables (Beri, 2011).

Target population refers to the entire group of individuals or objects from which the study seeks to generalize its findings (Cooper & Schindler, 2008). The target population of the study was small and medium manufacturing companies SMEs in Nairobi. The Manufacturing SMEs were drawn from five regions in Nairobi City County categorized into East Nairobi, Nairobi West, Northern, Nairobi South and Central Business District. Therefore, stratified random sampling was used to select a sample size of 106 SMEs according to the region. The sample included 29 manufacturing SMEs in East Nairobi, 17 manufacturing SMEs from Nairobi West, 23 manufacturing SMEs from Northern, 22 manufacturing SMEs from Nairobi South and 15 manufacturing SMEs in Central Business District. The units of observation were SMEs managers. A semi structured questionnaires were used to collect primary data from SMEs mangers. The data collected were using inferential analysis. The particular inferential statistics was regression analysis.

The simple regression model is;

$$Y = \beta_0 + \beta_i X_j + \epsilon$$

Where;

In the model, β_0 = the constant term while the coefficient $\beta_i = 1 \dots i$ will be used to measure the sensitivity of the dependent variable (Y) to unit change in the predictor variables $X_{1, \dots, j}$. The error (ϵ) term capture the unexplained variations in the model.

Research ndings and discussions

Research findings and discussions were done in line with the study's research objectives. These were followed by conclusions and recommendations given being based on information generated from findings of the study.

Response Rate

Out of one hundred and six questionnaires (106) which were distributed, eighty-two questionnaires (82) were completed and returned. This represented a response rate of 77.1%. According to Mugenda and Mugenda (2003), a response rate of 50% is considered good and response rate greater than 70% is considered to be very good.

Relationship between product innovation and SMEs performance

Simple regression model was used to establish the relationship between product innovation and SMEs performance. The R^2 of the model was 51.3, an indication that product innovation explained 51.3% of variation in SME performance. Analysis of variance in regression analysis is used to test whether the model is a good fit for the data. The results proof that the model was significant since the p-value is 0.000 which is less than 0.05. The model is equally statistically significance in predicting how product innovation, influence SME performance in Nairobi City County. The F-critical at 5% level of significance was 2.53. Since F-calculated (85.028) is greater than the F-critical, it shows that the model was significant.

The specific model was:

$$\text{SME performance} = 1.567 + .489 \text{ product innovation}$$

The above simple regression equation establishes that effect of product innovation on SME performance in Nairobi City County. The constant 1.567 shows the SME performance when product innovation was rated at zero. The finding also show that there is a positive significant relationship between product innovation and SME performance in Nairobi City County as seen from the coefficient of 0.398 (p-value=0.012). This infers that product innovation leads to the development of new products that meets customer needs. As a result, the performance of SMEs is improved.

Hypothesis testing for product innovation

The hypothesis was tested using the simple linear regression model. The study sought to test the given null hypothesis: H_{o1} . *Product innovation does not have a statistically significant effect on performance of small and medium enterprises in Nairobi City County*

The hypothesis was tested using p-value method. The acceptance/rejection criterion was that, if the p value is greater than the significance level of 0.05, we fail to reject the H_{o1} but if it's less than 0.05 level of significance, then H_{o1} is rejected. Results indicate that the p-value is 0.000. The null hypothesis was therefore rejected. The study therefore adopted the alternative hypothesis that *product innovation has a statistically significant effect on the performance of small and medium enterprises in Nairobi City County*.

Relationship between process innovation and SMEs performance

Simple regression model was used to establish the relationship between process innovation and SMEs performance. The R^2 of the model was 50.4, an indication that process innovation explained 50.4% of variation in SME performance. Analysis of variance in regression analysis is used to test whether the model is a good fit for the data. The results proof that the model was significant since the p-value is 0.000 which is less than 0.05. The model is equally statistically significance in predicting how process innovation, influence SME performance in Nairobi City County. The F-critical at 5% level of significance was 2.53. Since F-calculated (107.972) is greater than the F-critical, it shows that the model was significant.

The specific model was:

$$\text{SME performance} = 1.519 + 0.489 \text{ process innovation}$$

The above simple regression equation establishes that effect of process innovation on SME performance in Nairobi City County. The constant 1.519 shows the SME performance when process innovation was rated zero. The finding also show that there is a positive significant relationship between process innovation and SME performance in Nairobi City County as seen from the coefficient of 0.489 (p-value=0.000). This implies that process innovation increase firm's effectiveness and efficiency.

Hypothesis testing for process innovation

The hypothesis was tested using the simple linear regression model as shown in table 6. The study sought to test the given null hypothesis:

H_{o2} . *Process innovation does not have a statistically significant effect on the performance of small and medium enterprises in Nairobi City County*

The hypothesis was tested using p-value method. The acceptance/rejection criterion was that, if the p value is greater than the significance level of 0.05, we fail to reject the H_{o2} but if it's less than 0.05 level of significance, then H_{o1} is rejected. The null hypothesis was therefore rejected. The study therefore adopted the alternative hypothesis that *process innovation has a statistically significant effect on the performance of small and medium enterprises in Nairobi City County*.

Relationship between market innovation and SMEs performance

Simple regression model was used to establish the relationship between market innovation and SMEs performance. The R^2 of the model was 56.7, an indication that markets innovation explained 50.4% of variation in SME performance. Analysis of variance in regression analysis is used to test whether the model is a good fit for the data. The results proof that the model was significant since the p-value is 0.000 which is less than 0.05. The model is equally statistically significance in predicting how market innovation, influence SME performance in Nairobi City County. The F-critical at 5% level of significance was 2.53. Since F-calculated (110.941) is greater than the F-critical, it shows that the model was significant.

The specific model was:

$$\text{SME performance} = 1.352 + .557 \text{ market innovation}$$

The above simple regression equation establishes that effect of market innovation on SME performance in Nairobi City County. The constant 1.352 shows the SME performance when process innovation was rated zero. The finding also show that there is a positive significant relationship between market innovation and SME performance in Nairobi City County as seen from the coefficient of 0.557 (p-value=0.000). Market innovation affects sales since it leads to increase in market share or growth which results to high firm performance.

Hypothesis testing for market innovation

The hypothesis was tested using the simple linear regression model as shown in table 9. The study sought to test the given null hypothesis:

H₀₃: Market innovation does not have a statistically significant effect on the performance of small and medium enterprises in Nairobi City County

The hypothesis was tested using p-value method. The acceptance/rejection criterion was that, if the p value is greater than the significance level of 0.05, we fail to reject the H₀₃ but if it's less than 0.05 level of significance, then H₀₁ is rejected. The null hypothesis was therefore rejected. The study therefore adopted the alternative hypothesis that *market innovation has a statistically significant effect on the performance of small and medium enterprises in Nairobi City County.*

Discussion of results

The study established that product innovation has positive significant relationship with SME performance in Nairobi City County. It was also noted that product innovation explained 51.3% of variation in SME performance. Product innovations are new products or services created to meet market needs, thus constituting a client-focused kind of innovation. Product innovations help the SMEs to differentiate themselves from their competitors, by providing solutions to unattended needs of the customers. With product innovation, quality of products could be enhanced, which in turn it contributes to firm performance and ultimately to a firm's competitive advantage.

Process innovation had a positive significant relationship with SME performance in Nairobi City County while explain 54.4% of variation in SME performance. Process innovation entails the reengineering process of improving firm's internal operations.

This process involves many aspects of a firm's functions, including research, technical design, manufacturing, management and commercial activities. Process innovation concerns with the creation of or improvement in techniques and the development in process or system. Process innovation results to better ways of production which in essence leads to reduction in cost of production improving the SMEs performance.

The study also noted that there is positive and significant relationship between market innovation and SME performance in Nairobi City County. Market innovation deals with the market mix and market selection in order to meet a customer's needs. In addition, market innovation ensures the SMEs are able to tap new markets and ease accessibility of their products and services. This is particularly done through online marketing, which enables advertise and reach customers across the globe easily. Market innovation affects sales since it leads to increase in market share or growth which results to firm's performance growth.

Conclusion and recommendations

The study established that product innovation significantly influences SME performance in Nairobi City County. The study concluded that improving product design to suit customer needs promotes SME growth. It is recommended that SMEs firm must produce new products and services that are specifically tailored to suit market needs. The new product

design plays a pivotal role in defining the physical form of the product to satisfy customers' needs. The products should also be of high quality to attract regional markets.

It was noted that process innovation significantly influences SME performance in Nairobi City County. The study concludes that process innovation is critical in enhancing SMEs operational activities by streamlining smooth workflow. The study recommends that SMEs should adopt a step by step technique when designing product and services for guaranteed quality.

The study also indicated that market innovation significantly influences SME performance in Nairobi City County. The study concludes that innovations in marketing have a strong positive association with the performance of the SMEs. This is due to the fact that customer needs and preferences keep on changing in order to adapt to the changes. Small and Medium Enterprises need to pursue market innovation strategies that focus on product customization and customer intimacy in delivering their products and services while at the same time cultivating relationships with a small number of captive customers. This market intimacy will help SMEs make up for lack of resources for market intelligence as the customers will be able to offer them information on their current need, any changes in market competition.

References

- Abdilahi, M. H., Hassan, A. A., & Muhumed, M. M. (2017). The Impact of Innovation on Small and Medium Enterprises Performance: Empirical Evidence from Hargeisa, Somaliland. *International Journal of Academic Research in Business and Social Sciences*, 7(8), 14-28.
- Akinwale, Y. O., Adepoju, A. O., & Olomu, M. O. (2017). The impact of technological innovation on SME's profitability in Nigeria. *International Journal of Research, Innovation and Commercialisation*, 1(1), 74-92.
- Al-Ansari, Y., (2014). Innovation and business performance of SMEs: the case of Malaysia. *Education, Business and Society: Contemporary Middle Eastern Issues*, 6(3/4), 162-180.
- Anderson A. Bakar, A. R., & Ahmed, Z. U. (2015). Technology motivation in e-marketing adoption among Malaysian manufacturers. *Journal of Transnational Management*, 20(2), 126-152.
- Beck, T., & Demircug-Kunt, A. (2006). Small and medium-size enterprises: Access to finance as a growth constraint. *Journal of Banking & finance*, 30(11), 2931-2943.
- Beri, H., (2011). Double multiple stream tube model and numerical analysis of vertical axis wind turbine. *Energy and Power Engineering*, 3(03), 262.
- Birkinshaw, J., (2011). The 5 myths of innovation. *MIT Sloan management review*, 4, 1-8.
- Camisón, C., & Villar-López, A. (2010). Organizational innovation as an enabler of technological innovation capabilities and firm performance. *Journal of business research*, 67(1), 2891-2902.
- Cooper, D. R., & Schindler, P. S. (2006). *Marketing research*. New York: McGraw-Hill/Irwin.
- CSBRC, C. S. R. C. (2014). New Innovation Policy. *Journal of Small Business and Enterprise Development*, 14(3), 23.
- Dalberg. (2011). Report on Support to SMEs in Developing countries through financial intermediaries. Retrieved from http://www.eib.org/attachments/dalberg_smebriefing-paper.pdf.
- Haku J. & Wario, R. D. (2014). *Attitudes towards computer usage as predictors of the classroom integration of information and communication technology at a rural South African university* (Doctoral dissertation, University of the Free State).
- Harry B. & Mita B. (2016). Promotion of Innovation and Job Growth in Small and Medium Sized Enterprises in Australia: Evidence and Policy Issues. *Australian Economic Review*, V49 (2):192-199
- Herrera, Z. (2015). Social embeddedness of technology: *Prospective research areas*. *Форсаїм*, 9(1 (eng)).
- Hii, A. N. a. J. (1998). *Innovation and Business Performance: A Literature Review*. United Kingdom: University of Cambridge
- Ismail, K., Omar, W. Z. W., Soehod, K., Senin, A. A., & Akhtar, C. S. (2013). Role of innovation in SMEs performance: A case of Malaysian SMEs. *Mathematical Methods in Engineering and Economics*, 145-149.
- karim Suhag, A., Solangi, S. R., Larik, R. S. A., Lakh, M. K., & Tagar, A. H. (2017). The relationship of innovation with organizational performance. *International Journal of Research-Granthaalayah*, 5(2), 292-306.

- KNBS.(2016). *Kenya GDP 2016*. Nairobi: Kenya Bureau of Statistics.
- KPMG.(2015). *Top 100 SMEs Survey*. Nairobi: Nation Media Group.
- Kuhn, J. S., & Marisck, V. J. (2010). Action learning for strategic innovation in mature organizations: Key cognitive, design and contextual considerations. *Action Learning: Research and Practice*, 2, 27–48.
- Kuratko, D. F. (2007). Entrepreneurial leadership in the 21st century: Guest editor's perspective. *Journal of Leadership & Organizational Studies*, 13(4), 1-11.
- Lee, N., Sameen, H., & Cowling, M. (2015). Access to finance for innovative SMEs since the financial crisis. *Research policy*, 44(2), 370-380.
- Martin, M. S., & Namusonge, M. J. (2014). Influence of Innovation on Small and Medium Enterprise (SMEs) Growth. *International Journal for Innovation Education and Research*, 2(5), 31-41.
- Mbizi, R., Hove, L., Thondhlana, A., & Kakava, N. (2013). Innovation in SMEs: A review of its role to organisational performance and SMEs operations sustainability. *Interdisciplinary Journal of Contemporary Research in Business*, 4(11), 370-389.
- Mugenda, O. M., & Mugenda, A. G. (2003). Research methods. *Quantitative and qualitative approaches*, 46-48.
- Ndesaulwa, A. P., & Kikula, J. (2016). The impact of innovation on performance of small and medium enterprises (SMEs) in Tanzania: A review of empirical evidence. *Journal of Business and Management Sciences*, 4(1), 1-6.
- Necadova, M., & Scholleová, H. (2011). Motives and barriers of innovation behaviour of companies. *Economics & Management*, 16(2), 832-838.
- Njogu, T. W. (2014). The Effect of Innovation on the Financial Performance of Small and Medium Enterprises in Nairobi County, Kenya. *Unpublished MBA Project, University of Nairobi*.
- OECD.(2015). *Innovation in Science Technology and Industry*. International Conference on Innovation for Inclusive Growth, 2.
- Oirere, A. N. (2015). *Effect of Innovation on Financial Performance of Small and Medium Manufacturing Enterprises in Nairobi County*.
- Oke. (2015). The Impact of Innovation Performance. *International Journal of Innovation in SMEs*, 5(1), 13-25
- Olughor, R. J. (2015). Effect of innovation on the performance of SMEs organizations in Nigeria. *Management*, 5(3), 90-95.
- Ong'olo, D., & Awino, S. (2013). *Small and medium enterprises and devolved government system: An assessment of the regulatory and institutional challenges affecting the SMEs Development in Kenya*.
- Piatier, A. (1984). *Barriers to innovation*. London; Dover, NH: F. Pinter.
- Rahman, N. A., Yaacob, Z., & Radzi, R. M. (2016). An overview of technological innovation on SME survival: a conceptual paper. *Procedia-Social and Behavioral Sciences*, 224, 508-515.
- Reid, G. C. (2003). The state of British enterprise: Growth, innovation and competitive advantage in small and medium-sized firms. *International Journal of Industrial Organization*, 11(1), 147–50.
- Republic of Kenya. (2015). *The micro and small enterprises act. Published by the National Council for Law Reporting with the Authority of the Attorney-General*.
- Rosli, M. M., & Sidek, S. (2013). The Impact of Innovation on the Performance of Small and Medium Manufacturing Enterprises: Evidence from Malaysia. *Journal of Innovation Management in Small & Medium Enterprises*, 2013, 1.
- Salisu, Y., & Bakar, L. J. A. (2018). Strategic Alliance and the Performance of SMEs in Developing Economies: The Mediating Role of Innovation Strategy. *Asian Journal of Multidisciplinary Studies*, 6(2), 47-56.
- Saunila.(2014). Innovation Capability and Measurements. *Journal of Innovation and Entrepreneurship*, 4(1), 6 -19.
- Schumpeter, J. A. (1939). *Business cycles* (Vol. 1, pp. 161-74). New York: McGraw-Hill.
- Schumpeter, J.A. (1934). *The theory of economic development*. Cambridge, MA: Harvard University Press.

Subrahmanya, M. B., Mathirajan, M., & Krishnaswamy, K. N. (2010). *Importance of technological innovation for SME growth evidence from India*.

Wanjau, K., & Mkala, M. (2013). Transforming Implementation of Entrepreneurship Education Programme in Technical Training Institutions. *European Journal of Business and Innovation Research* Vol. 1, No. 3, 18-27.

Wernerfelt, B. (1984). A resource based view of the firm. *Strategic management journal*, 5(2), 171-180.

World Bank. (2015, September 1). The World Bank. Retrieved from Small and Medium Enterprises

s)

(SME

Finan

ce:

<http://www.worldbank.org/en/topic/financialsector/brief/smes-finance>

Yu, C., Zhang, Z., Lin, C., & Wu, Y. (2017). Knowledge creation process and sustainable competitive advantage: The role of technological innovation capabilities. *Sustainability*, 9(12), 2280.