

# **STRATEGIC INNOVATION AND PERFORMANCE OF OIL MARKETING FIRMS IN NAIROBI CITY COUNTY, KENYA**

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## **ABSTRACT**

The number of oil marketing firms operating in Nairobi City County have continued to increase in number. This has affected their performance as the oil marketing firms compete with each other. The stiff competition has made the oil marketing firms to either exit the market or develop new strategies such as strategic management to enhance their performance. However it was observed that there is limited empirical studies on the relationship between strategic innovation and performance of the oil marketing firms in Nairobi City County. Therefore the aim of this study was to establish the effect of strategic innovation on the performance of the oil marketing firms in Nairobi City County. The first specific objective was to establish the effect of product innovation on the performance of the oil marketing firms. The second specific objective was to determine the effect of market innovation on the performance of the oil marketing firms. The third specific objective was to investigate the effect of process innovation on the performance of the oil marketing firms. The fourth specific objective was to determine the effect of organizational innovation on the performance of the oil marketing firms. The study was based on knowledge based theory, innovation based theory and resource based theory. The study used a descriptive research design. The target population was the 94 registered oil marketing firms in Nairobi City County. The sample size was 35 oil marketing firms in which the general managers were the respondents. Closed ended questionnaires were used to collect

primary data. Statistical Package for Social Sciences version 23 by IBM was used to analyse the data. Measures of mean and standard deviation were used in descriptive statistics and inferential statistics involved correlation analysis and multiple regression analysis to determine the relationship between the different variables. The study found a positive and significant relationship between product innovation and performance of the oil marketing firms in Nairobi City County, a positive and significant relationship between market innovation and performance of the oil marketing firms in Nairobi City County, a positive and significant relation between process innovation and performance of the oil marketing firms and a positive and significant relationship between organizational innovation and performance of the oil marketing firms in Nairobi City County. Thus the study concluded that strategic innovation has a strong and positive influence on the performance of the oil marketing firms in Nairobi City County. The study recommends the oil marketing firms should make continuous improvements to their products and processes. The oil marketing firms should set aside funds for research and development. The oil marketing firms should reward their employees when they come up with new ideas. The management should support employees working in the teams dealing with different project within the oil marketing firm.

**Key Words:** *strategic innovation, performance, oil marketing firms, Nairobi City County, Kenya*

## **INTRODUCTION**

Innovation has always been considered an important factor in the sustainability and performance of firms operating in competitive industries (Pareto, 2015). Where the product is almost homogenous, the competing firms have to come up with strategies geared towards innovation. This enables the firm to make major or minor changes to their products and thus be able to compete effectively (Herrera, 2015). A firm which is unable to compete will most likely exit the market. This is best seen by the exit of some of the pioneer oil marketing firms in Kenya due to decline in performance as a result of stiff competition by new entrants (Jane, Aosa, Awino, & Njahia, 2018). The new entrants tend to come up with new products so as to attract customers (Deya & Laban, 2019). The firms which remain competitive in an industry are the ones which always remain innovative throughout their lifecycle (Kammerlander, Dessi, Bird, Floris, & Murru, 2015).

The consumers are always on the look-out for new products which can better satisfy their needs when compared to existing products ( Hilman & Kaliappen, 2014). It is thus important for the firm to focus on research and development so as to come up with new products (Pareto, 2015). However the type of innovation strategies will depend on the size of the firm, this is because innovation in small and medium enterprises is mostly characterized with quick decision since it depends on external knowledge about new innovations while in large organizations the process is slow and mostly depends on the research and development unit (Calabro, et al., 2018). The research and development unit thus plays a major role in generation of knowledge in a firm (Love & Roper, 2015).

To ensure sustainability innovation should be a continuous process and the firm should allocate adequate resources both human and physical resources (Prange & Pinho, 2017). Innovation promotes economic growth by making firms more competitive in a global dynamic environment that is why in the United States of America innovation has been placed at the centre of U.S. policies and in Europe it is one of the main pillars of Europe 2020 priorities(Ranchordas, 2015).A study of SMEs in Australia, showed an increase in performance of the SMEs that embraced the close linkage between strategy and innovation throughout the innovation process in the firms (Terziovski, 2010).

## **STATEMENT OF THE PROBLEM**

The number of oil marketing operating in Nairobi City County have continued to increase, this has contributed to increase in competition among the different players in the oil marketing sector and this has resulted to high operating costs (Baffes, Kose, Ohnsurge, & Stocker, 2015). Some oil marketing firms have thus exited the market while others have merged their operations to cut cost (Omai, Njeru, & Memba, 2018).The high operating costs as a result of competition has led to a decline in performance of the oil marketing firms. The decline in performance is best seen in the big three oil marketing firms operating in Nairobi City County. In 2013 the three oil marketing firms had a combined market share of 71% which in a span of 2 years had significantly declined

to 52% as of 2015 (Africa, 2015). The decline in market share as a result of competition has continued to affect the performance of the oil marketing firms despite the firm having long term strategies. Thus there is need for the oil marketing firms to explore different strategies to mitigate the problem of performance of the oil marketing firms. There exists a conceptual and contextual gap in the different studies carried out in Kenya on the performance of the oil marketing firm in Kenya when it comes to the study of the different strategies, such as strategic innovation. Ouma, Omagwa and Ngaba (2018) studied financial innovations and performance of deposit taking SACCOs in Nairobi City County, Kenya. The study concluded that new products have a significant effect on improving the performance of the SACCOs. However the study focused on financial innovation in the SACCOs. There is need to analyse the effect of other variables such as market innovation and process innovation on the performance of the firm in other industries such as oil marketing industry. A study done by Omai, Memba and Njeru (2018) on relationship between strategic innovation and performance of commercial banks in Kenya concluded there is a positive impact between product and process innovation strategies on the performance of the commercial banks. The study mostly focused on commercial banks and did not show a link between market innovation and firm performance. Only three types of innovation strategies: product, process and organizational. A study by Muchiri, Ombui and Iravo (2017), on relationship between strategic responses and the performance of oil marketing companies in Kenya found that the most popular strategies adopted by the oil marketing firms were strategic alliances, strategic differentiation and strategic mergers. The study focused on the three strategies which have been adopted by the oil marketing firms with varied success in the oil marketing firms. Because of the limited empirical studies on strategic innovation in the oil marketing firms in Kenya this therefore forms the basis for the study.

## **GENERAL OBJECTIVE**

The general objective was to establish the effect of strategic innovation and the performance of oil marketing firms in Nairobi City County, Kenya.

## **SPECIFIC OBJECTIVES**

1. To establish the effect of organizational innovation on the performance of oil marketing firms in Nairobi City County, Kenya.
2. To determine the effect of product innovation on the performance of oil marketing firms in Nairobi City County, Kenya.
3. To investigate the effect of process innovation on the performance of oil marketing firms in Nairobi City County, Kenya.
4. To determine the effect of market innovation on the performance of oil marketing firms in Nairobi City County, Kenya.

## **THEORETICAL REVIEW**

### **Knowledge Based Theory**

The knowledge based theory developed from the resource based theory which was developed by Penrose (1959). The theory advocates the view that useful information about the business environment is the most important asset of the organization (Curado & Rua, 2001). The theory further argues that the performance and growth of the firm depends on both tangible and intangible resources such as knowledge (Nikolaos, Vassilis, & Theriou, 2009). Knowledge is thus important since it enables the firm to develop new or improved products which leads to increase in profitability and guarantees sustainable growth (Yi Jia Low & Yen-Chen Ho, 2015). Studies have shown firms which utilize knowledge tend to better adopt to changes in their operating environments (Yan & Chen, 2018). This theory was used to show the foundation of market innovation, product innovation, process innovation and organizational innovation and their influence on performance of the oil marketing firms.

### **Innovation Diffusion Theory**

The theory emerged in 1962, and was further developed by Rodgers (1995). The theory explains how new ideas spread from one firm to another in a given industry (Wani & Wajid, 2015). The innovation diffusion theory has a classification for firms is based on how they adopt and implement the new idea: innovators, adopters, early majority, late majority and laggards (Benhabib, Perla, & Tonneti, 2017). The success of the firm will depend on the approaches it uses when adopting the innovation (Rombacas & Arjoon, 2012). New ideas which offer more advantage, are easy to implement and are commercially viable will be implemented quickly by firms (Sahin, 2006). The innovation diffusion theory is important in since it shows how new ideas move from one firm to another and the impact of their implementation on the performance of the firm (Wani & Wajid, 2015). The theory was used in this study to explain how new ideas about product, processes and market can be identified and implemented by the firm to enhance performance.

### **Resource Based Theory**

Penrose (1959) developed this theory and it states that the firm is a collection of resources (Huang & Cao, 2016). The theory further states that the growth of a firm is limited by its internal resources (Portillo-Trragona, Scarpellini, Monera, Valero-Gil, & Aranda-Uson, 2018). The resource based theory became the most significant approach in strategic management after its introduction in the 1980's (Gaya & Struwig, 2016). Thus the theory mostly focuses on how the firm uses its internal resources efficiently and effectively to enhance its performance (Gardiner & Almarri, 2014). It also advocates for sustainable competitive advantage through the use of internal resources of the firm (Kull, Korschun, & Mena, 2016). The internal resources should not be replicated by other firms so as to guarantee competitive advantage (Hitt, Carnes, & Xu, 2016). The resources will also enable the firm to formulate value creating strategies which causes the firm to have efficiency during production of goods and services. However one major criticism of this theory is that it lacks

practical solutions and carrying out empirical tests is almost impossible (Gardiner & Almarri, 2014). Still the resource based view is the most dominant theory used to analyse the organization's internal environment and how it influences performance of the firm (Napshin & Marchisio, 2017). Knowledge is important in the development of new products which will leads to improvement in performance and also facilitates sustainable growth of the firm (Jimenez-Jimenez & Sanz-Valle, 2010).The resource based theory was important in showing the role of resource allocation on research and development activities in the oil marketing firms and how innovation influences.

## **EMPIRICAL REVIEW**

### **Product Innovation and Performance of Oil Marketing Firms**

Product innovation is the process of developing new goods and services (Deya & Laban, 2019). The development of new or improved products by the firm leads to good performance of the firm and sustainable growth (Silva, Styles, & Lages, 2017). The firm should therefore undertake consistent research and development to promote development of new or improved goods and services by the firm (Karabulut, 2015).

Deya and Laban (2019) did a study on strategic innovation and performance of communication technology firms in Nairobi, Kenya. The study concluded product innovation leads to creation of the demand for the new or improved products and services. This will increase the sales and thus improved performance and increased competitive advantage (Deya & Laban, 2019).

A study by Lilly and Juma (2014), on the influence of strategic innovation and the performance of commercial banks in Kenya. The study concluded that innovation leads to improved performance of the firm and growth and assets (Jerop & Juma, 2014). Bocquet, Le Bas, Mothe and Poussing (2014), did a study on corporate social responsibility and innovation and its impact on firm performance. The study concluded that firms with strategic corporate social responsibility programmes will achieve better growth in both their product and process innovation activities ( Bocquet, Le Bas, Mothe, & Poussing , 2014). Thus the introduction of new products by the firm will lead to sustainable and positive growth of the firms (Varris & Littumen, 2010).

### **Market Innovation and Performance of Oil Marketing Firms**

Marketing innovation refers to activities by the firm aimed at retaining and increasing its market share (Kang, Na , & Jeong, 2019). An increase in the market share of the firm leads to more sales this leads to growth in performance of the firm (Kang, Na , & Jeong, 2019). The firm is thus able to achieve its objectives and satisfy its shareholders. Na, Kang and Jeong (2019), did a study on market innovation and competitive advantage and performance. The study established that to promote sustainable performance and growth, it is important for firms to actively participate in the innovation process by generating and supporting new ideas. (Kang, Na , & Jeong, 2019).

Ungerma, Dedkova and Gurinova (2018), did a study on relationship between market innovation and performance of firms. The study concluded that marketing innovation strategies when implemented in manufacturing firms, will lead to increased competitiveness and profitability (Dedkova, Ungerma, & Gurinova, 2018). Cascio (2011), did a study on the link between firm performance and market innovation. The study concluded that marketing innovation is a key determinant in enhancing the financial performance and growth of the organization (Cascio, 2011).

### **Process Innovation and Performance of Oil Marketing Firms**

Process innovation is the use of new or enhanced techniques for the production of goods and services (Ballot, Fakhfakh, Galia, & Salter, 2015). For the firm to benefit from process innovation, the firm should consider the needs and preferences of the customers and incorporate them into process innovation (Ringim & Dantsoho, 2017). Deya and Laban (2019), did a study on strategic innovations and the performance of information communication technology firms in Nairobi, Kenya. The study concluded for the firms to improve their performance they, should implement process innovation strategies and to align its human resource management strategies with process innovation strategies (Deya & Laban, 2019).

Al-Sa'di, Abdallah and Dahiyat (2017), did a study on the mediating role of product and process innovations on the relationship between knowledge management and operational performance in manufacturing companies in Jordan. The study found that knowledge plays a crucial role in facilitating process innovation in the firm which will eventually lead to better performance of the manufacturing firm (Dahiyat, Abdallah, & Al-Sa'di, 2017). Hilman and Kaliappen (2014), did a study on leadership strategy and process innovation and performance of Malaysia hotel industry. The findings of the study was that, cost leadership significantly affects process innovation which will eventually lead to improvement in profitability of the firm ( Hilman & Kaliappen, 2014).

### **Organizational Innovation and Performance of Oil Marketing Firms**

Organizational innovation refers to a new idea which when implemented causes changes in the methods used by the organization to carry out its activities ( Ahmad , Waheed , Miao , Waheed, & Majeed, 2019). Many studies have argued that for firms to remain competitive, they must engage in organizational innovation (Chen, Wang, & Huang, 2019). Chen, Wang and Huang (2019), did a study on the link between organizational innovation and its influence on technological capabilities and their effect on the firm. The study concluded that firms with better performance were the ones which implemented organizational innovation strategies (Chen, Wang, & Huang, 2019). Bello and Adeoye (2018), did a study on the relationship between organizational innovation, organizational learning and profitability and growth of manufacturing companies in Lagos, Nigeria. The study concluded that organizational innovation has a positive impact on the performance of the firms involved in manufacturing in Nigeria ( Bello & Adeoye , 2018).

Aziz, Razak, Yaacob, Hussin and Razmin (2016), did a research on the influence of technological and organizational innovation on the growth and profitability of the Logistics service providers in

Malaysia. The findings of the study established that organizational innovation did not contribute significantly to the performance of the logistics service providers (Aziz, Razak, Yaacob, Hussin, & Razmin, 2016). However this study contradicted a study by Lee and Song (2015) which concluded that organizational innovation has a positive impact on the profitability of the firm (Lee & Song, 2015).

Overstreet, Hanna, Byrd, Cegielski and Hazen (2013), did a study on the leadership style and organizational innovativeness drive motor carriers towards sustainable performance. The study further concludes leaders who are visionary and goal oriented tend to promote organizational innovation thus enhancing the performance of the firm (Overstreet, Hanna, Byrd, Cegielski, & Hazen, 2013).

## **RESEARCH METHODOLOGY**

Descriptive research design was used in the study since it gives a comprehensive outline of the five key variables in the study. Rahi (2017) is of the view that descriptive research design increases the scope of the study thus more informed conclusions can be made. The target population for this study were the registered oil marketing firms in Nairobi City County, Kenya. The target population was the 94 oil marketing firms in Nairobi City County which have been licenced and approved by the Energy and Petroleum Regulatory Authority as of June 17th 2019. A total of 35 oil marketing firms in Nairobi City County were randomly selected. Furthermore a sample size of 10-15% is considered sufficient for a descriptive study (Mugenda & Mugenda, 2003). The 35 oil marketing firms selected in Nairobi City County represented 37.2 % of the oil firms in the target population. The 37.2% representation was thus sufficient for the study. The 35 general managers in the oil marketing firms were the respondents. Questionnaires were used to collect primary data from the respondents. The questionnaire will consist of five parts. The first section will focus on collection of demographic data. Part two will focus on product innovation, the first study variable. The third section will focus on market innovation. The fourth section will focus on process innovation. The fifth section will focus on organizational innovation. The sixth section will focus on performance. The collected data will be checked Microsoft Office 2013 and transferred to Statistical Package for Social Sciences (SPSS) version 23 for analysis. The resulting descriptive statistics will be summarized in measures of central tendency, frequency tables, graphs and pie-charts. All qualitative data was analysed using content analysis. The multivariate regression model was used to assess the link between the independent and dependent variables. Below is the multivariate regression model which was applied in the study.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4$$

Where: Y = Performance of the Oil Marketing Firms; X<sub>4</sub>= Market Innovation; β<sub>0</sub> = Constant Term; β<sub>1</sub>, β<sub>2</sub>, β<sub>3</sub> and β<sub>4</sub>= Regression coefficient of the predictor variable; X<sub>1</sub>= Product Innovation; X<sub>2</sub>= Organizational Innovation; X<sub>3</sub>= Process Innovation



## **RESEARCH RESULTS**

### **Product Innovation and Performance of the Oil Marketing Firms**

The specific objective was to determine the effect of product innovation on the performance of the oil marketing firms in Nairobi City County. The findings of the study showed that the oil marketing firms have not introduced new products in the last one year. The oil marketing firms have not used product innovation as a tool of enhancing their competitive advantage. The employees of the oil marketing firms have also not been rewarded whenever they come up with new products. However product innovation has been a key pillar in the vision and mission of the oil marketing firms in Nairobi City County. The study found that the oil marketing firms have been making continuous improvements to their products.

### **Market Innovation and Performance of the Oil Marketing Firms**

The specific objective was to determine the effect of market innovation on the performance of the oil marketing firms in Nairobi City County. The findings of the study showed that oil marketing firms have invested on research and development so as to predict what the customer wants. The products offered by the oil marketing firm are of lower price when compared to its competitors. The oil marketing firm has unique and quality products. The oil marketing is aware and has information about its competitors. However the oil marketing firm has not developed an innovative market strategy.

### **Process Innovation and Performance of the Oil Marketing Firms**

The specific objective was to investigate the effect of process innovation on the performance of the oil marketing firms in Nairobi City County. The findings of the study indicated that the oil marketing firms has not been rewarding employees when they make improvements when they carry out their activities. There has not been any improvement when new systems are introduced. However the oil marketing firm has been supporting continuous improvement of its activities. The new systems of workflow management introduced by the firm have led to an increase in sales. The introduction of new systems have also contributed to efficiency in the oil marketing firms.

### **Organizational Innovation and Performance of the Oil Marketing Firms**

The specific objective was to establish the effect of organizational innovation on the performance of the oil marketing firms in Nairobi City County. The findings of the study showed that the teams in the oil marketing firms are supported by the management. However the findings indicated that the employees of the oil marketing firm feel that the management is not supportive of their work. The oil marketing firms do not encourage self-supervisory among the employees. The oil marketing firms don't have an innovative organizational strategy to enhance their competitive advantage. The oil marketing firm also does not encourage the employees to communicate freely.

## INFERENCE STATISTICS

Inferential statistics is used to explain the parameters of the sampled data (Kothari, 2004). The measures of relationships as a form of inferential statistics was used to explain the relationship between the different variables in the study. Correlation analysis is used to analyse the relationship between the dependent variable and the independent variables in the study (Omondi & Hood, 2017). Table 1 presents the values of the correlation analysis.

**Table 1: Correlation Analysis**

		<b>Product Innovation Total</b>	<b>Market Innovation Total</b>	<b>Process Innovation Total</b>	<b>Organizational Innovation Total</b>	<b>Firm Performance Total</b>
<b>Product Innovation Total</b>	Pearson Correlation	1	.474**	.521**	.369*	.763**
	Sig. (2-tailed)		.004	.001	.029	.000
	N	35	35	35	35	35
<b>Market Innovation Total</b>	Pearson Correlation	.474**	1	.703**	.648**	.764**
	Sig. (2-tailed)	.004		.000	.000	.000
	N	35	35	35	35	35
<b>Process Innovation Total</b>	Pearson Correlation	.521**	.703**	1	.658**	.805**
	Sig. (2-tailed)	.001	.000		.000	.000
	N	35	35	35	35	35
<b>Organizational Innovation Total</b>	Pearson Correlation	.369*	.648**	.658**	1	.750**
	Sig. (2-tailed)	.029	.000	.000		.000
	N	35	35	35	35	35
<b>Firm Performance Total</b>	Pearson Correlation	.763**	.764**	.805**	.750**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	35	35	35	35	35

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

\* . Correlation is significant at the 0.05 level (2-tailed).

The results of the correlation analysis showed product innovation and performance of the oil marketing firms are positively correlated and statistically significant as shown by (product innovation and firm performance:  $r = 0.763$ ,  $p < 0.01$ ). This is because performance increases when the oil marketing firm introduces new products (Deya & Laban, 2019). The introduction of new products also promotes sustainable long-term growth (Varris & Littunen, 2010). Market innovation and performance of the oil marketing firms are positively correlated and statistically significant as shown by (market innovation and firm performance:  $r = 0.764$ ,  $p < 0.01$ ). This is because market innovation leads to growth in profitability and increase in market share (Kang, Na, & Jeong, 2019). Process innovation and performance of the oil marketing firms are positively correlated and statistically significant as shown by (process innovation and firm performance:  $r = 0.805$ ,  $p < 0.01$ ). Thus process innovation leads to better performance of the firm (Dahiyat, Abdallah, & Al-Sa'di, 2017). Organizational innovation and performance of the oil marketing firms are positively correlated and statistically correlated as shown by (organizational innovation and firm performance:  $r = 0.750$ ,  $p < 0.01$ ). This is because when the firm implements organizational

innovation strategies the performance of the firm will increase ( Ahmad , Waheed , Miao , Waheed, & Majeed, 2019).

The multiple regression analysis was used to analyse how a change in the independent variables will affect the dependent variables (Kothari, 2004). The study sought to determine whether performance of the oil marketing firms is a function of product innovation, market innovation, process innovation and organizational innovation. The model is used to give an explanation of the changes in the dependent variable due to changes in the independent variables.

**Table 2: Model Summary**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	.950 <sup>a</sup>	.902	.889	1.16898

a. Predictors: (Constant), Organizational Innovation Total, Product Innovation Total, Market Innovation Total, Process Innovation Total

Table 2 shows that product innovation, market innovation, process innovation and organizational innovation determined changes in the performance of the oil marketing firms by 90.2% and other factors not in the study affected performance by 9.8%. There is also a strong positive relationship among the dependent and independent variables as shown by a coefficient of correlation of 0.950.

Analysis of variance is used to measure the significance of the model used in the study. The results are presented in Table 3.

**Table 3: Analysis of Variance**

<b>Model</b>		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
1	Regression	376.890	4	94.222	68.950	.000 <sup>b</sup>
	Residual	40.996	30	1.367		
	Total	417.886	34			

a. Dependent Variable: Firm Performance Total

b. Predictors: (Constant), Organizational Innovation Total, Product Innovation Total, Market Innovation Total, Process Innovation Total

From the results in Table 3 the p-value was 0.000 which was less than 0.05 ( $p < 0.05$ ) and a  $F = 68.950$ , thus the model was found to be statistically significant. From the results the product innovation, market innovation, process innovation and organizational innovation are good predictors of the performance of the oil marketing firms.

Regression coefficients is used to show the relationship between the different variables in the study. The regression coefficients indicate the level and direction of change on the dependent variables as a result of change on the independent variables.

**Table 4: Regression Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.824	.966		2.922	.007
	Product Innovation Total	.396	.062	.433	6.362	.000
	Market Innovation Total	.156	.073	.186	2.136	.041
	Process Innovation Total	.179	.066	.246	2.716	.011
	Organizational Innovation Total	.293	.077	.308	3.807	.001

a. Dependent Variable: Firm Performance Total

From the results in Table 4 the regression equation was:

$$Y = 2.824 + 0.396 X_1 + 0.156 X_2 + 0.179 X_3 + 0.293 X_4$$

Where: Y is the dependent variable which is firm performance of the oil marketing firm;  $\beta_0$  is the constant term which is 2.824;  $\beta_1, \beta_2, \beta_3$  and  $\beta_4$  represent the coefficient of the predictor variables;  $X_1$  is product innovation;  $X_2$  is market innovation;  $X_3$  is process innovation;  $X_4$  is organizational innovation;  $\epsilon$  is the error term

From the results in Table 4 when all other factors (product innovation, market innovation, process innovation and organizational innovation) are held constant, the performance of the oil marketing firms in Nairobi City County will grow by 2.824 units. The relationship between product innovation and performance of the oil marketing firm in Nairobi City County was significant and positive (Beta=0.433, t=6.362, p<0.05). Thus a unit increase in product innovation causes a corresponding increase in performance of the oil marketing firm by 0.396 units when all other factors are kept constant. This is in agreement with (Deya & Laban, 2019) who did a study on strategic innovation and performance of communication firms. The study concluded there is a strong positive relationship between performance and product relationship.

The relationship between market innovation and performance of the oil marketing firms in Nairobi City County was significant and positive (Beta=0.186, t=2.136, p<0.05). Thus a unit increase in market innovation causes a corresponding increase in performance of the oil marketing firm by 0.156 units when all other factors are kept constant. This is in agreement with (Dedkova, Ungerman, & Gurinova, 2018) who did a study on marketing innovation and competitiveness of firms. The study concluded marketing innovation has a strong positive influence on the profitability of the firm.

The relationship between process innovation and performance of the oil marketing firms in Nairobi City County was found to be significant and positive (Beta=0.246, t=2.716, p<0.05). This indicates that a unit increase in process innovation causes an increase in performance of the oil marketing firm by 0.179 units when all other factors are held constant. This is in agreement with (Dahiyat,

Abdallah, & Al-Sa'di, 2017) who did a study on role of product and process innovation and performance of manufacturing firms. The study concluded that process innovation is important in enhancing firm performance.

The relationship between organizational innovation and firm performance of the oil marketing firms in Nairobi City County was found to be significant and positive (Beta=0.308,  $t=3.807$ ,  $p<0.05$ ). This shows that a unit increase in organizational innovation causes an increase in performance of the oil marketing firm by 0.293 units when all other factors are kept constant. This findings are in agreement with (Lee & Song, 2015) who did a study on organizational innovation and firm performance. The study concluded that organizational innovation leads to increase in sales thus growth in profitability.

## **CONCLUSIONS**

From the inferential statistics the study made the following conclusions. The relationship between the different variables used in the study were found to be strongly related. The relationship between product innovation and the performance of the oil marketing firms was found to be positive and significant. Thus product innovation has a strong influence on performance. When the oil marketing firms comes up with new or improved products, this will attract more customers hence increase in sales leading to better performance.

The relationship between market innovation and performance of the oil marketing firm was found to be positive and significant. Market innovation enables the firm to increase its market share thus ensuring better performance in terms of increase in sales.

The relationship between process innovation and performance of the oil marketing firm was found to be positive and significant. Process innovation has a strong influence on performance since it ensures efficiency of processes thus avoiding wastage hence enhancing performance.

The relationship between organizational innovation and performance of the oil marketing firms was found to be significant and positive. Organizational innovation has a strong impact on performance of the oil marketing firm since the organization is able to support the teams working on different projects.

This will lead to efficiency and development of new commercially viable products thus improving performance. The study concluded that strategic innovation has a strong positive influence on the performance of the oil marketing firms in Nairobi City County.

## **RECOMMENDATIONS**

The study concluded that product innovation has a strong and positive impact on the performance of the oil marketing firms in Nairobi City County. The study therefore recommends the oil marketing firms in Nairobi City County should make continuous improvements to their products to enhance their competitive advantage. The study also recommends that the oil marketing firms

in Nairobi City County should reward their employees whenever they develop new products as a way of promoting product innovation in the oil marketing firm.

The study concluded that market innovation has a positive and significant impact on the performance of the oil marketing firms in Nairobi City County. The study therefore recommends that the oil marketing firms in Nairobi City County should set aside funds for research and development to facilitate development of products which are attractive to the customer. The study further recommends that oil marketing firms in Nairobi City County should focus on improving the quality of their products so as to attract and retain customers. A focus on quality will make their products competitive in terms of price.

The study concluded that process innovation has a strong and positive influence on the performance of the oil marketing firms in Nairobi City County. The study therefore recommends that the oil marketing firms should focus on making continuous improvements to its processes. The oil marketing firm should also implement new systems of workflow management since this will reduce wastage and thus increase efficiency in the oil marketing firms in Nairobi City County.

The study concluded that organizational innovation has a strong and significant impact on the performance of oil marketing firms in Nairobi City County. Hence the study recommends that the teams working on various projects in the oil marketing firms should be supported by the management in terms of allocation of resources. This will motivate the employees in the teams to come up with commercially viable products.

## **REFERENCES**

- Africa, P. I. (2015). Petroleum Institute of East Africa Report. Nairobi: Petroleum Insight Magazine.
- Baffes, J., Kose, M., Ohnsurge, F., & Stocker, M. (2015). The Great Plunge in Oil Prices - Causes, Consequences, and Policy Responses. Policy Research Note No.1. .
- Ballot, G., Fakhfakh, F., Galia, F., & Salter, A. (2015). The fateful triangle: Complementarities in performance between product, process and organizational innovation in France and the UK. 217-232. Retrieved June 1, 2019
- Benhabib, J., Perla, J., & Tonneti, C. (2017, January). A summary of Diffusion of Innovations. NBER WORKING PAPER SERIES. Cambridge, United States of America: NBER . Retrieved May 2019, from [www.nber.org/papers/w23095](http://www.nber.org/papers/w23095)
- Calabro, A., Vecchiarini, M., Gast, J., De Massis, A., Campopiano, G., & Kraus, S. (2018). Innovation in Family Firms: A Systematic Literature Review and Guidance for Future Research. *International Journal of Management Reviews*, 1-39. doi:DOI: 10.1111/ijmr.12192
- Cano-Kollmann, M., Cantwell, J., Hannigan, T., Mudambi, R., & Song, J. (2016). Knowledge connectivity: An agenda for innovation research in international business. *Journal of International Business Studies*, 255-262. Retrieved January 1, 2019
- Cascio, R. P. (2011). Marketing Innovation And Firm Performance Research Model, Research Hypotheses, And Managerial Implications. Doctoral Dissertation, 1-181. Florida, United States of America: University of Central Florida .

- Chen, Q., Wang, C.-H., & 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*, 1-27.
- Curado, C., & Rua, M. R. (2001). The Knowledge Based-View Of The Firm: From Theoretical Origins To Future Implications. *Instituto Superior de Economia e Gestao*, 1-18.
- Dahiyat, S., Abdallah, A., & Al-Sa'di, A. (2017). The mediating role of product and process innovations on the relationship between knowledge management and operational performance in manufacturing companies in Jordan. *Business Process Management Journal*, 349-376. doi:10.1108/BPMJ-03-2016-0047
- Deya, J., & Laban, M. O. (2019). Strategic Innovations and the Performance of Information Communication Technology Firms in Nairobi Kenya. *International Journal of Academic Research in Progressive Education and Development*, 1-24. doi:10.6007/IJARPED/v8-i2/5599
- Fadzil, F. H., Al-Matari, E. M., & Al-Swidi, A. K. (2014). The Measurements of Firm Performance's Dimensions. *Asian Journal of Finance & Accounting*, 6(1), 24-49. Retrieved January 1, 2019
- Gardiner, P., & Almarri, K. (2014). Application of resource-based view to project management research: supporters and opponents. 27th IPMA World Congress, 437 – 445. doi:10.1016/j.sbspro.2014.03.049
- Gaya, H., & Struwig, M. (2016). Is Activity-Resource-Based View (ARBV) the New Theory of the Firm for Creating Sources of Sustainable Competitive Advantage in Services Firms? . *Global Journal of Management and Business Research: A Administration and Management* , 16(5). Retrieved May 20, 2019
- Gebauer, H., Worch, H., & Truffer, B. (2012). Absorptive Capacity, Learning Processes and Combinative Capabilities as Determinants of Strategic Innovation. *European Management Journal*, 57-73. Retrieved January 1, 2019
- Gonzalez-Rodriguez, M. R., Caballero, J. L., Martin-Samper, R. C., Koseoglu, M. A., & Okumus, F. (2018). Revisiting the link between business strategy and performance: Evidence from hotels. *International Journal of Hospitality Management*, 21-31. Retrieved January 1, 2019
- Haradhan, M. (2017). Two Criteria for Good Measurements in Research: Validity and Reliability. Munich: Munich Personal RcPEc Archieve.
- Hassan, S. (2015). Overview of the Oil and Gas Sector in Kenya. *MINDSPEAK FORUM* (pp. 1-22). Nairobi: National Oil Corporation of Kenya. Retrieved January 1, 2019
- Herrera, M. E. (2015). Creating Competitive Advantage by Institutionalizing Corporate Social Innovation. *Journal of Business Research*, 1468-1474. Retrieved January 1, 2019
- Hitt, M., Carnes, C., & Xu, K. (2016). A Current View of Resource Based Theory in Operations Management a response to Bromiley and Rau. *Journal of Operation Management*, 107-109. Retrieved January 1, 2019
- Hitt, M., Carnes, C., & Xu, K. (2016). A current view of resource based theory in operations management: A response to Bromiley and Rau. *Journal of Operations Management*, 107-109. Retrieved May 23, 2019
- Huang, M., & Cao, L. (2016). The Relationship between Institutional Capital and Competitive Advantage: Literature Review and Future Research. *Open Journal of Business and Management*, 4, 94-104. Retrieved May 22, 2019, from [www.scirp.org/journal/ojbm](http://www.scirp.org/journal/ojbm) <http://dx.doi.org/10.4236/ojbm.2016.41011>

- Imenda, S. (2017). Is There a Conceptual Difference between Theoretical and Conceptual Framework. 185-195. Retrieved June 1, 2019
- Jane, K. W., Aosa, E., Awino, B. Z., & Njahia, J. (2018). Relationship between Business Process Outsourcing and Performance of Oil and Gas Distribution Firms in Kenya. *Journal of Strategic Management*, 2(1), 71-86. Retrieved January 1, 2019
- Jerop, L., & Juma, D. (2014). Influence Of Strategic Innovation On Performance Of Commercial Banks In Kenya: The Case Of Kenya Commercial Bank In Nairobi County. *European Journal of Business Management*, 1-19. Retrieved January 1, 2019
- Jimenez-Jimenez, D., & Sanz-Valle, R. (2010). Innovation, Organizational Learning and Performance. *Journal of Business Research*, 408-417. Retrieved February 20, 2019
- Kammerlander, N., Dessi, C., Bird, M., Floris, M., & Murru, A. (2015). The Impact of Shared Stories on Family Firm Innovation: A Multicase Study. *Family Business Review*, 28(4), 332–354. Retrieved May 21, 2019
- Kang, S., Na, Y., & Jeong, H. (2019). The Effect of Market Orientation on Performance of Sharing Economy Business: Focusing on Marketing Innovation and Sustainable Competitive Advantage. *MDPI*, 1-19. Retrieved January 2, 2019
- Karabulut, A. (2015). Effect of Innovation Types on Performance of Manufacturing Firms in Turkey. *World Conference on Technology, Innovation and Entrepreneurship*, 1355-1364. Retrieved February 3, 2019
- Kothari, C. (2004). *Research Methodology: Methods and Techniques*. New Delhi: New Age International (P) Ltd.,. Retrieved May 2, 2018
- Kull, A., Korschun, D., & Mena, J. (2016). *Journal of Business Research*. Retrieved May 22, 2019
- Lazar, S. (2016). Determinants Of Firm Performance: Evidence From Romanian Listed Companies. *Review of Economic and Business Studies*, 9(1), 53-69. Retrieved January 1, 2019
- Lee, E., & Song, D. (2015). The effect of shipping knowledge and absorptive capacity on organizational innovation and logistics value. *The International Journal of Logistics Management*, 218-237.
- Love, J., & Roper, S. (2015). SME innovation, exporting and growth: A review of existing evidence. *International Small Business Journal*, 33(1), 28-48. Retrieved January 1, 2019
- Malterud, K., Siersma, V., & Guassora, A. (2016). Sample Size in Qualitative Interview Studies: Guided by Information Power. *SAGE Journals*, 26(13), 1753-1760.
- Muchemi, C., & Moronge, M. (2017, May 18). Effects Of Implementation Of Strategic Innovation On The Performance Of Commercial Banks In Kenya; A Case Study Of Equity Bank. *The Strategic Journal of Change and Business Management*, 605-630. Retrieved January 1, 2019
- Muchiri, L., Ombui, K., & Iravo, M. (2017). Impact of Strategic Responses on the Performance of Oil Marketing Companies in Kenya . *International Journal of Scientific and Research Publications*, 7(10), 660-675. Retrieved January 1, 2019
- Mugenda, O., & Mugenda, A. (2003). *Research Methods: Qualitative and Quantitative Approaches*. Nairobi: ACTS Nairobi. Retrieved 2019
- Muigai, R., & Gitau, S. (2018). Effect of Innovation Strategies on Financial Performance of the Banking Industry in Kenya. *European Journal of Economic and Financial Research*, 3(1), 168-186. Retrieved September 15, 2019



- Napshin, S., & Marchisio, G. (2017). The challenges of teaching strategic management: Including the Institution based view. *International Journal of Management Education*, 470-480. doi:<http://dx.doi.org/10.1016/j.ijme.2017.07.004>
- Nikolaos, T., Vassilis, A., & Theriou, G. (2009). A Theoretical Framework Contrasting the Resource-Based Perspective and the Knowledge-Based View. *European Research Studies*(3), 1-14.
- Nyamboga, N. (2016). Inaugural Oil & Gas Public Lecture Series: “The Oil and Gas Sector in East Africa Region: Challenges and Opportunities” . KPC/UoN 1ST OIL AND GAS PUBLIC LECTURE (pp. 29-30). Nairobi: University of Nairobi (UoN) & Kenya Pipeline Company Ltd (KPC). Retrieved November 2, 2019
- Omagwa, J., Kihoota, E., & Reardon, G. (2017). Oil Retail Pricing and Price Controls: A Case of Oil Marketing Sector in Kenya. *Journal of Economics and Sustainable Development*, 8(2), 114-120. Retrieved January 1, 2019
- Omai, D. M., Njeru, A., & Memba, F. (2018). The Effect Of Commercial Debt Finance On Profitability Of Petroleum Marketing Companies In Kenya. *International Journal of Economics, Commerce and Management*, 6(1), 125-138. Retrieved January 1, 2019
- Omondi, J., & Hood, A. (2017). Strategic Management Factors Affecting Performance of Thermal Power Generation Companies in Kenya. *Finance Management*, 46364-46375. Retrieved September 5, 2019
- Overstreet, R., Hanna, J., Byrd, T., Cegielski, C., & Hazen, B. (2013). Leadership style and organizational innovativeness drive motor carriers toward sustained performance. *The International Journal of Logistics Management* , 247-270 . Retrieved June 1, 2019
- Paretto, P. (2015). From Smith to Schumpeter: A theory of take-off and convergence to sustained growth. *European Economic Review*, 1-26. Retrieved May 20, 2019
- Petroleum, M. o. (2015). Draft National Energy and Petroleum Policy. Nairobi: Ministry of Energy and Petroleum. Retrieved January 1, 2019
- Portillo-Trragona, P., Scarpellini, S., Monera, J., Valero-Gil, J., & Aranda-Uson, A. (2018). Classification and Measurement of the Firms’ Resources and Capabilities Applied to Eco-Innovation Projects from a Resource-Based View Perspective. *Sustainability*, 1-23. doi:10.3390/su10093161
- Prange, C., & Pinho, J. C. (2017). How Personal and Organizational Drivers Impact on SME International Performance: The Mediating Role of Organizational Innovation. *International Business Review*, 1-33. Retrieved January 1, 2019, from <http://dx.do.org/a0.1016/j.ibusrev.2017.04.004>
- Ranchordas, S. (2015). Does Sharing Mean Caring? Regulating Innovation in the Sharing Economy. *Minnesota Journal of Law, Science & Technology*, 16(9), 414-474. Retrieved January 1, 2019
- Ringim, K., & Dantsoho, M. (2017). Process innovation and organisational Performance: The moderating Effects of Information Technology (IT) Personnel Expertise in Nigeria. *Northwest Journal of Social and Management Sciences*, 95-109. Retrieved June 12, 2019
- Rombacas, M., & Arjoon, S. (2012). Using Diffusion of Innovation Theory to Model Customer Loyalty for Internet Banking: A TT Millennial Perspective. *International Journal of Business and Commerce*, 1-14.

- Sahin, I. (2006). Detailed Review Of Rogers' Diffusion Of Innovations Theory and Educational Technology-Related Studies Based On Rogers' Theory. *The Turkish Online Journal of Educational Technology*, 5(2), 1-10. Retrieved May 21, 2019
- Silva, G., Styles, C., & Lages, L. (2017). Breakthrough innovation in international business: The impact of tech-innovation and market-innovation on performance. *International Business Review*, 391-404. Retrieved January 2, 2019
- Singh, S., Darwish, T., & Potocnik, K. (2016). Measuring Organisational Performance A Case for Subjective Measures. *British Journal of Management*, 27(1), 214-224. Retrieved January 1, 2019
- Swanson, R. (2013). *Theory of Building in Applied Disciplines*. San Francisco: Barrett-Koehler Publishers.
- Terziovski, M. (2010). Innovation Practice and its Performance Implications in Small and Medium Enterprises (SMEs) in the Manufacturing Sector: A Resource-Based View. *Strategic Management Journal*, 31(8), 892-902. Retrieved May 22, 2019, from [doi.org/10.1002/smj.841](https://doi.org/10.1002/smj.841)
- Varis, M., & Littunen, H. (2010). *European Journal of Innovation Management*, 13(2), 128-124. Retrieved January 1, 2019
- Varris, M., & Littunen, H. (2010). Types of innovation, sources of information and performance in entrepreneurial SMEs. *European Journal of Innovation and Management*, 128-154.
- Yan, Q., & Chen, C.-S. (2018). Research on the Influence of Firm's Innovation Driven on New Product Innovation Performance. *International Business Research*, 1913-9012. [doi:https://doi.org/10.5539/ibr.v11n8p110](https://doi.org/10.5539/ibr.v11n8p110)
- Yi Jia Low, K., & Yen-Chen Ho, E. (2015). A Knowledge-based Theory of the Multinational Economic Organization. *Long Range Planning*, 1-6. Retrieved May 19, 2019