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EFFECT OF STRATEGIC INNOVATIONS ON ORGANIZATIONAL PERFORMANCE

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ABSTRACT

This study aimed at examining the effect of strategic innovations on organizational performance of manufacturing firms in Kwale County. The study adopted descriptive survey design. The target population of the study comprised105 staff of manufacturing firms in Kwale County. For this study, data was collected using structured questionnaires based on the research questions. Data analysis was done with the help of Statistical Package for Social Science (SPSS) version 23. Descriptive statistics included mean and standard deviations, while inferential statistical analysis used included correlations, and multiple regression analysis. The study findings established that it has a positive and insignificant relationship with the performance of manufacturing firms. Therefore this implied that a unit increase in technological innovation would lead to an increase in organizational performance. On product innovation, regression test indicated a positive and significant effect on the organizational performance. Further, it was observed that marketing innovation had a positive and significant effect on organizational performance. The study concluded that the manufacturing firms carry out benchmark activities with the best technology in the industry. On product innovation, the study concluded that the surveyed manufacturing firms have been producing new products with a view to enhance their performance. Finally the study concluded that the manufacturing firms have invested in automating routine tasks so as to improve efficiency. The study recommend that manufacturing firms should invest in benchmarking with the best technology in the industry so as to cut a niche in the industry without necessarily reinventing the wheel. Further, the study recommends that the manufacturing firms should continuously produce new products and re-engineer existing products so as to prolong the product life cycle. Finally, it is recommended that manufacturing firms should invest in automating routine tasks so as to improve efficiency in the production process.

Key terms: *Organization performance, Process innovation, Product innovation, Strategic innovation, Technology innovation*

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INTRODUCTION

Globally, strategic innovation is an important factor for organization, sustainable competitive advantage and financial performance (Nybakk & Jenssen, 2012). Strategy innovation is seen as capable of creating organisational direction by charting the course of the firm's effort, by focusing the effort through promoting coordination, by providing people with an easy way to understand the organisation and by providing consistency and reducing ambiguity (Mintzberg, Ahlstrand and Lampel, 2011). It has been suggested that in service industries like mobile telecommunication, where competition can move very quickly and new players can enter easily, there is a constant need to think strategically about what is going on (Schmenner, 2013). This appears to be precisely what manufacturing firms, in particular, have begun to do in recent years.

A strategy is a plan that provides an organization with the intended course of action and also serves as a guide when dealing with situations (Lusweti, 2012). A strategy is about creating a niche which will generate sufficient revenue to enable an organization outsmart its competitors. A good strategy is one that actually generates a competitive advantage that differentiates an organisation with its competitors by giving it sustainable edge that is valuable, rare and not easy to imitate (Jin, Hewitt, and Thompson, 2012).Innovation refers to the process of translating an idea or invention into a good or service that creates value or for which customers will pay; it is finding a better way of doing something (Frame & White, 2013). Innovation can be viewed as the application of better solutions that meet new requirements, in-articulated needs, or existing market needs. Innovation is accomplished through having effective products, processes, services, technologies, or ideas that are readily available to markets, governments and society. The term innovation can be defined as something original and, as a consequence, new, that breaks into the market or society (Frankelius, 2011).

Innovativeness is one of the fundamental instruments of growth to enter new markets, to increase the existing market share and to provide the company with a competitive edge (Gunday *etal.*, 2011). Motivated by the increasing competition in global markets, companies have started to hold the significance of innovation, since dynamic technologies and real competition in the global arena quickly wear away the value added of existing services and products. Therefore, inventions entails an crucial element of the company strategies for many reasons like applying for manufacturing processes that are more productive, to improve the market, to look for positive image in the perception of the customer and hence to increase justifiable competitive advantage (Gunday *et al.,* 2013).

The theory on the relationship between strategic innovation and firms' performance has its history to the work of Schumpeter and a large body of research regarding this relationship exists which has found that innovation is a key component for long-term firm success. In addition, several scholars argue that innovative businesses are more successful than others. However, research has also shown that innovation can be risky and that failure is the most likely outcome of product innovations (Cooper, 2010). Furthermore, Cooper (2010) argued that the benefits of innovation vary and may not accrue at all. Other scholars have argued that the relationship can be U-shaped, with high and low levels of innovation likely resulting in the highest performance (Cooper & Brentani, 2011).

Increasing intensity of competition in Kenya's manufacturing industry has negatively affected financial performance of manufacturing firms with most of them incurring huge losses in the recent past (KAM, 2013).For instance in the manufacturing and allied firms, five out of the eight listed firms saw a drop in profits in 2016 even as one – Mumias Sugar-widened its losses. Since tasting profit of Sh2 billion in 2012, losses have set in, widening each year.

Last year, it closed with a loss of Sh6.8 billion. East African Portland Cement lost Sh3 billion or 42 per cent of its profits, to settle at Sh4.13 billion in 2016. This has created the need for firms to adopt innovative organization strategies. Pressure on Kenyan manufacturing companies has also increased due to the changing legal environment requiring the companies to offer more quality products at lowest costs and from customers who expect more and more from the products offered. In order to face the new conditions and situations, manufacturing firms have been forced to continuously search for new ways of offering new products or enhancing existing ones. The best organization strategy that manufacturing firms can adopt to make them profitable is one that is innovative, relates to radical changes and creating of a new vision for a new future where the firm will be a leader instead of being follower of the trends established by others (Dobson, Starkey & Richards, 2013).

Strategic innovations have been found to be critical requirement for the growth and profitability of organizations. It has a considerable impact on corporate performance by producing an improved market position that conveys competitive advantage and superior performance (Walker, 2010). Strategic innovation is an important ingredient for sustained firms' performance. Much weight has been accorded on building innovative institutions and the management of the innovation progression as necessary elements of institutional survival. Firm's strategic innovation level is determined by prescribed indicators or standards of effectiveness, efficiency, and environmental accountability such as productivity, cycle time, regulatory compliance and waste reduction (Brown, 2013).

Strategic innovation is one of the fundamental instruments of growth strategies to enter new markets, to increase the existing market share and to provide the company with a competitive edge (Nybakk & Jenssen, 2012). Motivated by the increasing competition in global markets, companies have started to grasp the importance of strategic innovation, since swiftly changing technologies and severe global competition rapidly erode the value added of existing products and services. Thus, strategic innovations constitute an indispensable component of the corporate strategies for several reasons such as to apply more productive processes, to perform better in the market, to seek positive reputation in customers' perception and as a result to gain sustainable competitive advantage. Innovations provide firms a strategic orientation to overcome the problems they encounter while striving to achieve sustainable competitive advantage (Hitt, Ireland, Camp &Sexton, 2011).

Polder *et al.* (2012) argues that firms bring product innovation to bring efficiency in the business and reflects the nature of strategy adopted by the firm. In highly competitive environment of today, firms have to develop strategies aimed at developing new products according to customer's needs. The aim of product innovation is to attract new customers. Shorter product life cycle of the products forces the firms to adopt innovative strategies aimed at bringing innovation in the products (Duranton & Puga, 2014). Innovative products faces low competition at the time of introduction and that is why it earns high profit (Roberts, 2012). Product innovation is one of the key factors that contribute to success of an organization.

Strategic competitiveness can best be achieved by firms through developing new technologies. Therefore, the only way for a firm to gain a sustainable competitive advantage is invariably upgrade its processes and activities through innovation (Porter, 2011). Even if innovation do not get direct rewards by market, it can be used to generate dynamic capabilities to manage changes in the organization's environment and to gain first-mover advantages or react speedily to market changes (Cohen & Levinthal, 2008). Strategic

innovation can take the form of product, process innovation, process innovation or marketing innovation. Product innovation means introducing the new products/services or brining significant improvement in the existing products/services. For product innovation, the product must either be a new product or significantly improved with respect to its features, intended use, software, user-friendly or components and material (Polder, Leeuwen, Mohnen, and Raymond, 2012). Change in design that brings significant change in the intended use or characteristics of the product is also considered as product innovation (OECD, 2015).

The measures of innovation at the organizational level include financial efficiency, process efficiency, employees' contribution and motivation, as well benefits for customers. Measured values will vary widely between businesses, covering for example new product revenue, spending in research and development, time to market, customer and employee perception & satisfaction, number of patents, additional sales resulting from past innovations (Frankelius, 2012). Strategic innovation is considered as critical requirement for the growth and profitability of organizations. It has a considerable impact on corporate performance by producing an improved market position that conveys competitive advantage and superior performance (Walker, 2013).

Strategic innovation is considered as critical requirement for the growth and profitability of organizations. Extant literature has been carried out on strategic innovation practices (Igartua *et al.*, 2014; Sanchez *et al.*, 2013; Terziovski, 2012). The outcome of the previous studies on impact of strategic innovation on performance has been empirically inconclusive. Previous studies have produced contradicting results regarding the impact of innovations on organization's performance. Some scholars argue that firms possessing the strategic innovations that other firms do not possess will achieve high performance (Han, Kim, &Srivastava, 2013). Scholars asserting the contrary specify that less innovative products are less uncertain and may possess more synergy, leading them to be more successful (Calantone, Chan, & Cui, 2014).

Furthermore, firms in the manufacturing sector in Kenya are operating in increasingly competitive, highly regulated and dynamic market and therefore they have to formulate strategies to ensure their survival. The manufacturing industry environment has of late been affected adversely by the changing operating environment that has seen three out of the four firms in the industry make huge losses. For instance East African Portland Cement lost Sh3 billion or 42 per cent of its profits, to settle at Sh4.13 billion in 2016 (KAM, 2013). In this regard, various studies have been done trying to understand the influence of strategic innovation. For instance, Odhiambo, (2015) studied the innovation strategies at Safaricom Ltd while Gitonga, (2012) studied the innovation processes and the perceived role of the CEO in the telecommunication industry innovations were an important part of firm success. Karanja, (2013) studied the innovation strategies adopted by insurance companies in Kenya and Lusweti, (2012) who studied the innovation strategies adopted by radio stations in Kenya.

However despite many studies having been done in the area of strategic innovations on virtually all sectors of the economy in the world, there is no study specifically done on the manufacturing firms. It is this dearth in literature that has formed the motivation behind this study. Further majority of the reviewed literature on strategic innovations has been biased on service industry and specifically telecommunication sector. Therefore, this study sought to examine the effect of strategic innovation on organizational performance with specific focus on manufacturing firms in Kwale County.

Research Objectives

- To establish the effect of technological innovation on organizational performance of manufacturing firms in Kwale County
- To determine the effect of product innovation on organizational performance of manufacturing firms in Kwale County
- To examine the effect of marketing innovation on organizational performance of manufacturing firms in Kwale County
- To find out the effect of process innovation on organizational performance of manufacturing firms in Kwale County

Research Hypothesis

The study was guided by the following null hypotheses;

$H0_1$: There is no significant effect of technological innovation on organizational performance of manufacturing firms in Kwale County

$H0_2$: There is no significant effect of product innovation on organizational performance of manufacturing firms in Kwale County

$H0_3$: There is no significant effect of marketing innovation on organizational performance of manufacturing firms in Kwale County

$H0_4$: There is no significant effect of process innovation on organizational performance of manufacturing firms in Kwale County

LITERATURE REVIEW

Theoretical Framework

Organizational Control Theory

Organizational control theory is a recent perspective with its main proponent being Sullivan. The theory argues that organization strategic innovation involves learning and knowledge accumulation of a trial and error process, rooted in experimentation that is individual and collective. Collective learning is the capacity of an organization to identify new knowledge and to capture it. The theory states that the nature of the innovation process will push firms to either adapt strategies to establish and develop such a process (innovation strategies) or rather adapt alternative strategies (adaptation strategies) that ensure a firm's survival without the uncertainty attached to the innovation process. For this, the Organizational Control Theory adopts an evolutionary approach to the analysis of innovative processes. Successful innovation can build in firms "retained" capabilities that will allow the firm to survive in the future without innovating. The Organizational Control Theory grasps the complexity of organizations, their environments and the innovation process. For this reason, in such a perspective where uncertainty reigns, it is important to recognize that decision making is not a linear, synchronic process. Far from it, within firms pursuing innovation strategies, decision making is more an art of muddling through where every knowledge holder has to contribute (Bitar, 2012). The theory portrays organizations as complex thus attracting uncertainty in the innovation process. The theory will contribute to establishing the effect of process innovation on firm performance.

Stakeholder Theory

Stakeholder theory can be defined by two key aspects. Stakeholders are persons (or groups) with legitimate interests in the corporation and the interests of all stakeholders are of intrinsic value. This means that a firm's management is required to give simultaneous attention to the legitimate interests of all appropriate stakeholders, both in the establishments of organizational structures and general policies and in case by case decision making. The importance of stakeholder theory is to examine how innovation takes place and how it should be undertaken (Lusweti, 2013). According to the theory, ever increasing pace of change and innovation and the increasing turbulence of the environment make it practically impossible for firms to innovate alone (Walker, 2012). As a result, there is clear need for firms to view themselves as a node in a network of

firms that enable it to continually innovate. Stakeholder theory's contribution to the field of strategy is a richer perspective on the nature of the firm, ways managers think about strategic innovation and how board members think about the interests of corporate constituencies.

Stakeholder theory recognizes that managers should acknowledge the interests of different stakeholders and should attempt to respond to them within a mutually supportive framework; management should accept the legitimacy of stakeholders as well as other stakeholders should accept this legitimacy too. Strategic innovations ought to be adopted by the management and should be done to the best interest of all stakeholders and strategy implementation and formulation should be as consultative as possible (Bitar, 2012). In relation to the topic, it requires the organization's management to recognize the interest of all stakeholders who include the shareholders and the employees. Stakeholders interests are maximised when the when the company makes profits and overall organization performance being good. To maximise the interests of various stakeholders, the theory view strategic innovations to be important. This theory will help explain how strategic innovation adoption improves firm performance.

Agency Theory

Agency theory is a management approach where one individual (the agent) acts on behalf of another (the principal) and is supposed to advance the principal's goals (Judge *et al.*, 2010). The agent therefore advances both the principals' interests and his own interests in the organization. Agency theory explains the relationship between strategies adopted by the managers and relates them to overall organization objectives and firms performance. The theory was propounded by Jensen and Meckling (1976) and views the firm as an artificial construct which serve as a nexus of contracts between individuals. The theory argues that one of the most important contracts a firm engages in is the residual claim (equity) of the shareholders on the firm's assets and cash flows.

In relevance to organization's strategic innovation and financial returns, the managers will try to adopt a strategy that maximizes their returns and not those of principals (shareholders). Since most managers remunerations are based on the financial performance of their firms, they are likely to adopt a strategic plans that will ensure that the firms continuously innovative with intention of achieving competitive advantage and increased profits. However, if the returns of the managers does not relate to the firms profitability, the company is less likely to adopt an innovative strategy. The theory will explain the motive behind managers adopting strategies that maximize their returns.

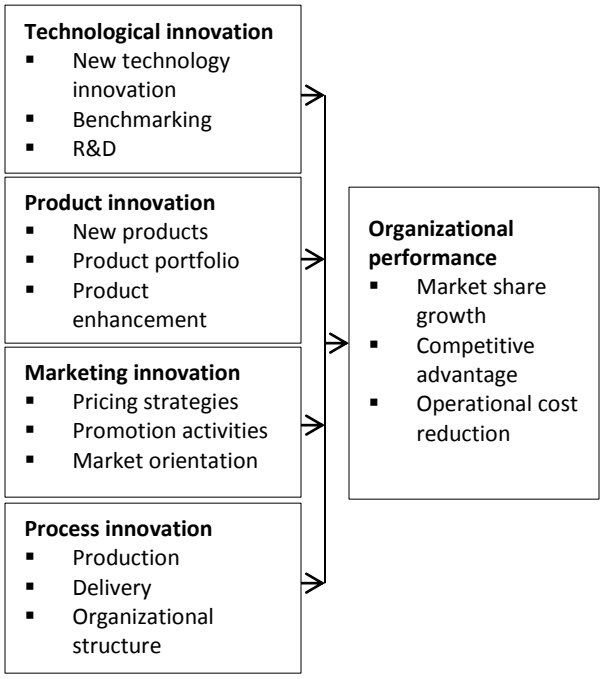
Technology Acceptance Model

Basing on the theory of reasoned Action, Davis (1986) established the Technology Acceptance Model that deals particularly with the forecast of the suitability of an information system. The aim of this is to forecast the suitability of an instrument and identification of the changes which should be included into to the system so as to make it accepted by the users. This model proposes that the acceptance of an information system is solely dependent on two major factors: apparent usefulness and apparent easy usage. Perceived helpfulness can be termed as being the extent to which an individual believes that usage of a system will better the performance. Perceived easy usage is the extent to which an individual believes that the operation of the system will bear no fruits. Many factorial studies shows that perceived importance and perceived easy usage can be seen as two separate measurements (Swanson, 2012).

This model is applicable to this study in that, it assumes that the application of an information system is dependent on behavioral aim and the behavioral intention is dependent on the individual attitude towards the introduction of the system and

hence affects the adoption of an innovation. According to Davis, the approach of a person is not the only an aspect that determines the use of system, but is also founded on the effect which may have on the Apart from Technology Acceptance Model (TAM) a positive relationship between perceived importance and perceived easy usage. With two systems giving the same characteristics, a client will find more beneficial the one that he discovers it is easier to use (Dillon & Morris, 2013). It is therefore important to note that the study presented by Davis (2009) to authenticate his model, proves that the relationship between the need to apply an information system and perceived importance is stronger than perceived easy usage. The theory supports the variable on the effect of technological innovation on firm performance.

Conceptual Framework



Independent variables **Dependent variable**

Figure 1: Conceptual framework

Source: Author (2019)

Review of variables

Technological innovation

The success of most firms majorly depends on efficient operational processes which result from more investments in technologies that enhance firm internal efficiencies (Cerolli, 2014). Thus technological innovation strategies adopted by firms should help to identify and explore new revenue opportunities and improve customer satisfaction through reliable delivery. Technological innovation strategies involve the adoption of systems such as ERP systems that provide capabilities that support and enhance processes associated with producing. The systems should also help improve firm activities by automating routine tasks such as order management (Valacich & Schneider, 2012).

Firms are separated according to their technology capabilities. Vega-Jurado, GutierrezGracia, Fernandez-de-Lucio, and Manjarres-Henriquez (2012), who consider innovation a potential source of competitive advantage, emphasize that TC typically measured with research and development is a determinant of innovation and performance. Technological developments may change market dynamics, weaken the positional superiority of established firms and enable new firms to successfully enter the market (Han *et al.*, 2012). Firms have to stay agile to collect customer and competition information and to make use of the opportunities made available by new technologies so that they can survive and compete with other firms in these types of markets (Li & Calantone, 2013). Although there are contradictory findings in the literature regarding the impact of TC on firms' learning strategies and types of innovation (Zhou & Wu, 2010), the general opinion on this topic is that TC has an indirect or direct impact on new product development (Moorman & Slotegraaf, 2014).

Product innovation

Product innovation strategies involve the presentation of a decent or an administration that is

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new to the market or has been altogether enhanced in connection to its attributes or employments. These incorporate critical enhancements in mechanical determinations, segments and materials, joined, or ease of use among different capacities (Tavassoli & Karlsson, 2015). Product innovation strategies are majorly driven by advance in technologies, ever changing customer taste and preferences, shortening item cycles and expanding rivalry. A study by Slivko (2013) on advancement Systems among German Firms that included three development procedures: refraining from advancement, presentation of items that are known in the market yet new to the firm (impersonation) or presenting market oddities (development) found that IP assurance strategy and antitrust approach, can strengthen each other in advancing advancement since they increase firms' incentives to introduce market novelties.

Marketing innovation

Marketing innovation strategies involve the implementation of new marketing methods and models that would significantly change the product design or packaging, product placement or pricing (Tavassoli & Karlsson, 2015). Marketing innovation strategies are targeted at meeting the customer's needs and opening up new markets or giving the firm's products a new position in the market to increase the firm sales hence income. Common marketing innovation strategies include; market pricing strategies, product offers, design properties, product placements strategies and promotion activities. According to Hong (2015), innovative marketing strategies improve brand relationship and experiences with customers thus exert their influence on brand marketing efforts thus allow brands to be customer centric.

A study by Lusweti (2012) on development procedures embraced by radio stations in Kenya and found that the reception of systems (whether cooperative or aggressive techniques) is in this manner vital in overseeing advancement and in making the development happen and that advancement methodologies are extremely vital in any business henceforth they ought to be set up at any cost since it helps the association to understand their targets.

Process innovation

Process innovation is about improving the production and logistic methods significantly or bringing significant improvements in the supporting activities such as purchasing, accounting, and maintenance and computing. Process innovation includes bringing significant improvement in the equipment, technology and software of the production or delivery method. Firms bring novelties in the production and delivery method to bring efficiency in the business. The new method must be at least new to the organization and organization had never implemented it before. The firm can develop new process either by itself or with the help of another firm (Polder *et al.*, 2012).

Process innovation also includes execution of new or essentially enhanced creation or conveyance techniques. Basic process advancement procedures incorporate changes it strategies or hardware (Tavassoli & Karlsson, 2015). Forms in a firm can be intended to diminishing unit expenses of generation or conveyance to increment/enhance efficiency or administration conveyance quality. Prepare advancement methodologies are formed by the securing of epitomized information which goes about as a key system for countering the association's frail inner abilities. Process innovation strategies may include; adopting the supply chain concept, Enterprise engaged consultants from Deloitte international and implementation of the global reference model (GRM).

Organizational Performance

Organization performance is a multidimensional construct operationalized by a variety of financial measures (which include sales, value of net assets

and profit) and non-financial measures which include number of workers, market share and overall customer satisfaction. In addition, factors such as overall satisfaction and nonfinancial goals of the firms are also very important in evaluating performance. Organization performance cannot be adequately determined without considering both financial and nonfinancial measures (Zahra, 2012).Firms' performance relate to the efficiency and effectiveness of the firm. It is a contextual concept associated with the phenomenon being studied. Profitability is the main financial measure used to determine organization performance since it is an indicator of both efficiency and effectiveness of organization operations (Bora & Bulut, 20013).

METHODOLOGY

Descriptive survey research was utilized as a part of this study. A descriptive review outline is the gathering of data from a typical gathering through meetings or the use of surveys to a delegate test of that gathering. Quantitative methods of data analysis was used to analyze the data. Quantitative information was analyzed through statistical procedures. Statistical analyses cover a broad range of techniques, from simple procedures that we all use regularly (e.g., computing an average) to complex and sophisticated methods. The statistical package for social sciences, SPSS (version 23.0) was used for data analysis.

The regression model used was as follows:

$Y=\alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$

Where:

Y is weight for organizational performance
α is regression constant
β is regression coefficients
$\mathbf{X_1}$ is weight for technological innovation
$\mathbf{X_2}$ is weight for product innovation
$\mathbf{X_3}$ is weight for marketing innovation
$\mathbf{X_4}$ is weight for process innovation
εis error term

RESEARCH FINDINGS

Technological Innovation

This section sought to achieve the first objective of the study which was to examine effect of technological innovation adopted by manufacturing firms in Kwale County. The results from the collected responses were analysed based on means and their standard deviations to show the variability of the individual responses from the overall mean of the responses per each aspect. Findings on technological innovation were as presented in table 1 below;

Table 1: Technological innovation

	Mean	Std. Deviation
The firm benchmarks with the best technology in the industry	3.97	1.494
The firm has adopted new systems such as ERP	3.81	1.495
Increasing investment in innovative technology has been embraced by the firm	3.97	1.309
The firm has research and development unit which is autonomous	2.45	.816

Results in Table 1 indicated that majority of respondents agreed that the firm benchmarks with the best technology in the industry (mean = 3.97; std. dev. = 1.494). Further, the respondents were indifferent on whether the firm had adopted new systems such as ERP (mean = 3.81), this implies that the surveyed manufacturing firms shunned implementation of costly systems such as ERP. The study established that increasing investment in innovative technology has been embraced by the firm as indicated by a mean of 3.97 and std. deviation of 1.309. However, majority of the respondents disagreed that the firm has research and

development unit which is autonomous (mean = 2.45; std. dev. = .816).

The study findings are supported by Odhiambo (2013) who evaluated innovation strategies adopted by Standard Chartered Bank and found that Standard Chartered Bank just like most banks in Kenya adopted Technological Innovation Strategies to help in the advent of globalization and to enhance their methods for working together keeping in mind the end goal to draw in and keep up existing clients.

Product Innovation

The effect of product innovation was measured by a likert scale where the respondents rated their organizations by indicating the extent to which they agreed to a set of statements. The responses were coded using a scale of 1 to 5 where 1 was strongly disagree, 2 disagree, 3, neutral, 4 agree and 5 strongly disagree. The findings were presented in table 2 below.

Table 2: Product innovation

	Mean	Std. Deviation
New products have been produced by the firm	4.06	1.303
The firm has invested on increasing product portfolio	4.45	1.224
The organization is highly committed to development of new ideas and investing in the same	4.13	1.418
Organization has invested in technology to support firm strategy	4.12	1.423

As shown in the table 2, the respondents agreed that new products have been produced by the firm. This was according to the mean of 4.06 with a standard deviation of 1.303. The findings were supported by Ettlie and Reza (2012) who established that new product development has positive impact on the performance of the firm. The respondents also agreed that the firm has invested on increasing product portfolio as shown by a mean of 4.45 and a standard deviation of 1.224. Further, the respondents agreed to a strong extent that the organization is highly committed to development of new ideas and investing in the same. This was shown by a mean of 4.13 with a standard deviation of 1.418. Also the respondents agreed that the organization had invested in technology to support firm strategy. This was shown by a mean of 4.12 with a standard deviation of 1.423.

The findings above resonate with the study by Tavassoli and Karlsson (2015) who analyzed innovation strategies of firms in Sweden for the period somewhere around 2002 and 2012 utilizing sixteen advancement techniques, which were made out of Schumpeterian 4 sorts of developments (process, item, advertising, and authoritative) in addition to different blends of the four sorts and found that organizations are not homogenous in picking advancement systems; rather, they have an extensive variety of inclinations with regards to advancement procedure.

Marketing Innovation

The respondents were requested to rate the execution of marketing innovation by their manufacturing firms. The methods recorded were deciphered as follows: 1 strongly disagree, 2 disagree, 3, neutral, 4 agree and 5 strongly disagree. The findings are presented in table 3 below.

Table 3: Marketing innovation

	Mean	Std. Deviation
Company has a feedback channel that captures customer complaints which are used in service improvement	4.12	1.279
The company has a marketing strategy that makes customers feel a part of the company through social responsibility and promotions	4.17	1.343
The firm uses innovative and mix of target market	3.94	1.313
The firm oftenly introduces innovative product offers	3.99	1.294

As shown in the table 3, the respondents agreed that the firm had a feedback channel that captures customer complaints which are used in service improvement. This had a mean of 4.12 with a standard deviation of 1.279. The company had a marketing strategy that makes customers feel a part of the company through social responsibility and promotions. This was indicated by a mean of 4.17 and a standard deviation of 1.343. The findings agreed with Hong (2015), who asserted that innovative marketing strategies improve brand relationship and experiences with customers thus exert their influence on brand marketing efforts thus allow brands to be customer centric.Further, respondents agreed that the firms uses innovative and mix of target market as indicated by a mean of 3.94 and standard deviation of 1.313. Also respondents agreed that the firm oftenly introduces innovative product offers (mean = 3.99). The findings were supported by Aswani, (2013) who established that strategic innovation in universities is greatly done by the universities continuously engaging in branding and marketing activities. Also, the study results revealed that there was a strong positive relationship between marketing innovation and the performance of the public universities.

Process Innovation

The study also sought to establish the extent to which process innovation affects performance of manufacturing in Kwale County. Analysis of the data was done using means and standard deviations. The means recorded were interpreted as follows: 1 strongly disagree, 2 disagree, 3, neutral, 4 agree and 5 strongly disagree. The findings are presented in table 4 below;

Table 4: Process innovation

	Mean	Std. Deviation
The firm has invested in automating routine tasks	4.10	1.447
Process innovation affects firm performance positively	3.83	1.623
The firm has adopted business process re-engineering	4.15	1.339
The firm's organizational structures create enabling environment for innovations	3.63	1.530

Findings as presented in table 4 showed that the firm has invested in automating routine tasks. This was as indicated by a mean of 4.10 and a standard deviation of 1.447. Findings also showed respondents agreed that the process innovation affects firm performance positively (3.83) and that the firm had adopted business process re-engineering (4.15). However, majority of respondents were indifferent with the statement that the firm's organizational structures create enabling environment for innovations (mean = 3.63; std. dev. = 1.530). The findings above resonate with the work of Simiyu (2013) who concluded that the process innovation strategies adopted by the banks were philosophy, vision, performance

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evaluation, shared commitment by everyone in the organization and clear communication & communication channels.

Organizational Performance

In this section, the study sought to establish the effect of strategic innovation on performance of manufacturing firms in Kwale County. The mean scores recorded were interpreted as follows: 1 strongly disagree, 2 disagree, 3, neutral, 4 agree and 5 strongly disagree. The findings are presented in table 5 below;

Table 5: Organizational performance

	Mean	Std. Deviation
Organization has adopted an innovative strategy so as to develop competitive advantage	4.18	1.277
The firm operational cost has reduced due to innovation	4.01	1.391
The firm produces quality output due to strategic innovation	3.92	1.090
The firm market share has grown over time	3.96	1.200

Concerning the dependent variable, organizational performance, respondents were asked to indicate whether the firms have adopted an innovative strategy so as to develop competitive advantage where majority of the respondents agreed (mean = 4.18). They were further asked whether the firm operational cost has reduced due to strategic innovations and majority (mean = 4.01) agreed with the statement. Further respondents agreed that the firm produces quality output due to strategic innovation (mean = 3.92) and that the firm market share has grown over time (mean = 3.96).

The findings were in agreement with the proposition by Lusweti *et al.* (2012) who carried out a study on the innovation strategies adopted by radio stations in Kenya. The study established that innovation strategies are very essential in any business and hence they should be put in place at any cost since it helps the organization to realize their objectives.

Table 6: Bivariate correlation analysis

		Tech Innovation	Product innovation	Mkt innovation	Process innovation	Org performance
Tech Innovation	Pearson Correlation	1				
	Sig. (1-tailed)					
Product innovation	Pearson Correlation	.677**	1			
	Sig. (1-tailed)	.000				
Mkt innovation	Pearson Correlation	.642**	.690**	1		
	Sig. (1-tailed)	.000	.000			
Process innovation	Pearson Correlation	.637**	.523**	.514**	1	
	Sig. (1-tailed)	.000	.000	.000		
Org performance	Pearson Correlation	.429**	.504**	.523**	.311**	1
	Sig. (1-tailed)	.000	.000	.000	.003	
	N	78	78	78	78	78

**. Correlation is significant at the 0.01 level (1-tailed).

Regression Analysis

Regression analysis was used to explain the relationship between strategic innovation and the performance of manufacturing firms in Kwale County. The variables which were measured on a nominal scale were quantified using dummy variable to obtain scores for regression analysis. The results obtained are as discussed.

Table 7: Model summary results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.561[a]	.315	.277	2.388

a. Predictors: (Constant), Process innovation, Marketing innovation, Product innovation, Technological Innovation

Table 8: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	191.186	4	47.796	8.380	.000[b]
	Residual	416.353	73	5.703		
	Total	607.538	77			

a. Dependent Variable: Organizational performance

b. Predictors: (Constant), Process innovation, Marketing innovation, Product innovation, Technological Innovation

Table 9: Regression Coefficients

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	8.636	1.669		5.173	.000
	Tech Innovation	.072	.148	.075	.489	.626
	Product innovation	.202	.120	.250	1.688	.046
	Mkt innovation	.216	.097	.318	2.224	.029
	Process innovation	.130	.028	.030	.236	.814

a. Dependent Variable: Organizational performance

DISCUSSION OF KEY FINDINGS

The study sought to examine the effect of strategic innovations on organizational performance of manufacturing firms in Kwale County. On technological innovations, the study established that it has a positive and insignificant relationship with the performance of manufacturing firms (β=0.072, P=0.626, P>0.05). Therefore this implies that a unit increase in technological innovation would lead to an increase in organizational performance by a coefficient factor of 0.072. Further, hypothesis testing conducted at 95% confidence level on technological innovation confirmed it had insignificant effect on the dependent variable, hence the Fail to Reject null hypothesis.

On product innovation, regression test indicated a positive and significant effect on the organizational performance (β=0.202, P=0.046, P<0.05). This gives evidence of a significant relationship between product innovation and performance of manufacturing firms. Hypothesis testing conducted at 95% confidence level on technological innovation confirmed its significant effect on the dependent variable, hence reject null hypothesis.

Further, it was observed that marketing innovation had a positive and significant effect on organizational performance (β=0.216, P=0.029). These findings give evidence of a significant relationship between marketing innovation and performance of manufacturing firms in Kwale County. Hypothesis testing was also conducted on this variable at 95% confidence level and it was found out that marketing innovation had a statistical significant effect on performance of manufacturing firms, hence null hypothesis is rejected.

Finally, it was established that process innovation had a positive but insignificant effect on organizational performance of manufacturing firms (β=0.130,

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P=0.814). The findings indicated a beta of 0.130 indicating that process innovation has a moderate effect on organizational performance. Conducting Hypothesis testing on this variable at 95% confidence interval concluded that process innovation had statistically insignificant effect on performance of manufacturing firms, hence Fail to Reject Null hypothesis.

The findings of this study both corroborate and contradict existing literature. For instance, Tidd (2010) observes that a firm's ability to innovate is increasingly viewed as the single most important factor in developing and sustaining a competitive advantage. Further, Walker (2011) observes that innovation strategies have been empirically linked with superior performance since it enhances global competitiveness, overall productivity and value maximization of the firm. According to Karanja (2009), companies with strong technology-enabled innovation strategies are more likely to secure competitive advantage and create superior shareholder value. A good technology-enabled innovation strategy clearly indicates the reasons why these companies are successful. On the other hand, Easterby-Smith (2008) observes that literature has found it difficult to establish the link between the innovation strategies and company performance.

Table 10: Hypothesis results

Hypothesis Statement	Test Model	Results
Technological innovation	$Y= \beta_1X_1+ Ɛ$	P>0.05 Fail to reject
Product innovation	$Y= \beta_2X_2+ Ɛ$	P<0.05 Reject
Marketing innovation	$Y= \beta_3X_3+ Ɛ$	P<0.05 Reject
Process innovation	$Y= \beta_4X_4+ Ɛ$	P>0.05 Fail to reject

CONCLUSSIONS

The study concluded that the manufacturing firms carry out benchmark activities with the best technology in the industry. Further, the study concludes that due to cost implications, the manufacturing firms have not acquired company wide systems like ERP, this implied that the surveyed manufacturing firms shunned implementation of costly systems such as ERP. The study further concluded that increasing investment in innovative technology has been embraced by the firm. However, majority of the respondents disagreed that the firm has research and development unit which is autonomous.

On product innovation, the study concluded that the surveyed manufacturing firms have been producing new products with a view to enhance their performance. Further it is concluded that the manufacturing firms have invested on increasing product portfolio so as to spread the market risk and that the firms are highly committed to development of new ideas and investing in the same. Finally, the study concludes that the manufacturing firms have greatly invested in technology to support firm strategy.

On marketing innovation, the study concluded that the manufacturing firms have a feedback channel that captures customer complaints which are used in service improvement. Further it is concluded that the company has a marketing strategy that makes customers feel a part of the company through social responsibility and promotions. Innovative marketing strategies improve brand relationship and experiences with customers thus exert their influence on brand marketing efforts thus allow brands to be customer centric. The surveyed firms use innovative and mix of target market to improve performance.

Finally the study concluded that the manufacturing firms have invested in automating routine tasks so as to improve efficiency. The study further concludes that the process innovation affects firm performance

positively and that the firms have adopted business process re-engineering. It is concluded that the existing organizational structures of the manufacturing firms impede smooth environment for innovations.

RECOMMENDATIONS

Based on the findings of this study and the conclusions drawn, the following recommendations were made.

- The manufacturing firms should invest in benchmarking with the best technology in the industry so as to cut a niche in the industry without necessarily reinventing the wheel. Further it is recommended that the manufacturing firms should make use of cloud computing services to use ERP without necessarily purchasing the software. This will minimize cost and improve performance. The study recommends that the manufacturing firms should invest in innovative technology so as to survive intense competition currently experienced in the manufacturing sector.
- Further the study recommends that the manufacturing firms should continuously produce new products and re-engineer existing products so as to prolong the product life cycle. This will increase the firms' returns. Also manufacturing firms should invest on increasing product portfolio so as to spread the market risk and enhance performance. Finally, the study recommends that manufacturing firms should zealously invest in technology so as to support firm strategy.
- The study recommends that manufacturing firms should have a feedback channel that captures customer complaints and effectively use the complaints to improve service and products. Further the study recommends that the firms should design a marketing strategy that makes customers feel a part of the company through social responsibility and promotions.
- Finally, it is recommended that manufacturing firms should invest in automating routine tasks so as to improve efficiency in the production process. The study further recommends that the firms should adopt business process re-engineering and embark on minimizing waste in the manufacturing process. This will reduce production costs and improve overall performance. The manufacturing firms should restructure organizational structures to enhance inter-functional team working as it will provide smooth environment for innovations.

Recommendations for Further Research

The research highlighted various relevant issues that the study did not investigate, but which might be important for further research on application of strategic innovation to create a sustainable competitive advantage. First, the study only studied manufacturing firms in Kwale County. There is need to carry out further study on other industries in Kenya like telecommunication, banking among others and confirm whether the results will be similar.

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