STRATEGIC OPERATIONS MANAGEMENT AND PERFORMANCE OF PETROLEUM MARKETING FIRMS IN KENYA

Moderated by Ernest Akelo

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BY

LAWRENCE OSODO OLOO

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DECLARATION

I declare that this research project paper is my original work and confirm that it has never been presented to any university, college, or institution of higher learning for the award of a Degree, Diploma, certificate, or any other academic purpose or examination.

Signature.....  .....Date….....8th February, 2023…….

LAWRENCE O. OLOO

(Reg: D61/75959/2012)

I confirm that, as the University Supervisor, I have approved this research proposal to be presented for examination.

Signature……  …….Date……12th February, 2023……

Dr. Peterson Obara Magutu

Senior Lecturer

Faculty of Business & Management Science

Department of Management Science and Project Planning

DEDICATION

I dedicate this project to my loving children for always being with me throughout my academic journey. I also dedicate to my family for their constant encouragement and patience in see me go through my academic struggle to realize my long-cherished academic dream.

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Special thanks go to my supervisor Dr. Peterson Obara Magutu for the guidance, insight and encouragement in the writing and compilation of this study. Your invaluable support and patience throughout this journey have been incredible and are appreciated from the bottom of my heart. To my classmates and friends, without whose interest and cooperation I could not have completed this study. I thank you for supporting this initiative and affording me your time and sharing your experiences. Finally, I thank my family for instilling in me unquestionable values and morals, thank you for your love, and guidance, and for always believing in me throughout the year.

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LIST OF ABBREVIATIONS

BSC	Balance Score Card
CoPS	Complex Product Systems
DCT	Dynamic Capability Theory
EPPRA	Energy and Petroleum Regulatory Authority
FMCG	Fast-Moving Consumer Goods
KPC	Kenya Pipeline Company
LPG	Liquefied Petroleum Gas
MBDC	Multiple-Bounded Discrete Choice
NOCK	National Oil Corporation Of Kenya
RBV	Resource-Based View
SPSS	Statistical Package for Social Sciences
VRIN	Valuable, Rare, Imperfectly Imitable And Imperfectly Substitutable

ABSTRACT

The main objective was to establish the relationship between strategic operation management and performance of oil marketing firms in Kenya. The specific objectives were to establish the strategic operations management initiatives implemented by oil marketing firms in Kenya and their effects on the firm performance, and to recommend implementable supply chain efficiency initiatives that can enhance affordability of petroleum products in Kenya. This study was based on resource-based theory and dynamic capabilities theory. Descriptive survey approach was employed to collect data from respondents. The target population was all the 35 oil marketing companies have their head offices in Nairobi. It was therefore a census survey. A questionnaire was utilized to collect primary data. The drop-and-pick method was used. The questionnaires were personally administered to the respondents by the researcher. This method made the data collection simpler and the researcher was able to facilitate accuracy in the data collection as the method entailed a personal appeal. The data from the field was thoroughly checked to ensure completeness, consistency, and accuracy. The data was then coded and tabulated to facilitate data analysis. The researcher further analyzed the data and presented the results in form of percentages, frequencies, graphs, and tables. In addition, the researcher used descriptive statistics such as the mean and standard deviation to also present the data. SPSS and Microsoft Excel were also used to produce the output of the data. Further, the study utilized simple regression to find out the relationship between strategic operational management and firm performance. The study found that new features are often added to the existing system which promotes strategic operational management. The study found that the steps included appropriate planning, having the right decisions, having adequate resources, as well as preparing and having the right personnel for the implementation of the decisions. The study found that at a 5% level of significance and 95% level of confidence, strategic capacity planning, strategic scheduling, and leveraging were significant to the performance of oil marketing firms in Kenya. The study concluded that new features are often added to the existing system which promotes strategic operational management. The study concluded that the steps included appropriate planning, having the right decisions, having adequate resources, as well as preparing and having the right personnel for the implementation of the decisions. On policy, the study recommends that the management should support strategic operations management through the use of technology by ensuring that the employees are committed to the course and that they are trained on how well they can implement strategies through the use of modern technology. In practice, the study recommends that oil marketing firms need to have adequate resources which are well coined to the organization's strategies. The management should ensure that every step of strategic operations management and its objectives are allocated adequate resources as well as personnel. The team involved in the strategic operations management process should haveadequate training for them to have the necessary skills that will increase the rate at which strategiesare implemented.

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CHAPTER ONE

INTRODUCTION

1.1. Background of The Study

Operations strategies drive organizations' excellence through the creation of superior delivery capabilities. One of the four basic operations strategies is the supply chain strategy whose objective is to reduce product unit cost and deliver more customer value while simultaneously making the delivery of goods more efficient. This mission underpins the companies' most basic strategic goals. Improving customer satisfaction and increasing shareholder value both depend on achieving operational excellence. Implementing operations strategies enables organizations to develop a competitive advantage. Companies indeed try to improve strategic operations excellence which has an impact on the value chain, but performance improvements fail because they are not properly communicated to all parts of the organization. Most efficiency measures start at the top, yet employees' recommendations are necessary for implementing strategic initiatives. Over the last ten years, there has been great concern regarding the competitiveness of the oil and gas industry. The reason for this is the introduction of regulations in the market that discourage innovation and creativity. Operations excellence is no longer a subject of discussion in corporate boardrooms. The rise of geopolitical issues among major oil-producing countries has caught players in the supply chain without any competitive advantage. The rising demand for green energy has meant oil firm need technology that guarantee clean energy, the development of new production plants, the rapid progress in information technology, and the increasing demand for variety (Rajiv, & Jagongo, 2014, Oguba, 2015, Karani, 2018). Significant foreign competition, shorter product and service life cycles, better-educated and quality-conscious consumers, and the capabilities of new technology have placed increasing pressure on the operations function to improve affordability while providing a broader array of high-quality products and services.

The anchoring theory in this study is the resource-based theory and the dynamic capabilities theory. Resource-based theory or resource-based view (RBV) of firms is based on the view of the company as a collection of capabilities. Each organization including the counties in Kenya is a collection of unique resources and capabilities that provides the basis for its strategy and the primary source of its returns. The Dynamic Capabilities Theory states that a firm's capacity to

create, extend or modify its resources by acquiring the right firm capabilities and characteristics improves firm performance (Teece, Pisano & Shuen, 2008). Teece et al (1997) and Pearce et al (2012) established that the dynamic capabilities perspective often aims to understand a firm's growth and survival and it is therefore not surprising that it draws from a range of theoretical perspectives. Teece's dynamic capability theory explains how firms adapt to environmental dynamism by modifying their underlying resources and capabilities

The oil and gas sector largely remains oligopolistic. International companies dominate markets accounting for 90% of all imported petroleum products and virtually businesses in the country. Total Energy Kenya, Vivo Energy(Shell brand), Oil Libya OLA (Mobil), and Rubis Energy (KenolKobil) controlled 85.3% of the market in the early years of 2000 (GoK, 2006). In 2008 market concentration ratio was 76.7% with HHI (Harfindal Hirschman Index) estimating it at 1649.16. Over the years, some companies have exited the Kenyan market (and the East African market at large) mostly through mergers and acquisitions. Previously dominating oil companies such as Chevron, Caltex, Agip, BP, Mobil and others have exited the local market and their assets taken over by other new or existing companies. However, many small independent oil marketing firms have continued to join the oil and gas sector since the market is now liberalized and they can afford the products. A research study explaining the impact of strategic operations management is of the essence, especially in the oil and gas industry. Taking into consideration firms' importance of strategies incorporation (Porter,1980), as well as literature on existing gaps.

1.1.1. Strategic Operations Management

Strategic operations management is the ability of an organization to execute its tactical plans while maintaining a healthy balance between cost and productivity(Steve Brown, J Bessant & Richard Lamming, 2000). It is the ratio between the input to run a business operation and the output gained from the business. Strategic operational management deals with how well a relevant action is performed hence operational efficiency are achieved with minimal resources. Strategic operational goals are affected by the productivity of the organization which is measured by examining the amount of output either product or service for a given amount of input which could be assets, employee work hours, and other inputs (Coelli, PrasadaRao, O'Donnell and Battese, 2015). When improving operational management, the output-to-input ratio improves. Inputs typically refer to money/cost, people/headcount, or time/effort while outputs are money, new customers, customer

loyalty, market differentiation, headcount productivity, innovation, quality, speed and agility, complexity, or opportunities.

Strategic operations management involves the capability of the organization to deliver services to its people in the most cost-effective manner possible while still ensuring the high quality of its products, service, and support. Strategic operations management is often achieved by streamlining a company's core processes to respond to continually changing market forces cost-effectively (DeVries, and Lin, 2010). To attain operational management a company needs to minimize redundancy and waste while leveraging the resources that contribute most to its success and utilizing the best of its workforce, technology, and business processes. The reduced internal costs that result from operational management enable a company to achieve higher profit margins or be more successful in highly competitive markets. It is in the vision of every company to improve its operational effectiveness. Significant expertise in the areas of cost reduction, sourcing and shared services analysis, IT effectiveness, as well as crisis management help companies achieve best-in-class performance and operational effectiveness.

1.1.2. Firm Performance

Firm performance can be defined as the efficiency of an organization in the deployment of its resources bearing in mind the stakeholder's objectives and the environment in which the organization operates (Le, 2005). The managerial team must adopt tools that can accurately measure the firm's performance to give a true picture of how the firm is doing in all aspects. There are several performance measures that firms frequently adopt (Leban and Euske, 2006). Today, the area of performance has significantly evolved to cover key metrics like Economic Value Added models, the Balance Score Card (BSC), and quality management systems. At the same time, various quality programs have been embraced by firms including quality management and Six Sigma.

The basis of implementation of these programs is to improve quality and thus performance measurement. This study considers the customer perspective and the external perspective as performance measures. The study also considers financial and market performance as this gives a picture of the financial ability of the organizations to attract, and retain employees and clients as well as its sustenance. Finally, the study considers operational performance indicators such as

market share, compliance/noncompliance rate in the quality audit report, annual staff turnover, and incidents and accidents report.

1.1.3. Petroleum Marketing Firms in Kenya

The liberalization of the petroleum industry in Kenya in 1994 led to an increase in the number of petroleum dealers in the country (Institute of Economic Affairs, 2000). Players in the sector had to develop competitive advantages that enable them to manage costs and be profitable

The reintroduction of regulations that covers the procurement of petroleum products into the country in 2004 under the OTS and the price regulation in 2008 took away the operational efficiencies that had been developed over the years by the players in the industry. Profitability in the marketing firms is now more guaranteed by price caps reviewed monthly by EPRA and not the operational efficiency of the firms. According to the Kenya Energy Regulatory Commission (2015), the major sources of commercial energy in Kenya are petroleum fuels. Kenya is a prime petroleum products importer and has an 800km oil pipeline running from Mombasa to Nairobi and Western Kenya, terminating in Nairobi, Nakuru, Eldoret, and Kisumu, under the management of Kenya Pipeline Company. KPC enjoys a monopoly in the transport and storage of liquid petroleum products which has seen a rise in product operational losses occasioned by poor infrastructure maintenance and outright theft.

Kenya is a net importer of petroleum products. The emergence of geopolitical issues that affect products cost of petroleum products has worsened the affordability aspect of oil and gas products. There are over thirty oil marketing companies in Kenya and their market shares are based on the volumes of fuel traded within a given period (Energy Regulatory Commission, 2017). There are six major players in the petroleum industry in Kenya; Total Kenya Limited, Vivo Energy Kenya Limited (Shell Licensee), Libya Oil Kenya Limited, Kenol Kobil, Gulf Energy, and National Oil Corporation of Kenya (NOCK), which is a state corporation fully owned by the Kenyan government. These six players control over 80% of the market share and thus significantly influence the supply chain in the whole country.

1.2. Research Problem

Strategic operations management is highly adopted by organizations aiming at providing directions in managing the processes of firms. It has been highly adopted by organizations in various

organizational processes aimed at increasing organizational efficiency as well as creating a competitive advantage on the various products of the firms. Oil companies face wide challenges in procurement activities, which in turn affect the competitiveness of the products which has an impact on the firm's performance. The emerging geopolitical issues directly affect supplies, increased the cost of transactions, and competition from alternative energy sources (Petroleum Insight, 2017). Fast technological progress, high products cost in the international market, new regulations, and other market shifts compel forward-looking firms to reconfigure their asset bases and processes continuously to match the requirements of the dynamic operating environment. Despite the efforts made by companies in the energy sector in Kenya to make procurement processes leaner and more efficient, the objective is yet to be achieved.

Oil and gas play a key role in running world economy, from powering homes and businesses to keeping the transportation infrastructure running. Our lives wouldn't be the same without oil and gas. Consumers can easily spot price fluctuations within the oil and gas industry, from filling up our tanks at the gas pump or sticker shock on our utility bills after the monthly price review. These price changes may seem meaningless at times; however, several factors influence increases and decreases in oil and gas pricing. The factors include demurrage costs occasioned by inadequate storage capacity, KPC losses, and inefficiencies in the procurement process OTS. Since the introduction of petroleum products price regulation under EPRA, there has been a steady increase in product prices affecting customer affordability. As a result, most petroleum firms have been looking for ways through which they can address this issue. Supply chain optimization has been deemed as one of the ways through which competitiveness can be enhanced. Despite this assumption, little has been done about the matter. This thus necessitates the carrying out of a study that will establish this fact.

As a part of the journey towards a low carbon economy, a concerted push is being given towards the promotion and adoption of cleaner cooking technologies especially LPG at the household level in rural areas where the bulk of the population resides. Sustained efforts are being made by the government to overhaul their subsidy systems, introduce pro-poor financial schemes, and bolster infrastructure to increase the adoption and use of LPG in the rural landscape. Despite such initiatives, demand-side issues of adoption, sustained, and exclusive use of LPG by these communities remain. Evidence suggests that the adoption and sustained use of LPG is impacted

by affordability, accessibility, and awareness (3As) issues. Systematic research is needed to undertake a concurrent analysis of the 3As and their corresponding impact on both the adoption and sustained use of LPG in rural households.

Various studies have been carried out concerning strategic operations management. Barua, (2010), did a study on challenges facing supply chain management in Oil marketing companies in Kenya. The findings showed that challenges facing supply chain management in the oil marketing companies in Kenya occur in one or more of the supply chain components; transportation, equipment, communication, suppliers, customers, labor, and finance. Kabuga, (2012), did a study on lean procurement methodologies used by large-scale manufacturing firms in Nairobi, Kenya. The study findings established that the methodologies adopted by large-scale manufacturing firms influenced lean procurement and positively aided manufacturing firms to possess a competitive advantage. Wangari, (2013), did a study on the role of strategic procurement on organization performance in the case of cooperative banks. She found that found out that though a lot of strides have been made in the provision of strategic procurement in Cooperative Bank. Still, there are a couple of challenges that hamper the full implementation of the strategies.

Ocharo, (2013), studied the factors affecting procurement practices, in the case of the Ministry of Energy, and found that procurement planning has a significant impact on procurement performance. To the best of my knowledge, no study has been done on the impact of strategic operational management on enhancing the affordability of oil and gas products in Kenya. This study, therefore, seeks to fill this gap.

Restructuring the organization in the light of the new regulations to ensure the firms are flexible and responsive to the new regime (Rowbotham, Azhashemi & Galloway, 2012). Oil marketing firms in Kenya have not undertaken this crucial process. (Lowson & Robert,2004) outlines the firm's ability to add value to what it does through strategies that consider internal factors of the organization and the environment

The research question to guide the study is: What is the impact of strategic operations management on the performance of oil marketing firms in Kenya in light of the local and global dynamics that negatively impact the competitiveness in the industry?

1.3. Objectives of the Study

1.3.1. General Objective

The main objective will be to establish the relationship between strategic operations management and the performance of oil marketing firms in Kenya.

1.3.2. Specific Objectives

The study will be guided by the following specific objectives:

i. To establish the strategic operations management initiatives implemented by oil marketing firms in Kenya and their effects on the firm performance
ii. To recommend implementable supply chain efficiency initiatives that can enhance the affordability of petroleum products in Kenya.

1.4. Value of The Study

The findings of the study were important to the oil companies management in Kenya as well as other players in the sector as the study enabled them to assess whether the strategic operational efficiencies practices adopted add value to their operations which improves competitiveness. In addition, oil Companies would use the findings of this study to improve their strategic management processes and streamline their practices aimed at achieving and enhancing operational management as well as shareholder value.

The findings of this study would be important to policymakers in government bodies as they would guide the decision-making processes on the subject of strategic operational efficiencies for the various departments in government organizations. The result of this study would add value to researchers and scholars as it would provide a useful basis for further studies on the effect of strategic operational management and affordability. The findings would contribute to existing knowledge by enhancing the understanding of the importance of incorporating strategic operational management into specific lines of production in firms which will improve affordability.

CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

Chapter two gives a summary of the works of other researchers concerning this study. It entails the theoretical review, empirical review, and the research gap in existence.

2.2. Theoretical Foundation

A theoretical framework is a structure for the support of theories that introduce the research study and describe why the research problem exists. It is important to state what other scholars hold as knowledge and what those theories have in common with your problem. It, therefore, provides scientific justification for your investigation. This study is based on resource-based theory and dynamic capabilities theory.

2.2.1. Resource-Based Theory

Resource-based theory or resource-based view (RBV) of firms is based on the view of the company as a collection of capabilities. Each organization including the counties in Kenya is a collection of unique resources and capabilities that provides the basis for its strategy and the primary source of its returns. In the 21st-century hyper-competitive landscape, an organization is a collection of evolving capabilities that are managed dynamically in pursuit of above-average returns. Thus, differences in firms' performances across time are driven primarily by their unique resources and capabilities rather than by an industry's structural characteristics the same case can be applied to the provision of affordable homes (Helfat & Peteraf, 2003). The RBV has developed very interesting contributions, among others, concerning imitation with the concepts of isolating mechanisms, time compression diseconomies, asset mass efficiencies, and causal ambiguity. Recently, much resource-based research has focused on intangible assets, which include information, knowledge, and dynamic capabilities (Alvarez & Barney, 2000).

The central premise of the resource-based view is that firms compete based on their resources and capabilities. Most resource-based view researchers choose to look within the enterprise and down to the factor market conditions that the enterprise must contend with, to search for some possible causes of sustainable competitive advantages holding constant all external environmental factors

(Peteraf and Barney, 2003). This inward-looking approach has proven to be both influential and useful for the analysis of many strategic issues (Foss and Knudsen, 2003), among which the conditions for sustained competitive advantage and diversification. Porter (1991) writes that resources are not valuable in and of themselves, but because they allow firms to perform activities that create advantages in particular markets. The competitive value of resources can be enhanced or eliminated by changes in technology, competitor behavior, or buyer needs which an inward focus on resources will overlook. Similarly, Levinthal and Myatt (1994) argue that many organizational capabilities emerge, are refined, or decay as a result of, or an absence of, product market activity.

The resource-based view (RBV) as a basis for the provision of affordable homes lies primarily in the application of a bundle of valuable tangible or intangible resources at the organization's disposal. Transforming a short-run competitive advantage into a sustained competitive advantage requires that these resources are heterogeneous in nature and not perfectly mobile. Effectively, this translates into valuable resources that are neither perfectly imitable nor substitutable without great effort. If these conditions hold, the bundle of resources can sustain the organization's above-average returns (Crook et al., 2008). The RBV suggests that the resources possessed by a firm are the primary determinants of its performance, and these may contribute to a sustainable competitive advantage of the firm in whatever operation an organization seeks to undertake. According to Barney (1991), the concept of resources includes all assets, capabilities, organizational processes, firm attributes, information, and knowledge, among many others controlled by a firm that enable the firm to conceive of and implement strategies that improve its efficiency and effectiveness and more relevantly in the provision of affordable homes (Barney, 1991).

2.2.2. Dynamic Capabilities Theory

Dynamic capabilities theory (Teece, Pisano, and Shuen, 1997) which is grounded in the Resource Based Theory (Wernelfelt,1984) argues that capabilities are a firm’s capacity as well as abilities to deploy resources, usually in combination with using a firm's processes, procedures and demand. Teece et al (1997) and Pearce et al (2012) established that the dynamic capabilities perspective often aims to understand a firm's growth and survival and it is therefore not surprising that it draws from a range of theoretical perspectives. Teece’s dynamic capability theory explains how firms adapt to environmental dynamism by modifying their underlying resources and capabilities. It is

considered to have originated from Schumpeter's (1934) Innovation-based Competition where competitive advantage is based on the creative destruction of existing resources and novel recombination into new operational capabilities (Gathungu & Mwangi, 2012).

In addition, it emphasizes that value creation does not come from the possession of resources but from their use, and how much value is created depends on how these resources are combined within the firm. She also argues that a firm's growth demands the continuous development of expertise and innovativeness and those managers need to have entrepreneurial skills rather than managerial skills. These ideas are also relevant to the dynamic capability perspective (Lockett 2005; Augier and Teece 2007). DCT emphasizes the key role of strategic management in appropriately adapting, integrating, and reconfiguring an internal firm's skills, resources, and functional competencies to match the requirements of a changing environment. Teece et al, (1997) argued that dynamic capabilities are rooted in the firm's internal processes.

Dynamic capabilities build, integrate, or reconfigure operational resources and do not directly affect the output where they reside but indirectly contribute to the output of the firm through other operations. The resource-based view argues that resources that are simultaneously valuable, rare, imperfectly imitable, and imperfectly substitutable (VRIN) are a source of competitive advantage (Barney 1991). The underlying assumptions of the resource-based view are that resources are heterogeneously distributed across firms and that this heterogeneity can be sustained over time. This explains how some firms can earn super profits in equilibrium and, as such, it is essentially a static view (Barney 2001). It is argued that dynamic capabilities are an extension of the resource-based view as they govern the rate of change of a firm's resources and, notably, its VRIN resources. In summary, DCT argues that firm performance is enhanced when capabilities are reconfigured, recombined, and reallocated according to the needs. An example of recombined firm capability as competence is the blending of technology and production skills, thus offering the greatest strategic value (Prahalad and Hamel, 1990).

The theory aims to understand how firms use dynamic capabilities to achieve and sustain a competitive advantage over other firms despite an ever-changing environment by appropriately adapting, integrating, and reconfiguring organizational skills and operational capabilities in a changing environment (Gathungu & Mwangi, 2012). It explains the sources of enterprise-level

competitive advantage over time and guides managers when renewing a firm's competencies to match the requirements of a changing environment.

2.4. Empirical Studies and Knowledge Gaps

Studies have been carried out both locally and internationally concerning the impact of strategic operational efficiencies on enhancing affordability. While the studies may be related only a few of them qualify to apply to the current study.

Bankole et. al. (2012) did a study on product–service system affordability in defense and aerospace industries: state-of-the-art and current industrial practice. This is achieved through the review of literature materials and current industrial practices within the defense and aerospace industries. The main contribution of this article is that it provides a state-of-the-art review of affordability from the three perspectives and together with definition and assessment methods for affordability. The findings helped to identify qualitative and quantitative factors affecting affordability and assessment techniques from the three affordability perspectives. Also, a gap analysis of literature and current industrial practice in terms of definitions and assessment methods was performed based on research findings.

As noted by Sunder, (2017), improving operations management is one objective of internal controls. To increase operational management, an organization should strive to increase output without a change in input of a similar order of magnitude. It is nearly impossible to increase output without affecting the input requirements, so an organization must realize that it is simply trying to get a higher ratio of output: to input than simply higher numbers. To improve operational management, an organization has to start by measuring it. According to Hackman, (2018), operational management entails finding answers to the following questions: how efficient is the firm in utilizing its input to produce its outputs, is the firm using the right mix of inputs or producing the right mix of outputs given prevailing prices, how will the firm respond to a price hike in a critical input; how efficient is the firm in scaling its operations, has the firm improved its productive capability over time and how does the firm compare to its competitors. When improving operations management, companies have a few alternatives. The most common is the same output for less input, more output for the same input, and much more output for more input.

Lindsay, (2016), compared the efficiency of the public sector and private counterparts and found that the public sectors are observably less efficient.

According to Lindsay, (2016), there exists a relationship between strategic management and operational management of firms. Lindsay argues that all strategic management decisions are aimed at transforming the operations of organizations and this consequently improves the operational management of the organization. Strategic management decisions that promote efficiency tend to be aimed at reducing the use of resources through maximizing return. Any action taken to reduce inventory waste, for example, would be a strategic management decision aimed at greater efficiency (Sunder, 2017). Efforts to increase productivity would be included in this category. Another strategic management decision that would be efficiency-oriented would be having executives share an executive assistant, rather than hiring executive assistants for each executive. Strategic management has evolved into a more sophisticated and potentially powerful tool for enhancing organizational efficiency. The strategic management process requires competent individuals to ensure its success. The top management of an organization has the responsibility to ensure firm success and overcome any competition that occurs (Hackman, 2018). However, to be more effective, people at all levels, not just top management, need to be involved in strategic management; scanning the environment for critical information, suggesting changes to strategies and programs to take advantage of environmental shifts, and working with others to continuously improve work methods, procedures, and evaluation techniques.

Wanjiru, & Njeru, (2014) did a study on the impact of a strategic response to change on the financial performance of the commercial bank in Kenya. The study target mainly banks personnel involved in strategy formulation and implementation. The data were analyzed through descriptive statistics such as mean, percentages, and standard deviation. The data was presented in tables and graphs. The study found that technological innovation has a strong positive relationship with banks' performance. This means that the better the technological innovation adopted by the bank the better the performance of the commercial banks. Similarly, there is a positive correlation between an expansive branch network and bank performance. This means that as the number of branches increases the more profitability the bank will be. However, there is associated cost related to expansive branch network such as fixed cost and operation costs which were reported to affect bank performance.

Wachira, (2014) did a study on strategic approaches to affordable houses in Nairobi County, Kenya. This study adopted a qualitative research design. Primary data was derived from interview guides formulated to target the top management of several stakeholder organizations. The researcher personally administered the interview guide to the managers of Nairobi City County, top managers from the Ministry of Lands and Urban Development, and top managers in Housing Finance Institutions who were handy in providing the relevant information sought by the researcher. Responses from managers indicate that some of the strategic approaches adopted to affordable housing include: efficient and effective resource allocation mechanisms among responsible departments in the housing department, formulation, implementation, and review of the county housing sector policy, improving the living environment in slums and informal settlements through slum upgrading as this is where most people do not have affordable homes. In addition, the respondents stated the promotion of low-cost housing development through housing sector incentives, promotion of research and utilization of appropriate building materials and technologies, and coordination of stakeholders on housing and human settlement matters in the county. The stakeholders` management but more relevantly the county of Nairobi must explore the possibility of outsourcing additional functions such as land allocation, rates collection, and research on ways of making housing affordable as well as city planning.

Firms in the oil and gas sector aim at providing essential services and providing pricing and assistance to customers that ensure everyone has the service they need. Liu et. al. (2013) a review of a company's affordability of increased energy costs due to climate policies: A survey by sector in China. The data were collected from 170 respondents mainly from iron and steel, cement, and chemical industries, using a multiple-bounded discrete choice (MBDC) format. Estimations indicate that a mean of 8.8% in energy cost increase would be acceptable for all the samples. The chemical companies express slightly higher affordability, with the mean of acceptable ratios of energy cost increases being 9.9%, while the cement companies show slightly lower affordability with a mean of 7.7%. Econometric analysis confirms that the market competition degree has a significant but negative relationship with affordability while the company's size is significantly and positively associated with affordability.

Sardana et. al. (2016) did a study on the impact of strategic alignment and responsiveness to the market on a manufacturing firm's performance. A multi-variate regression method is applied to the

factors identified using confirmatory factor analysis. Our findings indicate that operations' strategic alignment to the firm's objectives is the single most key contributor to firm performance. The operations' capability to respond to the market need for customization also significantly contributes to firm performance. Plant technology capability is also essential to respond effectively to the market need for customization, and is positively and significantly related to firm performance. On the other hand, while delivery capability and cost control of the manufacturing operation is positively related to firm performance, they are not significant. Operations and marketing managers and firms' policymakers should emphasize operations' strategic alignment to firms' performance objectives, and build dynamic operational capability to be responsive to changing market needs.

Wanjohi, (2018) did a study on the effect of the bottom of the pyramid strategies on the market performance of fast-moving consumer goods companies in Kenya. The study adopted an exploratory survey research design and the research philosophy was positivism. The study findings from FMCG respondents showed that affordability strategies have a significant effect on the market performance of fast-moving consumer goods companies in Kenya. Availability strategies were positively related to the market performance of FMCG companies operating in Kenya. Acceptability strategies were also found to have a positive and significant effect on the market performance of FMCG companies operating in Kenya. Awareness strategies likewise were found to have a strong and significant effect on the market performance of FMCG companies operating in Kenya and indeed, they had the greatest effect among the four strategies.

Singh, & Hong, (2020) did a study on the impact of strategic and operational risk management practices on firm performance: An empirical investigation. Using a literature review and survey research of managers from global firms; we present a research model, and empirically test the hypothesized relationships. The results show that under conditions of uncertainty, management decision-making is more likely to be cautious until visible forms of risks emerge, and prudent response mechanisms are put in place. This study identifies the crucial role of supply chain exploration and exploitation practices, and their influence in the development of network risk management practices, leading to competitive financial outcomes.

Amann et. al. (2021) did a review on managing affordability in the concept development of complex product systems (CoPS). This study originates in a recognized unsustainable cost

escalation for complex defense equipment. To understand how such cost escalation for complex product systems (CoPS) can be avoided, this study comparatively explores four different industrial sectors energy, transportation, healthcare, and defense – with and without intergenerational increasing costs, represented by four international companies. The results, collected from studying the development of one of each company's products, reveal some characteristic differences in market factors between those sectors and companies having problems with intergenerational escalating costs and customer affordability, as compared to other sectors and companies. It is suggested that dependent on market characteristics, it might be necessary to actively manage affordability when CoPS are developed. Efforts made by the companies to make products more affordable were identified, and several factors enabling and disabling the development of less costly products without compromising customer needs were explored. Further, the implications of affordability management in a CoPS setting are elaborated on.

2.6. Conceptual Model

Conceptual framework refers to the tools which are utilized by the researcher to understand and develop an awareness of the subject being investigated in a study (Roberts, 2011). A conceptual framework comprises independent and dependent variables. It shows the relationship that exists between the set of variables that exist at a particular instance. An independent variable is a variable that is not affected by the change in any of the other variables in the conceptual framework (Van der Waldt, 2008).

The independent variable cannot be adjusted concerning the researcher's wish but the change does not require any explanation whatsoever. A dependent variable is a variable that is influenced by any adjustment in other variables in the conceptual framework. The change in the dependent variable should always be accompanied by an explanation. The framework in Figure 1 shows the relationship that exists between the impact of strategic operational efficiencies and enhancing affordability.

The relationship between the variables is indicated in Figure 2.1

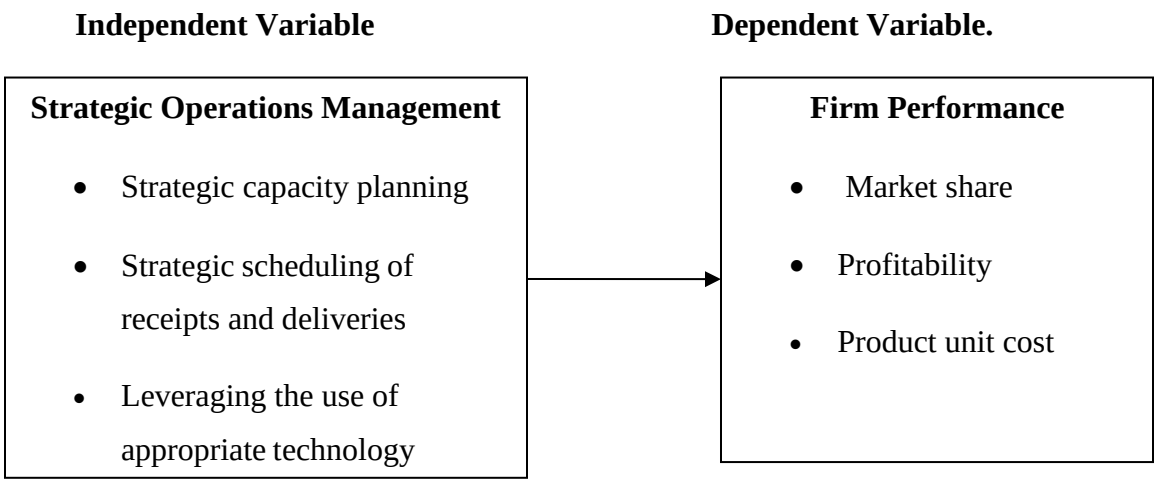


Figure 2.1: Conceptual Model

Source: Researcher (2019)

2.7. Summary of The Literature Review

The chapter has summarized both theory and model anchoring which guided the study. The chapter has discussed and synthesized the theoretical underpinnings and reviews of the study variables. It explained the contributions of resource-based theory as well as dynamic capabilities theory. The empirical studies and the knowledge gap to which the study is inclined to have also been provided.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

The current chapter presents the various methodologies that will be applied in this study to answer the study research question. The subsections are research design, the population of the study, data collection, and analysis.

3.2. Research Design

A descriptive survey approach will be employed to collect data from respondents. Kothari (2006), claims that different kinds of questions are considered in descriptive research to reach survey and fact establishment. The appropriateness of this study is observed in that variables don't include manipulation but rather the establishment of current phenomenal status (Borg & Gail, 1983). This design equips the researcher in examining strategic operational efficiencies for enhancing the affordability of oil and gas products in Kenya.

3.3. Population of the Study

The targeted population will be all the petroleum companies in Kenya. Cooper and Schindler (2006) described the population as the sum of essentials collected about which one wishes to make some inference. According to PIEA April-June 2020 publication, there are 35 oil marketing companies plus the other group classified as others (Appendix II). All 35 oil marketing companies have their head offices in Nairobi. It will be therefore a census survey.

3.4. Data Collection

The researcher will use questionnaires or use phone calls and interviews to collect the data from the target respondents where possible. Drop and pick method will also be used. The questionnaires will personally be administered to the respondents by the researcher. This method will make the data collection simpler and the researcher will be able to facilitate accuracy in the data collection as the method entailed a personal appeal. Upon presentation of the questionnaires, the respondents will be expected to fill in their responses in the provided spaces. The questionnaires will collect information based on the objectives of the study.

3.5. Data Analysis

According to Burn and Grove (2003), data analysis is how the collected data is processed to provide meaningful information. The data from the field will be thoroughly checked to ensure completeness, consistency, and accuracy. The data will then be coded and grouped based on the objectives to facilitate data analysis. The data analysis is to be used to determine the operations strategic management initiatives adopted and their effects on the firm performance. The researcher will further analyze the data and present the results in form of percentages, frequencies, graphs, and tables. Recommendations can be made to EPRA to include the study findings in the pricing computation. In addition, the researcher will use descriptive statistics such as the mean and standard deviation to also present the data. SPSS and Microsoft excel will also be used to produce the output of the data. Further, the study utilized simple regression to find out the relationship between strategic operational management and firm performance.

The model is indicated below:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + ẹ$$

Where

Y= Firm Performance

α = constant term

β_1= Parameters

X_1= Strategic capacity planning

X_2= Strategic scheduling of receipts and deliveries

X_3= Leveraging on the use of appropriate technology

ẹ = Error

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter present the findings on to establish the relationship between strategic operations management and performance of oil marketing firms in Kenya. The research was conducted on a sample of 35 respondents to which questionnaires were administered.

4.2 Questionnaire Response Rate

This section presents the information on the response rate in relation to the questionnaires that were returned and not returned from the field. Findings on filled in questionnaires and unreturned questionnaires are presented in Table 4.1.

Table 4.1. Response Rate

Response	**Frequency (n)**	**Percentage (%)**
Filled in questionnaires	28	80%
Un returned questionnaires	7	20%
Total Response Rate	**35**	**100**

Source: Field Data (2022)

From table 4.1 out of the sampled population, 28 questionnaires were returned duly filled in making a response rate of 80%. The response rate was representative and was adequately used to answer the research question. Kothari (2009) stated that a response rate which is above 50% is appropriate for data analysis as well as reporting. In addition, he stated that a response rate of 60% is good and that of 70% is excellent.

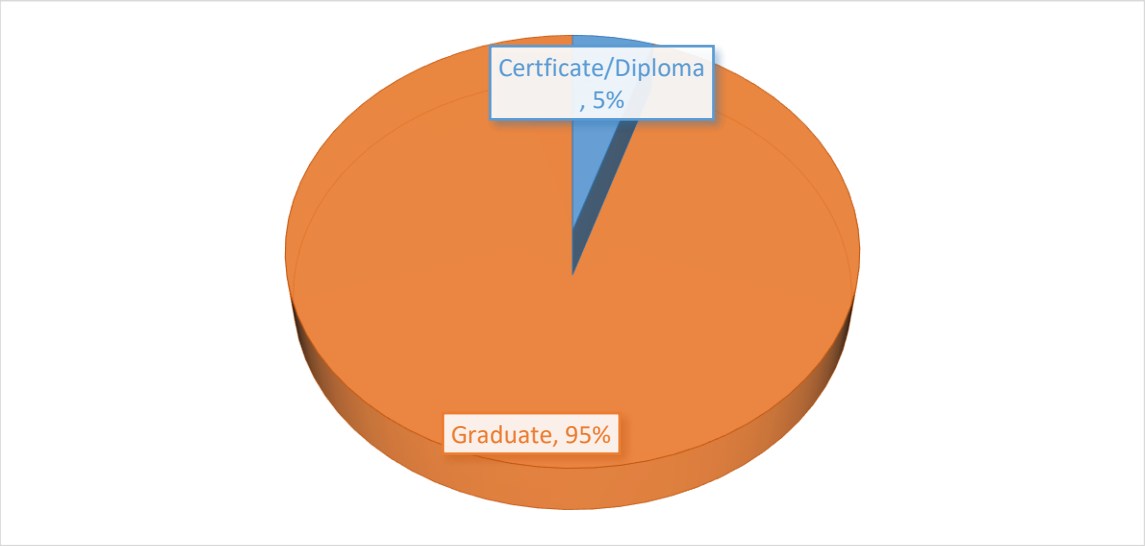
4.3. Background of Information

The background information included education level, the period of time the respondents have worked in the firm.

4.3.1. Highest Level of Educational Qualification

The respondents were requested to indicate their level of education. The findings are shown in Figure 4.2.

Figure 4.2. Highest Level of Educational Qualification



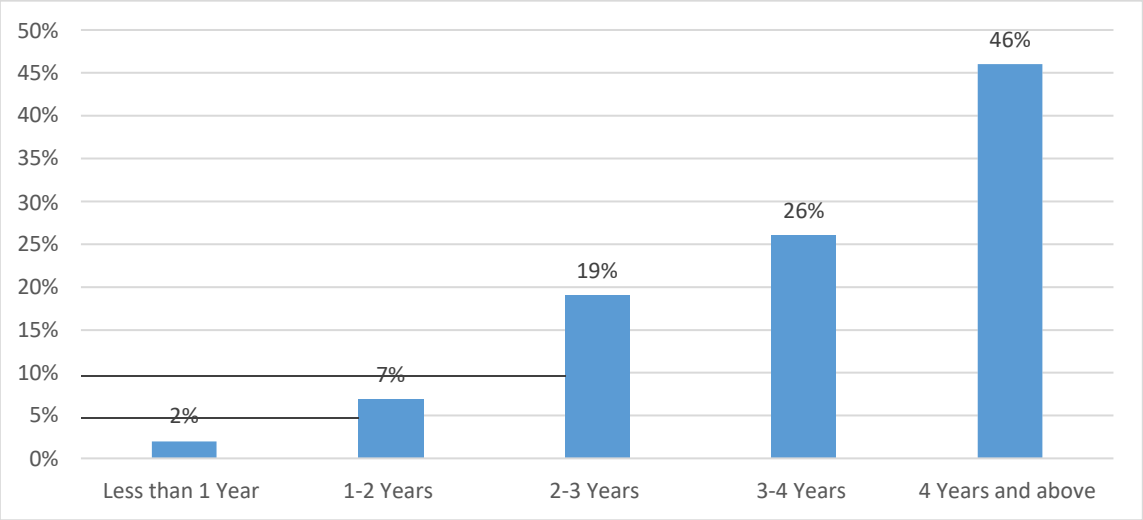
Source: Research Data (2022)

From Figure 4.2. majority (95%) of the respondents had graduate level of education, while 5% had certificate/diploma level of education. This depicts that majority of the respondents were learned and could answer questions related to strategic operations management and performance of petroleum marketing firms in Kenya.

4.3.3. Period of Operations in the Firm

The study sought to establish the period of operations of the respondents in the firm. The findings are shown in Figure 4.3.

Figure 4.3. Period of Operations in the Firm



Source: Research Data (2022)

From Figure 4.3 most (46%) of the respondents had operated within a department in the firm for duration of over 4 years, 26% indicated 3-4 years, 19% indicated 2-3 years, 7% indicated 1-2 years while 2% indicated less than one year. This depicts that most of the respondents had operated within the firm for a duration of 4 years and thus understood how strategic operations management influences performance.

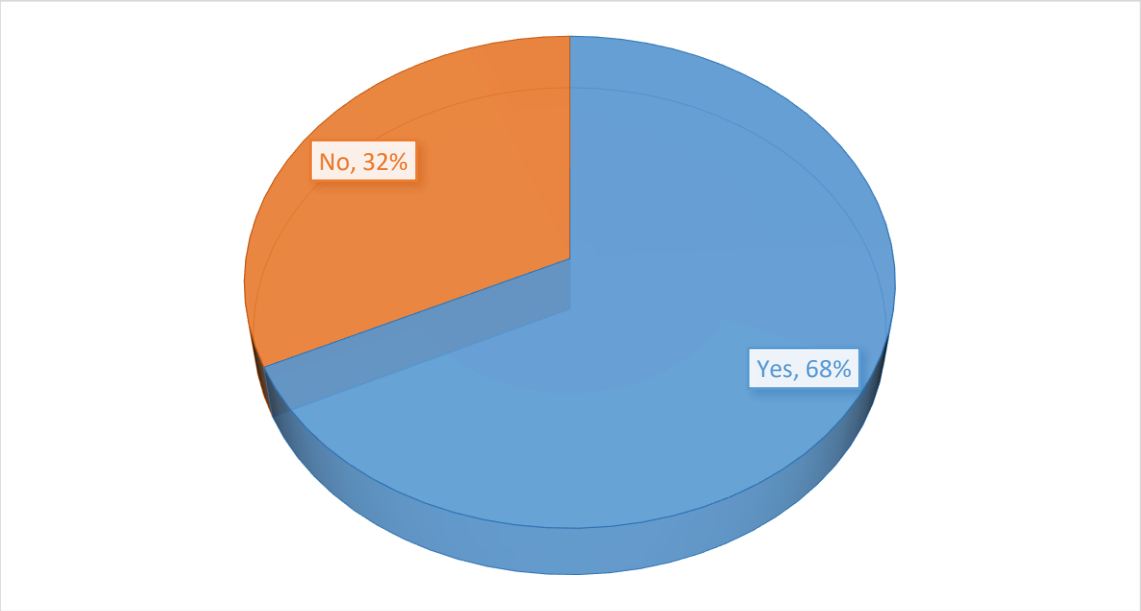
4.4. Strategic Operations management

This section presents findings on strategic operations management. The findings are presented in the following subsections:

4.4.1. Strategic Operations Management and Performance

The respondents were requested to indicate whether strategic operations management enhance performance. The findings are shown in Figure 4.4

Figure 4.4. Strategic Operations Management and Performance



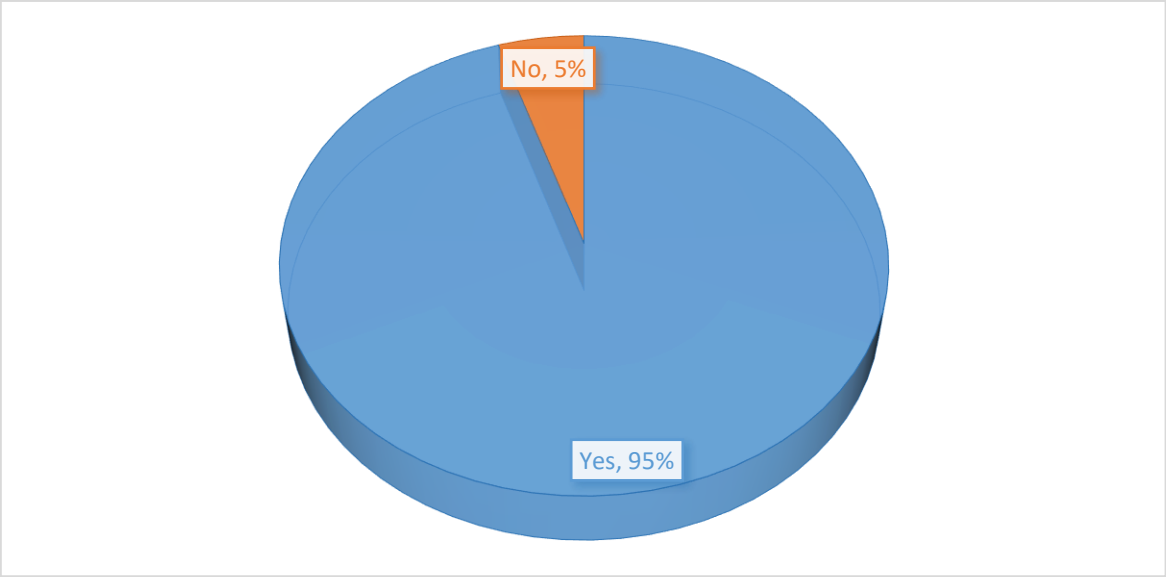
Source: Research Data (2022)

From Figure 4.4 majority (68%) of the respondents indicated that strategic operations management enhance performance while 32% were of the contrary opinion. This depicts that the strategic operations management enhance performance.

4.4.2. Strategic Operations Management and Way Business is Done

The respondents were requested to indicate whether strategic operational management has the capability to change how business processes are carried out in an organization. The findings are shown in Figure 4.5

Figure 4.5. Strategic Operations Management and Way Business is Done



Source: Research Data (2022)

From figure 4.5 majority (95%) of the respondents indicated that strategic operations management has the capability to change how business processes are carried out in an organization while 5% were of contrary opinion. This depicts that strategic operational management has the capability to change how business processes are carried out in an organization.

4.4.3. Extent of Agreement on Strategic Operations Management

The respondents were requested to indicate the extent to which they agree with statements on strategic operations management. The findings are shown in the Table 4.2

Table 4.2. Extent of Agreement on Technological Innovation

Statements	Mean	Std. Dev
The organization frequently adds new capabilities to an existing system	3.87	0.1384
New features are often added to the existing system	4.12	0.1529
Identified defects are corrected on a continuous basis	3.62	0.1723

The organization modifies systems on a continuous basis to enhance efficiency	3.79	0.2001
The organization frequently adds new capabilities to an existing system	3.95	0.1834
The organization has automated storage and retrieval system	3.73	0.2081
The organization makes use of global positioning systems	4.04	0.2189
Electronic data interchange is widely practiced in the organization	3.92	0.2213

Source: Research Data (2022)

From table 4.2 the respondents agreed that new features are often added to the existing system which promotes strategic operations management (mean=4.12), the organization makes use of global positioning systems (mean=4.04), the organization frequently adds new capabilities to an existing system (mean=3.95), electronic data interchange is widely practiced in the organization (mean=3.92), organization makes use of radio frequency identification systems (mean=3.89), the organization frequently adds new capabilities to an existing system (mean=3.87),the organization has automated storage and retrieval system (mean=3.73), and that identified defects are corrected on a continuous basis (mean=3.62). This depicts that new features are often added to the existing system which promotes strategic operations management.

4.5. Strategic Operations management and Firm Performance

This section presents findings on strategic operations management and firm performance. The findings are presented in the following subsections:

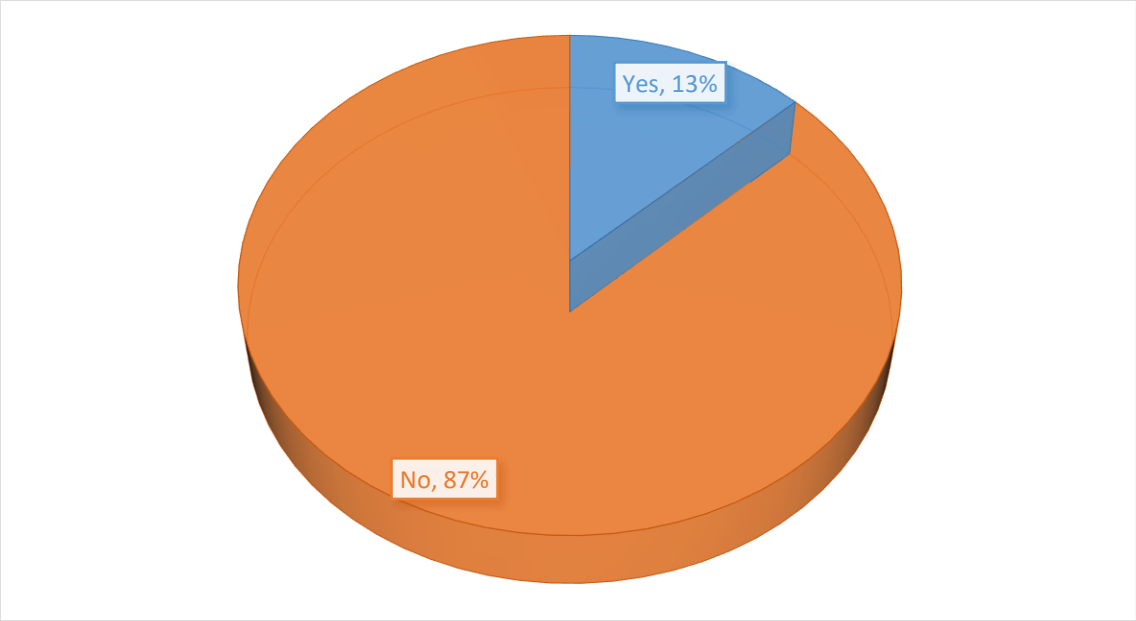
4.5.1. Steps in Implementation of Strategic Operations Management

The respondents were requested to indicate some of the prior steps they consider necessary prior to implementation of strategic operations management in order to ensure their success. According to the respondents the steps included appropriate planning, having the right decisions, having adequate resources, as well as preparing and having the right personnel for the implementation of the decisions.

4.5.2. Technologies Innovation and Strategic Operations Management Implementation

The respondents were requested to indicate whether there are technologies innovation that they would not recommend to aid in strategic operations management implementation. The findings are as shown in Figure 4.6

Figure 4.6. Technologies Innovation and Strategic Operations Management Implementation



Source: Research Data (2022)

From the findings in Figure 4.6 majority (87%) of the respondents indicated that there are no technologies innovation that they would not recommend to aid in strategic operations management implementation while 13% were of the contrary opinion. This depicts that there are no technologies innovation that they would not recommend to aid in strategic operations management implementation.

4.5.3. Extent of Agreement on Strategic Operations Management and Performance

The respondents were requested to indicate the extent to which they agree with statements on strategic operations management and performance. The findings are shown in the Table 4.3

Table 4.3. Extent of Agreement on Strategic Operations Management and Performance

Statements	Mean	Std. Dev

Strategic operations management facilitates monitoring and evaluation that is conducted during strategy implementation	4.04	0.1258
Strategic operations management helps organization to adopt to dynamics in the environment and thus increase competitive advantage	4.09	0.2219
Strategic operations management helps in increasing the volume and quality which are used in planning and which help in reducing the cost during the implementation of strategy	4.16	0.2024

Source: Research Data (2022)

From the findings in table 4.3 the respondents agreed that strategic operations management helps in increasing the volume and quality which are used in planning and which help in reducing the cost during the implementation of strategy (mean=4.16), followed by strategic operations management helps organization to adopt to dynamics in the environment and thus increase competitive advantage (mean=4.09), and that strategic operations management facilitates monitoring and evaluation that is conducted during strategy implementation (mean=4.04). This depicts that strategic operations management helps in increasing the volume and quality which are used in planning and which help in reducing the cost during the implementation of strategy.

4.5.4. Extent of Agreement on Potential Challenges

The study sought the extent of agreement on various challenges and how they influence strategic operations management and performance in the firm. The findings are shown in the Table 4.4

Table 4.4: Extent of Agreement on Potential Challenges

Challenges	Mean	Std. Dev
There was inadequate communication of the strategy to the staff	3.95	1.0412
The goals of, and incentives for, the workforce are not aligned with the strategy of the organization	4.39	0.9124
Leadership and direction provided by Board of Directors and management were not adequate	4.25	0.8014
Competing activities and crisis distracted attention from implementing the decisions	3.88	0.9922
Slow acceptance of new strategy by stakeholders such as members and Board of Directors	4.17	1.4326
Major obstacles surfaced during implementation that had not been identified before hand	3.90	0.8919

Source: Research Data (2022)

From the findings in table 4.4 the respondents agreed that the goals of, and incentives for the workforce are not aligned with the strategy of the organization (mean=4.39), followed by leadership and direction provided by Board of Directors and management were not adequate (mean=4.25), slow acceptance of new strategy by stakeholders such as members and Board of Directors (mean=4.17), there was inadequate communication of the strategy to the staff (mean=3.95), major obstacles surfaced during implementation that had not been identified beforehand (mean=3.9), and that competing activities and crisis distracted attention from implementing the decisions (mean=3.88). This depicts that the goals of, and incentives for the workforce are not aligned with the strategy of the organization.

4.5.5. Measures to Ensure Successful Implementation of Strategic Operations Management

The study sought to establish the measures that would be recommend to ensure successful implementation of strategic operations management to enhance performance. According to the respondents some of the measures included improvement in the organization infrastructure, and increase in the resources required to promote implementation of strategic operations management. In addition, the respondent indicated that other measures included acquisition of the right strategies, as well as having the right stakeholders on the board.

4.6. Regression Analysis

The study used simple regression to find out the association between the predictor variable and strategy implementation. The study utilized SPSS version 24 to generate output of the regression statistics after cleaning and coding data from the field. The dependent variable in this study was strategy implementation while the independent variable was strategic capacity planning strategic scheduling of receipts and deliveries and leveraging on the use of appropriate technology.

4.6.1. Model Summary

The model summary in Table 4.5 shows the relationship between the predictor variable and performance of oil marketing firms in Kenya. The results are as indicated in Table 4.5

Table 4.5: Model Summary

Model	R	R Square	Adjusted RSquare	Std. Error of the Estimate	F	P-value
1	0.747	.558	.545	.34309	31.341	.001

a. Predictors: (Constant), strategic capacity planning strategic scheduling of receipts and deliveries and leveraging on the use of appropriate technology.

b. Dependent Variable: Performance of petroleum marketing firms in Kenya.

Source: Research Data (2022)

From the findings in Table 4.5 the R^2 was found to be 0.558 which is 55.8% difference in performance of petroleum marketing firms in Kenya. The difference is explained by the independent variable in the model. In addition, from the table the unexplained difference of 44.2% is as a result of other factors not in the model. From the results in the table it can be depicted that the model is good and can be utilized for the purposes of estimation (sig value is less than 0.05).

4.6.2 ANOVA Results

Table 4.6 presents the findings on ANOVA results of the relationship between the predictor variable and performance of oil marketing firms in Kenya. The findings are as shown in Table 4.6

Table 4.6: ANOVA of the Regression

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.186	3	5.062	43.005	.000[a]
	Residual	2.832	24	.118		
	Total	**18.018**	**27**			

a. Predictors: (Constant), strategic capacity planning, strategic scheduling of receipts and deliveries and leveraging on the use of appropriate technology

b. Dependent Variable: Performance of oil marketing firms in Kenya

Source: Research Data (2022)

From the findings in Table 4.6 it was found that the significant value was 0.000 which is way below 0.005 thus showing the model was statistically significant. This depicted that the model would be used in predicting the relationship between strategic operations management and performance of petroleum marketing firms in Kenya. From the model it was further found that the F critical (5.062) was less that the F calculated (value = 43.005) and thus the model was statistically significant.

4.6.3 Coefficient of Determination

Table 4.7 provides the coefficient of determination on the relationship between the predictor variable and the strategy implementation of petroleum firms in Kenya. The findings are as shown in Table 4.7

Table 4.7: Coefficient of Determination

	Unstandardized Coefficients		**Standardized Coefficients**		
	B	Std. Error	Beta	T	Sig.
Model 1(Constant)	0.289	0.116		2.491	0.005
Strategic Capacity Planning	0.319	0.122	0.514	2.61	0.001
Strategic Scheduling	0.287	0.117	0.452	2.45	0.002
leveraging	0.245	0.106	0.413	2.31	0.001

a. **Dependent Variable:** Performance of petroleum marketing firms in Kenya

Source: Research Data (2022)

Simple regression analysis was conducted as to establish the relationship between strategic operations management and performance of oil marketing firms in Kenya. According to the SPSS the following equation was generated:

$(Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e)$

Becomes:

$(Y = 0.289 + 0.319 X_1 + 0.287 X_2 + 0.245 X_3 + e)$

From the regression taking the independent variable at constant (strategic capacity planning, strategic scheduling and leveraging) constant at zero, performance of oil marketing firms in Kenya was 0.289. The data findings analyzed also showed that taking all other independent variables at zero, a unit increase in strategic capacity planning will lead to a 0.319 increase in performance of oil marketing firms in Kenya, a unit increase in strategic scheduling will lead to a 0.287 increase in performance of oil marketing firms in Kenya, and a unit increase in leveraging will lead to a 0.245 increase in performance of oil marketing firms in Kenya. This infers that strategic capacity planning contribute the most to performance of oil marketing firms in Kenya, followed by strategic scheduling. At 5% level of significance and 95% level of confidence, strategic capacity planning, strategic scheduling and leveraging were significant to performance of oil marketing firms in Kenya.

4.7. Discussion of Findings

This section presents the discussion of findings.

The study found that strategic operations management enhance performance. The study found that strategic operations management has the capability to change how business processes are carried out in an organization. Lippitti (2013) states that when the strategy implementation is flawed the strategy may fail to achieve the organization desired objectives. The study found that new features are often added to the existing system which promotes strategic operations management. The study found that the steps included appropriate planning, having the right decisions, having adequate resources, as well as preparing and having the right personnel for the implementation of the decisions.

The study found that there are no technologies innovation that they would not recommend to aid in strategic operations management implementation. The study found that strategic operations management helps in increasing the volume and quality which are used in planning and which help in reducing the cost during the implementation of strategy. Pryor, et al (2014) agrees that when the strategy implementation process does not have appropriate alignment even the best strategies will end up failing. He further states that most of the strategies fail at the crucial state wasting resources which have already been invested. Lepsinger (2016) also has a similar argument and states that leaders with a clear organization vision will be 100% committed to pursuing the vision and implement it. He further states that when leaders try to bring their vison to life things tend to go wrong which is termed as strategy implementation gap.

The study found that some of the measures included improvement in the organization infrastructure, and increase in the resources required to promote implementation of strategic operations management. According to Johnson and Scholes (2012), for a strategy to be a success it should be in accordance to the organization environment. The strategic management process is concerned with analyzing the internal and external environments to determine the appropriate

strategy that needs to be implemented to ensure that the organization actually achieves its goals. In addition, the study found that other measures included acquisition of the right strategies, as well as having the right stakeholders on the board.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1. Introduction

This chapter presents summary, conclusion and recommendations on the relationship between strategic operations management and performance of petroleum marketing firms in Kenya. The summary, conclusion and recommendations are presented in subsequent headings.

5.2. Summary of Findings

The study found that strategic operations management enhance performance. The study found that strategic operations management has the capability of enabling the petroleum firms to meaningfully contribute towards the achievement of the national energy policy objectives. The study found that the regulatory authority EPRA is well positioned to formulate policies that promotes strategic operations management. The study found that the steps included appropriate planning, having the right decisions, having adequate resources, as well as preparing and having the right personnel for the implementation of the decisions.

The study found that there are no technologies innovation that they would not recommend to aid in strategic operational management implementation. The study found that strategic operational management helps in increasing the volume and quality which are used in planning and which help in reducing the cost during the implementation of strategy.

The study found that some of the measures included improvement in the organization infrastructure, and increase in the resources required to promote implementation of strategic operational management. In addition, the study found that other measures included acquisition of the right strategies, as well as having the right stakeholders on the board. The study found that at

5% level of significance and 95% level of confidence, strategic capacity planning, strategic scheduling and leveraging were significant to performance of oil marketing firms in Kenya.

5.3. Conclusion of the Study

The study concluded that new features are often added to the existing system which promotes strategic operational management. The study concluded that the steps included appropriate planning, having the right decisions, having adequate resources, as well as preparing and having the right personnel for the implementation of the decisions. The study concluded that there are no technologies innovation that they would not recommend to aid in strategic operational management implementation. The study found that strategic operational management helps in increasing the volume and quality which are used in planning and which help in reducing the cost during the implementation of strategy.

The study concluded that some of the measures included improvement in the organization infrastructure, and increase in the resources required to promote implementation of strategic operational management. In addition, the study concluded that other measures included acquisition of the right strategies, as well as having the right stakeholders on the board. The study concluded that at 5% level of significance and 95% level of confidence, strategic capacity planning, strategic scheduling and leveraging were significant to performance of oil marketing firms in Kenya.

5.4. Recommendations and Implications of the Study

Based on the study finding the following recommendations are made:

On policy the study recommends that the management should support strategic operations management through the use of technology by ensuring that the employees are committed to the

course and that they are trained on how well they can implement strategies through the use of modern technology.

On theory the study recommends that more research should be done with regard to resource based theory and dynamic capabilities theory to help established how well the theories are coined with regard to application in real life. The researcher should relook the criticism levelled against the theories and help come up with alternative that will help neutralize the criticism. This would ensure that the recommendations given by various theories are well articulated with matters of strategic operations management and performance.

On practice the study recommends the regulatory authority to develop policy guidelines on strategic operational standards to be maintained by petroleum firms in Kenya. The management of the firms should ensure that every step of strategic operations management and its objectives is allocated adequate resources as well as the personnel. The team involved in strategic operations management process should have adequate training for them to have the necessary skills that will increase the rate at which strategies are implemented.

5.5. Limitations of the Study

Certain respondents lacked confidence during the data collection time as they feared disclosing some vital information. Others feared exposing the weaknesses of their companies. Getting feedback from the targeted respondents was also another hurdle. This was due to their busy schedule that required their attention in the oil marketing firms.

Respondents also feared that releasing some of their confidential information could be leaked to their business rivals, which in turn could be used against them. To encounter this, the researcher

solved the problem by introducing the authorizing letter from the institution. The researcher also gave them assurance that the data collected would be used for the purposes of academics only.

Collection of the data became a big challenge due to shortage of time. This is because the researcher has an employment and most of the time occupied with office work. Getting permission from the management to go for data collection was not that easy. All in all, the researcher managed to collect the data as per the stipulated time. The researcher also would wait for too long before securing a chance to interview the respondents. Sometimes the researcher would even get one questionnaire filled in a day.

5.6. Areas for Further Study

The main focus of the study was to establish the relationship between strategic operations management and performance of oil marketing firms in Kenya. Further research is recommended to establish the relationship between strategic operations management and performance of petroleum marketing firms countries within the region.

In addition, a research study can be formulated to carry out the challenges facing strategic operations management in Kenya. From the conclusions and the findings, the study ought to recommend an in-depth research to be conducted to establish whether strategic operations management has relation with strategy implementation in Kenya rather than just performance.

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APPENDICES

APPENDIX I: LETTER OF INTRODUCTION

Dear Respondent,

I am an MBA student researching the impact of strategic operations management on enhancing the affordability of petroleum products in Kenya. This study is purely for academic purposes only. I humbly ask you to fill in the questionnaire with appropriate information which will be of much help to me. The opinion given will be confidential and it will not be exposed to outside parties. Kindly comply.

Thank you in advance.

Yours Faithfully,

APPENDIX II: RESEARCH QUESTIONNAIRE

SECTION A: Background Information

1. What year was your firm established?

   ……

2. Which department are you in?

   ……

3. What roles do various departments play operations management of the firm?

   ……

   ……

   ……..

4. Kindly indicate the level of educational qualification (tick)

   a) Primary education [ ] b) Secondary Education

   c) Certificate or diploma [ ] d) Graduate [ ]

5. Please indicate the period you have been with this firm

   a) 1 yr. and below [ ] b) 1-2 yrs [ ]

   c) 2-3 yrs [ ] d) 3-4 yrs [ ]

   d) 4 yrs and above [ ]

SECTION B: Strategic Operations management

1. In your opinion, does strategic operations management enhance affordability?

Yes [ ] No [ ]

If yes explain

……

……

2. Do strategic operations management have the capacity to change the way business is done in any given organization?

Yes [ ] No [ ]

If yes explain

……

……

3. Indicate the extent of agreement on strategic operations management and its application in the firm.

Statements	**1**	**2**	**3**	**4**	**5**
The organization frequently adds new capabilities to an existing system					
New features are often added to the existing system					
Identified defects are corrected in a continuous manner					
The organization modifies systems continuously to enhance efficiency					

The organization frequently adds new capabilities to an existing system					
The organization has an automated storage and retrieval system					
The organization makes use of global positioning systems					
Electronic data interchange is widely practiced in the organization					

SECTION C: Strategic Operations management and Affordability

4. What are some of the prior steps you consider necessary before the implementation of strategic operations management to ensure their success?

   ……

   ……

   ……

5. Is there technological innovation that you would not recommend for the firm to aid in strategic operations management implementation?

   Yes [ ] No [ ]

   If yes explain some of them

6. Indicate the extent of agreement on strategic operations management and affordability.

Statements	**1**	**2**	**3**	**4**	**5**

Strategic operations management facilitates monitoring and evaluation of the firm's products and consumer response toward the goods					
Strategic operations management helps the organization to adapt to dynamics in the environment and thus increase competitive advantage					
Strategic operations management helps in increasing the volume and quality which are used in planning and which helps in reducing the cost thus enhancing affordability					

7. Indicate the extent various challenges influence strategic operations management and affordability in the firm.

Challenges	**1**	**2**	**3**	**4**	**5**
There was inadequate communication of the strategy to the staff					
The goals of, and incentives for, the workforce is not aligned with the strategy of the organization					
Leadership and direction provided by the Board of Directors and management were not adequate					
Competing activities and crises distracted attention from implementing the decisions					
The slow acceptance of new strategy by stakeholders such as members and the Board of Directors					

Major obstacles surfaced during implementation that had not been identified beforehand					

8. What measures would you recommend to ensure the successful implementation of strategic operations management to enhance affordability?

……

……

THANK YOU FOR YOUR TIME AND SUPPORT

APPENDIX III– POPULATION OF OIL MARKETING COMPANIES IN KENYA

1. Total Kenya Limited
2. VIVO Energy Kenya Limited
3. Rubis Energy Limited
4. Hashi Energy Limited
5. Gulf Energy Limited
6. Libya Oil Kenya Limited
7. Gapco Kenya Limited
8. Regnol Oil Kenya Limited
9. Petro Oil Limited
10. National Oil Corporation of Kenya Limited
11. Hass Petroleum Limited
12. Fossil Fuels Limited
13. Engen Kenya Limited
14. Oryx Energies Kenya Limited
15. Bakri International Co. Limited
16. Royal Energy Kenya Limited
17. MGS International Limited
18. Tosha Petroleum Kenya Limited
19. Ainushamsi Energy Limited
20. Galana Oil Kenya Limited
21. Olympic Petroleum Limited
22. Banoda Oil Limited

23. Ranway Traders Limited
24. Essar Petroleum (EA) Limited
25. Cityoil Kenya Petroleum Limited
26. Ramji Hiribhai Devani
27. East African Gas Oil Limited
28. Dalbit Petroleum Limited
29. Trojan International Limited
30. Global Petroleum Products
31. Axon Energy Limited
32. Tiba Oil Company Limited
33. Futures Energy Co. Limited
34. Tradiverse Kenya Limited
35. Fast Energy Limited

Source: (Petroleum Institute of East Africa, 2020)