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Influence of strategic agility on competitiveness of petroleum companies in Nairobi County, Kenya.

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INFLUENCE OF STRATEGIC AGILITY ON COMPETITIVENESS OF PETROLEUM COMPANIES IN NAIROBI COUNTY, KENYA

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DECLARATION

I declare that this is my original work and has not been previously submitted and approved for the award of degree by this university or any other. To the best of my knowledge and belief, the dissertation contains no material previously published or written by any other person except where due reference is made in the dissertation itself.

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DEDICATION

I wish to dedicate the dissertation presented herein to my dear family for mental and financialsupport, advice, and genuine corrections.

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This academic endeavor would not succeed without the grace of God. I thank God for keeping me well and allowing me to finish this project on time. I also acknowledge the support of my family. My family granted me both social and emotional support that kept me going. You were an encouragement when things seemed tough, and I will not take that for granted. In addition, I recognize and thank my supervisor, Professor Joseph Odhiambo, for the unwavering help and advice. Your invaluable support gave me the confidence to achieve my best. Finally, I recognize my friends for their support.

ABBREVIATIONS AND ACRONYMS

BCM	Billion Cubic Meters
CEO's	Chief Executive Officers
EPRA	Energy and Petroleum Regulatory Authority
KMO	Kaiser-Meyer-Olkin
M^3	Cubic Meters
NACOSTI	National Commission for Science, Technology and Innovation
SMEs	Small and Medium Enterprises
US	United States
RBV	Resource-Based View Theory

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ABSTRACT

The petroleum sector plays a critical function in driving global economic transformation, influencing key policy objectives such as decarbonization, inflation control, and improvements in living standards. However, the sector faces mounting challenges due to rapid technological advancements, globalization, shifting customer preferences to other sources of energy, and heightened sustainability expectations. These dynamics necessitate greater innovation and strategic agility among firms to sustain competitiveness. This study investigated the influence strategic agility on the competitiveness of petroleum companies in Kenya. There are many other forms of strategic agility like IT agility, awareness/sensing, decision and implementation, resilience, versatility and transformation. However the study narrowed down to leadership capability, resource configuration, strategic sensitivity and marketing orientation. Specifically, it examined the effect of leadership capability, resource configuration, strategic sensitivity, and market orientation on firm competitiveness. The investigation was based on the dynamic capabilities' theory and evolutionary theory. A positivism research paradigm and descriptive survey design were employed. The target population comprised 60 registered petroleum companies in Kenya targeting one operations manager, sales manager and one of the pump attendants from each of the petroleum firm hence a census population of 180 employees. A structured questionnaire was adapted in collecting primary data and analysed by use of SPSS version 29 and the result presentation done using tables and charts. Both descriptive and inferential findings were explored. The findings indicated that leadership capability, resource configuration, strategic sensitivity, and market orientation positively and significantly influence competitiveness in the petroleum sector. It was concluded that strategic agility play a fundamental role in influencing competitiveness within the petroleum sector. The investigation recommends for investing in visionary and adaptive leadership, embrace technological advancements and automation, establish robust mechanisms for monitoring industry trends and regulatory changes, and enhance responsiveness to evolving customer needs and sustainability imperatives. These strategies are essential for maintaining competitiveness and ensuring resilience in a rapidly evolving energy landscape.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The energy sector is fundamental to global economic development, influencing key policy goals such as de-carbonization, living standards, and inflation. It is essential for powering industrial processes and heating homes (Liu et al., 2021). The industrialization of modern economies has been fuelled by non-renewable energy sources like coal, natural gas and crude oil (Sofia et al., 2022). However, global issues for example the COVID-19 pandemic and Russia-Ukraine war have disrupted energy markets, affecting the global supply of energy commodities (Allam et al., 2022).

No industry can achieve competitiveness without strategic foresight, technological capability, and an agile workforce (Arokodare & Asikhia, 2020). The petroleum sector faces challenges in maintaining competitiveness due to rapidly changing technological environments, innovation, globalization, and evolving customer preferences. Competitiveness involves controlling market share and seizing business opportunities to outperform competitors (Holbeche, 2022).

Competitiveness is defined by the capabilities that enable firms to do better in market compared to its peers (Cahyono et al., 2023). To achieve this, firms must consider both their internal capabilities and the operations of their competitors, as well as external resource capabilities that provide a competitive edge (Wu et al., 2023). International competitiveness reflects a ability of a company to generate wealth and value in global markets (Taneja et al., 2016).

Strategic agility involves a firm's preparedness to outperform competitors by attaining market share and also attaining a sustainable competitiveness (Fakunmoju et al., 2020). It is also the ability to detect and quickly adjust to businessal dynamics, ensuring competitiveness by reconfiguring and enhancing capabilities (Arokodare & Asikhia, 2020). The petroleum sector faces competitive disadvantages due to factors like globalization, slow technology adoption, and lack of strategic foresight (Gershman et al.,

2016).

Future preparedness in strategic agility involves leadership capability, resource configuration, strategic sensitivity, and market orientation (Clauss et al., 2019). Leadership capability includes effective communication, strategic forecasting, and human capital development. Strategic sensitivity involves insights, partnerships, and foresight. Market orientation encompasses pricing strategies, marketing planning, and market intelligence (Dirani et al., 2020).

The world's largest energy producers include Russia, the US, and Iran, with natural gas contributing significantly to global energy systems. By 2021, China led in natural gas imports, followed by Germany and other countries (Ahmed et al., 2023). Despite growth in production, Russia's gas industry faces challenges such as resource depletion and aging infrastructure (Shcherbakova et al., 2020).

Agility in organizations is key to adopting 4.0 technologies, which allow firms to withstand dynamic business changes (Mrugalska & Ahmed, 2021). Technologies like cloud computing, big data, and smart manufacturing enhance organizational agility. In China, digitization has positively impacted competitiveness and sustainability in the petroleum sector (Ren et al., 2021). This research narrows to strategic agility and competitiveness in the Kenyan petroleum industry, addressing conceptual and contextual gaps.

In Nigeria, the petroleum market face numerous challenges including supply disruptions and theft (Gajere et al., 2021). In Kenya, the dynamic global supply chain hampers coordination, affecting competitiveness, especially in the liquefied petroleum gas sector (Hachu & Paul, 2018).

1.1.1 Strategic Agility

This is a fuzzy term and has been differently defined and operationalized by various scholars. In a study on strategic agility in global businesses, Shams et al. (2021) operationalized strategic agility using agile and sustainable production, supply chain agility and IT agility whereas Lyn Chan and Muthuveloo (2021) viewed it in terms of technologies, organizational capabilities and people. More the less, several scholars have

conceptualized strategic agility as leadership unity, resource fluidity and strategic sensitivity (Ivory and Brooks, 2018; Reed, 2021; Joshi, 2023; Clauss et al. 2019; de Diego Ruiz et al., 2023; Liang et al., 2018). Based on the definition and conceptualization of strategic agility, its usage and application depend on the contextual factors.

Strategic agility entails the future preparedness of the firm and the major indicators of performing better than its competitors by attaining a bigger market share and hence a sustained competitiveness. (Fakunmoju et al., 2020). Strategic agility can also be seen as an enterprise to sense the dynamic fast-paced business environment changes and to respond swiftly to the changes by maintaining competitiveness and capturing the opportunities in the market through reconfiguring, mobilizing, enhancing, combining and building its capabilities leading to enhanced sustainability (Arokodare & Asikhia, 2020). It can also be defined to comprise three interrelated capabilities including operational, partnering and customer agility (Lengnick-Hall & Beck, 2016).

The future preparedness of a firm could take the form of leadership capability, resource configuration, strategic sensitivity and market orientation (Clauss et al., 2019). Leadership capability entails effective communication, strategic forecasting as well as human capital development. Strategic sensitivity may involve partnerships among companies, strategic insights and strategic foresight. Market orientation on the other hand entails the pricing strategies of the firms, marketing planning as well as the market intelligence for expansion. Resource configuration includes human and financial resources, firm specific resources as well as information technology resources (Dirani et al., 2020).

The management of the unforeseen changes and risks that could be faced by entities can be done through building strategic agility. It enables the firms to make utilization of the strategies with the goal of being flexible and responsive to the needs of the customers (Muchoki, 2022). The entities that have proven responsive to the unpredictable, diverse and changing needs of the clients on the front end while at the same time minimizing the supply disruption risks at the back end can be considered strategically agile. The strategic agility can be seen as proficiency of change management, which is a capability that allows the effective application of knowledge within organizations (Ahmed & Huma,

2021).

Different scholars have measured the concept of strategic agility differently. The concepts share common items through with some concepts being different. According to the scholars, strategic agility entail IT agility/technological agility (Lyn Chan & Muthuveloo, 2021; Lengnick-Hall & Beck, 2016; Shams et al., 2021; Vrontis et al., 2023), supply chain agility (Shams et al., 2021), sustainable production (Shams et al., 2021), organizational capabilities (Lyn Chan & Muthuveloo, 2021), people (Lyn Chan & Muthuveloo, 2021), effective resource deployment/dynamic capability and adaptability to change (Joshi, 2023; Weber & Tarba, 2014; Lengnick-Hall & Beck, 2016; Vrontis et al., 2023), strategic sensitivity (Clauss et al., 2019; de Diego Ruiz et al., 2023; Joshi, 2023; Ivory & Brooks, 2018; Reed, 2021; Vrontis et al., 2023), leadership unity (Clauss et al., 2019; de Diego Ruiz et al., 2023; Joshi, 2023; Ivory & Brooks, 2018; Reed, 2021; Weber & Tarba, 2014), and resource fluidity/configuration (Clauss et al., 2019; de Diego Ruiz et al., 2023; Joshi, 2023; Ivory & Brooks, 2018; Reed, 2021).

In addition, according to Palanisamy et al. (2022) strategic agility comprises awareness/sensing, decision and implementation while Prange and Hennig (2019) conceptualized strategic agility as resilience, versatility and transformation. Sampath and Krishnamoorthy (2017) studying at exploring the strategic agility constructed conceptualized it into resource reconfigurability, transformational leadership, learning, entrepreneurial market and strategic orientation. Focusing on Finnish public service sector, Liang et al. (2018) indicated that assessing public service organizations based on their leadership unity, resource fluidity and strategic sensitivity may affect their effectiveness in building strategic agility by adopting an approach of innovation that is user- driven. Commitment, competence, communications and climate as key items of strategic agility. In this study, leadership capability, resource configuration/ resource fluidity, strategic sensitivity and marketing orientation was adapted in the context of petroleum industry.

1.1.2 Industry Competitiveness

Competitiveness entails capabilities that facilitate business enterprises to perform better compared to peers in the market (Cahyono et al., 2023). Competitiveness is viewed as a way of controlling the market share as well as seizing the available business opportunities leading to better performance than competitors (Holbeche, 2022). In ensuring that competitiveness is achieved, any business enterprise ought to consider the operations of its competitors and further its internal capabilities together. It involves putting into consideration the external resource capabilities as well as its resource endowments, which form a source of competitiveness to the organistion. The country or an entity's' ability to be competitive and make more wealth and value compared to the performance of its competitors is determined by international competitiveness. This is because the international markets provide a level environment for market competition (Taneja et al., 2016).

In ensuring that competitiveness is achieved, any business enterprise ought to consider the operations of its competitors and further its internal capabilities together. It involves putting into consideration the external resource capabilities as well as its resource endowments, which form a source of competitiveness. The country or an entity's ability to be competitive and make more wealth and value compared to the performance of its competitors is determined by international competitiveness. This is because the international markets provide a level environment for market competition (Taneja et al., 2016). Competitiveness entails the enduring and implicitly static favorable market position cleverly established because of assembling the right capabilities and competencies for making or delivering an offering that is better than the competition (Kamau et al., 2016). The firm's performance is also intertwined amongst other activities of governments, partners, suppliers, its competitors, customers as well as its activities (Wuim-Pam, 2014). Competitiveness of the companies could be measured in terms of the market share of a particular company, product portfolio as well as the sales revenues or profitability (Akben-Selcuk, 2016).

1.1.3 Petroleum Companies in Kenya

Kenya was initially poised to benefit greatly from the discovery of petroleum by Tullow

Oil, a development that was expected to elevate Kenya's status on the global map. The prospect of these resources attracted interest from various global companies seeking to explore the potential of the reserves. However, the discovery came with several challenges, including environmental concerns, corruption, a weak revenue collection system, political activism, and a lack of capacity, among others. The oil discovery in Kenya faces significant hurdles such as inadequate technical capacity, limited bargaining power with foreign governments, political instability, lack of accountability and transparency, ineffective revenue management, and a fragile institutional framework (Kigwiru, 2020). Currently, 547 petroleum companies are licensed to operate in Kenya (Energy and Petroleum Regulatory Authority, 2024), with the study focusing on a sample of 60 licensed petroleum companies operating Nairobi City County.

The Kenyan oil industry is dominated by foreign entities such as Rubis Energies, Shell, and Total. Rubis Energies has expanded its market share to 20.1% following its acquisition of Gulf Energy and Kenol Kobil, which held a 14.8% market share. Total ranks second with a 13.2% market share, bolstered by the 2017 acquisition of Gulf African Petroleum Corporation and its organic growth. Vivo Energy, which operates Shell-branded outlets, holds a 12.5% market share, while Ola Energy commands 5.4%, and the National Oil Corporation has a 4.4% market share. The Energy Regulatory Commission reviews oil prices in Kenya monthly (Energy and Petroleum Regulatory Authority, 2024).

1.2 Statement of the Problem

Given the energy sector is a fundamental pillar of global economic development, as it directly affects policy goals such as de-carbonization, living standards and inflation as it is crucial for powering industrial processes as well as heating the people's homes (Gajdzik et al., 2024). The industrialization of the modern industrialized economies has been aided by the development of the non-renewable sources of energy including natural gas, crude oil, and coal. Various business enterprises compete with the aim of enhancing their profitability, improving the satisfaction of customers, improved standards of living as well as social development in the long term (Adiguzel, 2020). Competitiveness therefore entails capabilities that facilitate business enterprises to perform better than their competitors

(Cahyono et al., 2023). Strategic agility entails the future preparedness of the firm and the major indicators of performing better than its competitors by attaining a bigger market share and hence a competitiveness (Fakunmoju et al., 2020).

Petroleum industry firms have a competitive disadvantage because of the factors including globalization, innovation, creativity, changing preferences of customers, slow agility uptake to the technological development challenges, strategic foresight measures and poor adoption of information technology capabilities. This has affected the aggregate performance of the petroleum industry (Arokodare et al., 2019). The dynamic global supply chain has affected the effective coordination of the system because one member cannot compete as independent members in the supply chain, but rather as a group (Osei & Asante-Darko, 2023). The petroleum industry in Kenya comes with several challenges including inadequate capacity, political adequacy, low bargaining power with foreign countries, lack of accountability and transparency in the sector, weak revenue management and weak institutional framework (Kigwiru, 2020). Thus, the study at hand sought to determine strategic agility on the competitiveness of petroleum companies in Kenya.

Studies including Shcherbakova et al. (2020); Gajere et al. (2021); Abdow (2019) have been conducted globally, regionally and locally that have presented knowdge gaps that the this investigation sought to adress. In Russia, an investigation by Shcherbakova et al. (2020) indicates the need for maintaining competitiveness in petroleum companies as it determines success, nature and scope of the activities of the entity and the chances of getting into new markets. The study, however, focused on high financial stability and strategic position as the key aspects of strategic agility using a dynamic method. However, the study at hand focuses on leadership capability, resource configuration, strategic sensitivity as well as marketing orientation. The study thus presented contextual, conceptual and methodological gaps as the Russian and Kenyan contexts with regards the petroleum firms may not be the same. An investigation by Gajere et al. (2021) noted that the petroleum market in Nigeria has been faced with shortcomings in the recent past including unreliable gas supply, fire outbreak, inadequate pipeline infrastructure, fuel pricing, kidnapping, pollution, crude oil theft, pipeline vandalism and oil spills in Niger Delta as well as strategic drifting. The study however focused on strategic resilience,

organizational flexibility and managerial culture. However, the study at hand focuses on leadership capability, resource configuration, strategic sensitivity as well as marketing orientation. The study also presented conceptual and contextual gaps. A study by Abdow (2019) in Kenya indicated that corporate communication, strategic forecasting, development of human capital and strategic controls significantly influenced strategic leadership on organizational change. The investigation at hand focuses on leadership capability, resource configuration, strategic sensitivity as well as marketing orientation. A conceptual gap was evident in the investigation as this research narrowed on the competitiveness of the petroleum companies in Kenya.

1.3 Research Objectives

1.3.1 General Objective

The general objective was to explore the effect of strategic agility on competitiveness of petroleum companies in Kenya.

1.3.2 Specific Objectives

The specific objectives determined,

i. The effect of leadership capability on competitiveness of petroleum companies in Nairobi.
ii. The effect of resource configuration on competitiveness of petroleum companies in Nairobi.
iii. The effect of strategic sensitivity on competitiveness of petroleum companies in Nairobi.
iv. The effect of marketing orientation on competitiveness of petroleum companies in Nairobi.

1.4 Research Questions

i. How does leadership capability affect the competitiveness of petroleum companies

in Nairobi?

ii. How does resource configuration affect the competitiveness of petroleum companies in Nairobi?

iii. What is the effect of strategic sensitivity on the competitiveness of petroleum companies in Nairobi?

iv. What is the effect of marketing orientation on the competitiveness of petroleum companies in Nairobi?

1.5 Scope of the Study

There are many aspects of strategic agility as defined by scholars. However, this study narrowed to the effect of leadership capability, resource configuration, strategic sensitivity and marketing orientation on petroleum firms' competitiveness. The research study was carried out with specific attention on petroleum companies' competitiveness in Nairobi County. Specifically, the investigation focused on profitability and sales revenue, the number of customers as well as the product portfolio of the firms under study. In terms of theoretical scope, the study was guided by dynamic capability theory and evolutionary theory. There are 547 licensed petroleum companies operating in Kenya (Energy and Petroleum Regulatory Authority, 2023) forming population scope. The study thus sought the responses of the selected staff working at the petroleum companies including the operations manager, sales manager and a pump attendant. A descriptive research design guided the investigation and was undertaken in December 2024.

1.6 Significance of the Study

The has considerable significance for different stakeholders, including future scholars, policymakers, and industry practitioners within the petroleum sector.

To future scholars**,** the results enrich the current body of knowledge on strategic agility and competitiveness, particularly within the context of emerging markets such as Kenya. It provides a foundation for future academic inquiries by highlighting key dimensions of strategic agility—such as leadership capability, resource configuration, strategic

sensitivity, and market orientation—and their role in enhancing competitiveness.

For policymakers, especially those involved in regulating the energy and petroleum sector, this investigation offers valuable lessons into the dynamic challenges facing petroleum companies and the strategic competencies necessary for long-term competitiveness. Understanding the impact of strategic agility can guide the formulation of supportive policies and regulatory frameworks that foster innovation, sustainability, and resilience in the energy sector. It also informs national development plans that align with global shifts toward decarbonization and energy security.

For petroleum companies operating in Nairobi County and beyond, the investigation provides actionable insights into how firms can attain competitive edge in a rapidly evolving business environment. By identifying key agility drivers—such as adaptable leadership, effective resource utilization, and sensitivity to market trends, industry players can realign their strategic priorities to remain competitive, responsive, and resilient. The study's recommendations can also support capacity building, investment planning, and strategic decision-making within the sector.

1.7 Chapter Summary

The chapter discussed the research background and problem statement that necessitated the study. Additionally, it outlined the objectives of the study, presenting the general, specific objectives and research questions. Further, study scope and the research's significance to practice, policy and research was outlined. The chapter ended with chapter summary.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

The chapter outlines the literature review on strategic agility and competitiveness of petroleum entities in Nairobi County. Review of literature both empirical and theoretical reviews as well as outlining research gaps and conceptual framework. It ends with chapter summary.

2.2 The Theoretical Foundation

The dynamic capability theory and evolutionary theory guided the investigation. The two theories collectively provides a robust foundation for comprehending how firms operating in volatile and rapidly changing environments, such as the petroleum industry, can sustain competitiveness through strategic agility.

The Dynamic Capabilities Theory (Teece et al., 1997) serves as the primary anchoring theory in this research. It emphasizes the firm's capability to purposefully build, integrate, and reconfigure external and internal resources to match with the raid changes in the business environment. This theory moves beyond the static view of strategic resources by focusing on how organizations can dynamically adapt their resource base through innovation, strategic decision-making, and continuous transformation (Bleady et al., 2018). The relevance of this theory to the petroleum sector in Kenya lies in its call for firms to be flexible, innovative, and responsive to shifts in regulatory frameworks, technological developments, and customer expectations.

Complementing this, the Evolutionary Theory of the firm provides a comprehensive perspective on organizational development. Rooted in the works of Nelson and Winter (1982) and further expanded by scholars like Argote (2012), this theory views firms as evolving entities that learn and adapt over time. It posits that organizational routines, capabilities, and strategies emerge through cumulative learning and innovation processes. From this perspective, strategic agility is not only about to respond to business related change but also about embedding adaptive learning mechanisms within the organization's

structure and culture.

Although each theory emphasizes different mechanisms—Dynamic Capabilities Theory focusing on purposeful reconfiguration and Evolutionary Theory emphasizing path-dependent learning and adaptation—they converge on the central idea that firms must continuously evolve to survive and succeed in dynamic environments. Together, these theories support the study's focus on strategic agility as a multifaceted capability involving leadership capability, resource configuration, strategic foresight, and market responsiveness.

These theoretical lenses have been widely applied in strategic management research. Notable contributions include works by Arokodare et al. (2019), Wang et al. (2015), Lewandowska and Mikuła (2020), and Kraaijenbrink et al. (2010), who have demonstrated how organizations that embed dynamic capabilities and adaptive learning mechanisms are better positioned to navigate uncertainty and achieve sustained competitiveness.

2.2.1 Evolutionary Theory of the Firm

The theory was first suggested by Coase (1937) and later proposed by Nelson and Winter (1982) and postulates that a firm during its tenure accumulates substantial knowledge as it builds its portfolio of a set of skills that are unique that are utilized in its operations. Wright (2007) indicates that the set of unique skills and capabilities inherent within the firm gives it a comparative advantage and enhances its sustainability and adaptability in the dynamic environment. Thus, overtime, organizations tend to develop more skill and capabilities that that are suitable to the changing environments hence become agile (Hölzl, 2005). This is an evolutionary path that the firm follows involving the firm as a knowledge processor (Holsapple & Li, 2008). According to the theory, the evolutionary approach explains the behavior of firms in adapting to dynamic market conditions through the interaction between natural selection and innovation (Lo, 2004).

The Evolutionary Theory of the Firm suggests that firms transform across time via the knowledge accumulation and the development of routines and capabilities. It iterates the

significance of organizational learning, innovation, and flexibility in achieving long-term competitiveness (Teece, 2017). The theory is significant to the assessment because it highlights the role of leadership in facilitating organizational learning and adaptation to changing market conditions. Effective leaders can promote a learning culture within the company, encouraging experimentation, knowledge sharing, and responsiveness to environmental changes (Sonmez Cakir & Adiguzel, 2020). The theory also underscores the dynamic nature of resource management and the necessity for firms to evolve and adapt over time. Strategic sensitivity aligns with the evolutionary perspective, which views firms as adaptive systems that continuously scan their environment for signals of change. Firms possessing better levels of strategic sensitivity are better prepared to learn from their environment and adapt their strategies to remain competitive.

Marketing orientation aligns with an evolutionary perspective, which emphasizes the importance of firms' responsiveness to changes in customer preferences and market dynamics (Silva et al., 2017). Firms that are market-oriented are more likely to adapt these strategies and offerings in line with changing customer needs, promoting their competitiveness over time. Additionally, Evolutionary Theory of the Firm highlights the significance of leadership in facilitating organizational learning and adaptation to changing market conditions. Effective leaders can promote a learning culture within the company, encouraging experimentation, knowledge sharing, and responsiveness to environmental changes.

In terms of resource configuration, Evolutionary Theory of the Firm is crucial. Resource configuration can be viewed as an evolutionary process, where firms continuously adjust and refine their resource portfolios in response to environmental changes. This theory underscores the dynamic features of resource management and the need for firms to evolve and adapt over time. Evolutionary Theory of the Firm is also pertinent in understanding strategic sensitivity. Strategic sensitivity aligns with the evolutionary perspective, which views firms as adaptive systems that continuously scan their environment for signals of change. Firms possessing better levels of strategic sensitivity are well placed to learn from their environment and adapt their strategies to remain competitive.

Finally, marketing orientation aligns with the evolutionary perspective, which emphasizes the importance of firms' responsiveness to changes in customer preferences and market dynamics. Firms that are market- oriented are more likely to integrate these strategies while aligning with evolving customer needs, promoting their competitiveness over time.

Research drawing on Evolutionary Theory often explores how firms evolve and adapt over time to remain competitive in dynamic environments. For instance, a study by Lewandowska and Mikuła (2020) investigated the emergence of organizational capabilities and agility while focusing at Polish manufacturing sector. The researchers examined how firms' strategic responses to environmental changes and market dynamics contributed to their agility and competitiveness.

The theory is relevant to the investigation as underscores that over time, firms evolve through knowledge accumulation as well as through development of capabilities and routines to adapt to the dynamic business environments. The theory recognizes the role of organizational learning, flexibility, innovation and leadership in promoting sustainable long-term competitiveness of the organization and adaptation to the dynamics in the business environment. The theory thus informs the four constructs of strategic agility including leadership capability, resource configuration, strategic sensitivity as well as marketing orientation.

2.2.2 Dynamic Capabilities Theory

The Dynamic Capabilities Theory was started by Teece et al. (1997) to offer a more dynamic approach to achieving competitiveness, building on earlier resource-based frameworks. This theory focuses on how firms reconfigure, deploy, and integrate their resources in response to dynamic market conditions. Unlike static theories, which emphasize possessing valuable resources, this theory underscores the significance of adapting and aligning a firm’s resource base to maintain competitiveness over time (Teece, 2014).

Dynamic capabilities is the ability of an entity to sense threats and opportunities in the market, seize them, and reconfigure its resources accordingly (Teece, 2007). Wang et al.

(2015) argue that firms with stronger dynamic capabilities perform better, as they are more adept at adapting to market shifts. As per the theory, firms must maintain organizational agility to remain competitiveness in the dynamic environments.

Leadership plays an important role in driving organizational change. Effective leaders guide firms through adaptation by promoting culture of innovation, flexibility, and continuous improvement (Lopez-Cabrales et al., 2017). Resource reconfiguration is key to ensuring firms remain agile and aligned with market opportunities, a process that maintains operational efficiency while responding to external pressures.

The theory is highly important to this study, particularly in areas such as leadership capability, resource configuration, strategic sensitivity, and marketing orientation. In terms of leadership capability, the theory highlights how leaders must foster organizational agility, ensuring that firms can adapt these strategies and resources to shifting market conditions.

In resource configuration, the theory emphasizes the capability of an entity to continuously adapt its resources to dynamic market changes. This aligns with the study's focus on managing a firm’s resources to sustain competitiveness over peers in the market.

Strategic sensitivity is another key aspect of the theory, emphasizing the ability to respond and sense to environmental changes. Firms with high strategic sensitivity can anticipate market shifts, allowing them to adjust their strategies and maintain a competitive edge.

Additionally, marketing orientation aligns with the theory by focusing on understanding and meeting customer needs while staying ahead of market trends. Firms with strong capabilities in marketing can innovate, build better customer relationships, and refine their offerings to maintain long-term competitiveness.

Several studies have applied Dynamic Capabilities Theory to examine how firms develop and deploy resources to adapt to dynamic environments. For example, Wang et al. (2015) explored how dynamic capabilities enhanced organizational agility in China’s manufacturing industry. Their findings revealed that firms capable of reconfiguring their

resources in response to technological and market shifts were better able to maintain competitiveness.

2.3 Empirical Literature

The section presents a synthesis of researches conducted in relation to strategic agility and petroleum companies' competitiveness. The section also identifies the gaps existing from past studies and the empirical work that the investigation sought to fill.

2.3.1 Leadership Capability on Competitiveness of Petroleum Companies

The dominant theory for this research question would likely be Dynamic Capabilities Theory. This theory puts emphasis on the role of leadership in driving changes in organizations, adaptation, and competitiveness. Leaders with strong capabilities in strategic agility, decision-making, and innovation can effectively steer the company towards competitiveness by encouraging a norm of responsiveness and continuous improvement of the dynamics in the market.

There is research that has been carried out to demonstrate the link between leadership and competitiveness of various organizations. A study by Abdow (2019) in the Kenyan petroleum sector on strategic leadership on organizational change. A descriptive research design was employed with a target population including 234 participants including 187 directors and 47 CEOs. Utilizing a questionnaire, primary data was collected. Basing on the results, corporate communication, strategic forecasting, development of human capital and strategic controls significantly influenced strategic leadership on organizational change.

Another empirical investigation was conducted by Arami (2016) focusing on the leadership of the projects on the Kuwait petroleum industry. The results indicated that status, group oriented and value-based leadership styles as well as face saving are emphasized in the Middle East. However, global studies often value a set of isolated features of effective leaders and fail to consider situational effects. Project managers exhibited some differences in their leadership styles in comparison to countries in the west. The study, nonetheless,

presented methodological, contextual and conceptual gaps as the study largely relied on interviews in its investigation.

Thomas (2020) did an investigation about style of leadership and employee performance in the petroleum sector. The outcomes pointed out of effective leadership motivates its staff towards the direction of the organization's vision. Thus, to address the objective of the organization as well as achieving its sustainability in the petroleum business, the role of leaders is critical. In the long term, the democratic style of leadership is efficient while in the short term, autocratic style of leadership is effective. Gajere and Nimfa, (2021) undertook a study on strategic drift and the culture of organizations in Nigeria petroleum companies. A survey research design with the utilization of primary data. As per the outcomes, managerial culture, the flexibility of organizations and strategic resilience significantly and positively related with the culture of Nigerian petroleum organizations. Even though the investigation centered strategic agility of the petroleum companies, the research was done based on the Nigerian context whereas this research at hand was done based on the Kenyan context.

Zulkifli (2022) did carry out research on critical review, the framework of strategic agility on the Indonesian petroleum sector competitive dynamics. From the outcomes, the companies under review ought to be agile considering the dynamic nature of the business in the sector to enhance their performance. Thus, these companies must influence their operational performance by integrating and combining dynamic capability variables including absorptive capacity, competency, culture and leadership to remain competitive. Through unity in leadership, commitments and collective efforts towards taking actions in response to emerging threats/opportunities would be effective. Onyango (2017) in a study on how focus strategies, differentiation and cost leadership influences the competitiveness of firms at BOC Kenya limited utilized Survey research design was adopted. The outcomes pointed out that focus strategies, differentiation and cost leadership positively and significantly related with competitiveness of the firms. Thus, a combination of all three brings forth a higher competitive edge. The study however presented contextual and gap as the investigation was conducted focusing on the petroleum companies in Indonesia.

2.3.2 Resource Configuration on the Competitiveness of Petroleum Companies

With regards to the role of resource configuration on the competitiveness of the petroleum firms in Kenya, the dominant theory for this research question Dynamic Capabilities Theory. This theory puts emphasis on the role of resource configuration in driving changes in organizations, adaptation, and competitiveness. Leaders with strong capabilities in strategic agility, decision-making, and innovation can effectively steer the company towards competitiveness by integrating resources well while encouraging a norm of responsiveness and continuous improvement of the dynamics in the market.

There are studies that have been carried out demonstrate the link between resource configuration and competitiveness of various organizations. Among such studies include a study by Al-Frijawy and Militaru (2018) on how human resource management influence oil companies' competitiveness in Iraq. From the results, there should be participation of human resource management in implementation and establishment of the strategies of the company in achieving competitiveness. This includes offering services to customers that are superior to those of the competitors in terms of pricing and quality. This can be achieved by employing qualified labor, enhancing service quality, productivity and considering market changes. In a study on management of strategic resources in projects in petroleum sector, Al-Hanshi et al. (2022), the attributes of resources including organizational support and value influenced innovative environment and dynamic capabilities and related positively with the competitiveness. However, the attributes including inimitability and rareness exhibited less evolution. The proper alignment of human resources, financial and facility resources drive competitiveness in a firm. The study, however, presented methodological and contextual gaps, as the investigation at hand largely depended on quantitative data. The research presented a contextual gap, as the current investigation was undertaken in Iraq.

Van Alstine et al. (2014) did an investigation on the dynamics of the governance of resources, focusing on the challenge of 'new oil' in Uganda using an inductive and qualitative approach. From the outcomes, four gaps were notable including weak local

government capacity, industry driven interaction at the local level, the deliberate centralization of oil governance, limited civil society access to communities and lack of agreement among the civil society organizations. Corporate social responsibility activities and resource governance issues particularly those related to transparency do not go well with the development trajectory. The study, however, presented methodological and contextual gaps, as the current investigation largely depended on quantitative data. Santana-Sarmiento et al. (2019) in a study focusing at wind energy in Tenerife and Gran Canaria pointed out that the complementary resource endowment in the wind power in Island of Gran Canaria, is better while the value of its basic resources is low. Gran Canaria outperforms Tenerife in terms of capabilities due to proximity, innovation and demand. There is more robust institutional and governmental support in Tenerife. For the wind energy sector competitiveness to be possible, resource capabilities as critical strategic endowment to use. The study however presented methodological and contextual and contextual gaps.

Menhat (2015) conducted research on resources-based view perspectives the system of measuring performance of petroleum supply chain. The outcomes argued that the system of measuring performance complies with three basic characteristics of RBV is proposed in order to be competitive. The characteristics should be inimitable, nontransferable and valuable. These basic features are necessary for the performance of the entities to sustain their sustainability. The results are also backed by the findings of Maina (2022) focusing on the Kenyan Insurance firms on strategic agility and competitiveness employing cross-sectional research design. The target population was 58 insurance entities operating in Kenya. From the outcomes, the practices of strategic agility contributed positively towards enhancing the competitiveness of the entities under review. The focus of the research was on strategic agility of the insurance firms in Kenya whereas the current research is focused on strategic agility of petroleum entities in Nairobi County, hence presenting a contextual gap. Finally, a study by Menhat (2015) employed resource based view theory while this study employed dynamic capability theory bring about theoretical gap. Dynamic capability theory emphasizes about resource reconfiguration to align with organization objectives,

which is not done by resource based view theory.

2.3.3 Strategic Sensitivity on the Competitiveness of Petroleum Companies

The dominant theory for this research question could be a combination of Dynamic Capabilities Theory and Evolutionary Theory of the Firm. Both theories emphasize the importance of responsiveness of the entities to dynamics in their environment and their ability to adapt and evolve over time. Strategic sensitivity involves the ability of the firm to anticipate and adjust to dynamics in the external environment, aligning closely with the core concepts of these theories.

There are research that have been done to demonstrate the link between resource configuration and competitiveness of various organizations. Among such studies, include a research by Fakunmoju et al. (2020) on the moderating role of strategic foresight and information technology capability and on the association between strategic agility and competitiveness of petroleum marketing entities. A survey research design was employed with 515 management teams of the marketing firms under review making up the target population. The results indicated that strategic foresight and information technology capability exhibited strong moderating effect on the association between strategic agility and competitiveness in the petroleum-marketing firms. Hamed (2023) further investigated how strategic sensitivity influences car and equipment manufacturing companies' sustainable competitiveness. Data collection was done by employing an analytical approach from a sample of 195 participants. From the outcomes, a significant positive and association was exhibited between sustainable competitiveness and strategic sensitivity. From the results, the strategic insight indicator portrayed greatly influenced sustained competitiveness followed by strategic foresight. However, there is a conceptual gap as the study viewed strategic foresight as a moderator, but previous studies have regarded it as one of the antecedents of strategic agility.

In in Uyo, Akwa Ibom State, Nigeria, Ekanem et al. (2023) did a study in 11 selected deposit-taking banks on strategic sensitivity and competitiveness of the bank utilizing survey research design. The respondents included the staff of the selected banks. From the

outcomes, the strategic sensitivity and the competitiveness of the selected banks are positively related. In addition, the performance of the banks with low strategic sensitivity was lower compared to the performance of the banks with higher strategic sensitivity. Thus, it is necessary for the organizations to improve on their state as a way of enhancing their commitment towards strategic sensitivity. According to the author, mapping and responding rapidly to the market is key to attaining strategic agility and is vital for more expansion and understanding customer needs. A similar study was conducted In Nigeria by Adim and Maclayton (2021) focusing strategic sensitivity and responsiveness of the firms dealing in fast moving consumer goods. The investigation used a target population of 9 firms employing cross-sectional survey design. From the outcomes, the strategic sensitivity and the responsiveness of the companies are positively related. Strategic insight and strategic foresight correlated significantly and positively with the corporate responsiveness of the companies under review. These studies exhibited conceptual, contextual and methodological gaps.

A study was conducted by Majimbo and Namusonge (2020) on strategic innovation and 'Nairobi County marketing entities 'performance using a target population of 94 registered entities and a descriptive research design. From the outcomes, product innovation, market innovation and organizational innovation exhibited a positive relationship with performance. Thus, the study concluded of a positive strong influence of strategic innovation on the performance of oil marketing entities. This study presented contextual and conceptual gaps.

Focusing on Vivo energy, Nderitu and Njuguna (2017) did carry out a study on how the expansion of retail network influences competitiveness of oil-marketing firms. A descriptive research design was adopted with a target population of 110 staff providing services at the headquarters of Vivo energy. From the results, the expansion of retail networks positively and significantly influences the competitiveness of Vivo energy. Mwachia et al. (2023) further carried out research on the impact of dimensions of organizational agility on Kenyan coast counties' hotel industry performance. The study employed descriptive research design in providing a description of the key characteristics

of the sample population with the intent of establishing relations among the key variables of the investigation. The research results pointed out a positive strong correlation between Online Business and performance of hotel industry in Kenyan coast counties, indicating that there was a significant positive influence of online business on the performance of the hotel industry in coast region. The study was centered on organizational agility dimensions of the hotel industry in coastal counties of Kenya whereas the study at hand is focused on strategic agility of Petroleum companies in Nairobi County, hence presenting a contextual gap.

2.3.4 Marketing Orientation on the Competitiveness of Petroleum Companies

The evolutionary theory of the firm postulates that a firm during its tenure accumulates substantial knowledge as it builds its portfolio of a set of skills that are unique that are utilized in its operations. The set of unique skills and capabilities inherent within the firm gives it a comparative advantage and enhances its sustainability and adaptability in the dynamic environment. Thus, overtime, organizations tend to develop more skill and capabilities that that are suitable to the changing environments hence become agile.

There are studies that have been carried out to demonstrate the link between resource configuration and competitiveness of various organizations. Among such studies, include a study by Alao et al. (2020) on the moderating effect of resource capabilities on the association between strategic marketing and the Nigerian petroleum products entities' competitiveness using a target population of 1568 managers and a cross-sectional research design. The outcomes pointed out that strategic marketing and competitiveness have positive and significant relationship while no significant moderating role of resource capability on the association between strategic marketing and competitiveness. Further, Oyakhire and Akpan (2021) did an investigation in Nigeria focusing on the competitive strategies and petroleum companies' performance. A panel research design was utilized. From the outcomes, the petroleum business is highly competitive and turbulent and thus the need for these firms to be competitive by providing superior services to its customers. They should also learn to adapt to dynamic environment utilizing competitive strategies to enhance their performance. The outcomes demonstrate that competitive strategy and

organizational performance are positively and significantly related. The studies, however, presented contextual, methodological and conceptual gaps.

Employing resource-based view, Fakhreddin and Foroudi (2022) investigated the impact of market orientation on the performance of new products through product launch quality. Market orientation was operationalized using market intelligence gathering, dissemination and responsiveness to market analysis. Structural equation modeling was utilized in the analysis of data. Furthermore, the performance of new products is significantly influenced by market orientation. In Russia, Ekaterina and Dornberger (2014) in Tatarstan knowledge-intensive companies investigated how market orientation is influenced by business performance. From the results, responsiveness, intelligence dissemination and intelligence generation were utilized in measuring market orientation. High-tech companies working in sectors such as engineering, biotechnology and chemical industries were sampled. In knowledge-intensive industries, the performance of non- financial and financial businesses is positively influenced by market orientation.

Namagembe (2022) conducted a research on marketing strategy, capability and orientation of petroleum firms. From the results, marketing strategy, marketing capability and marketing orientation had an influence on marketing strategy. The capability of a firm to market had an influence on the strategy employed by the firms in Marketing. Furthermore, a partial mediation effect of marketing capability of the firm on the association between marketing orientation and marketing strategy was observed. Adefulu et al. (2020) in a study in Nigeria on how competitiveness of selected companies dealing in petroleum products marketing is influenced by innovation culture and strategic marketing. The results indicated that strategic marketing dimensions including marketing decision, marketing analysis, marketing planning and marketing orientation positively and significantly related to competitiveness and innovation culture of the selected petroleum products marketing entities. The studies, however, presented contextual, methodological and conceptual gaps.

An investigation was carried out by Mansouri et al. (2022) on the mediating influence of market orientation between internal marketing and entrepreneurial orientation by focusing at private sports clubs. A descriptive-correlational study was used. From the outcomes, the

entrepreneurial orientation of the employees positively related to internal marketing. The results further pointed out a positive mediating role of market orientation in the association between entrepreneurial orientation and internal marketing. Ogolla et al. (2017) did carry out an investigation on the association between strategic agility and the performance of organizations. The target population included senior staffs and the top managers of Kenyan state corporations. From the outcomes, strategic agility and the performance of organizations positively and significantly related. Individual strategic agility components are positively related to organizational performance. The components include organizational position, work experience and age significantly related to strategic agility. Gender and educational level had no significant relationship. The studies, however, presented contextual and conceptual gaps.

2.4 Summary of Research Gaps

Numerous researches have been done around the area of study. However, out of these studies, there were notable study gaps that the current investigation addressed.

Table 2.1: Summary of research Gaps

Author	Topic	Results	Research Gap	Focus of the Study
Abdow (2019)	Strategic leadership on organizational change in Kenya	Corporate communication, human capital development, strategic direction, controls and forecasting significantly influenced strategic leadership on organizational change	A conceptual gap as it dwells on strategic leadership and organizational change	The current investigation focuses on the effect of leadership capabilities, resource configuration, strategic sensitivity and marketing orientation on the competitiveness of petroleum companies in Kenya

Thomas (2020)	Style of leadership and petroleum sector employee performance	Autocratic leadership style is quite effective in the short term while in the for all times, democratic leadership style is useful	A conceptual gap as it dwells on style of Leadership and employee performance	The current study seeks to relate leadership capabilities and competitiveness of the petroleum firms in Kenya
Al-Frijawy and Militaru (2018)	Human resource management influence oil companies' competitiveness in Iraq	There should be participation of human resource management in implementation and establishment of the strategies of the company in achieving competitiveness	Focused on the nexus between HRM on the competitiveness of oil companies in Iraq hence presenting contextual and conceptual gaps. The context of Iraq and that of Kenya may not be the same	The current investigation focuses on the nexus between resource configuration and competitiveness of petroleum companies in Kenya
Al-Hanshi et al. (2022)	Management of strategic resources in projects in petroleum industry	The attributes of resources including organizational support and value influenced innovative environment and dynamic Capabilities and related positively with the competitiveness. However, the attributes including inimitability and rareness exhibited less evolution.	Focused on strategic resource management in petroleum industry projects hence outlining both contextual and conceptual gaps	The current research focuses on resources configuration and competitiveness of petroleum entities in Kenya

Ekanem et al. (2023)	Strategic sensitivity and competitiveness of selected DT banks in Uyo, Akwa Ibom state	Strategic sensitivity and competitiveness of firms related significantly.	The study was conducted in Nigeria focusing on selected deposit money banks presenting conceptual and contextual gaps	The current investigation focused on petroleum firms in Nairobi, Kenya
Adim and Maclayton (2021)	Strategic sensitivity and responsiveness of the companies dealing in fast moving consumer goods	The strategic sensitivity and the responsiveness of the companies positively related. Strategic insight and strategic foresight correlated significantly and positively with the corporate responsiveness of the companies under review	The study was conducted in Nigeria focusing on fast moving consumer goods companies presenting conceptual and contextual gaps	The current research was carried out in Kenya with a focus on petroleum entities
Alao et al. (2020)	Moderating role of resource capabilities on the nexus between competitiveness and strategic marketing of selected Nigerian petroleum firms	A significant positive association between strategic marketing and competitiveness and no significant moderating role of resource capability on the nexus between strategic marketing and competitiveness	A research design used was cross-sectional survey presenting conceptual and contextual gaps	Descriptive survey design was adopted

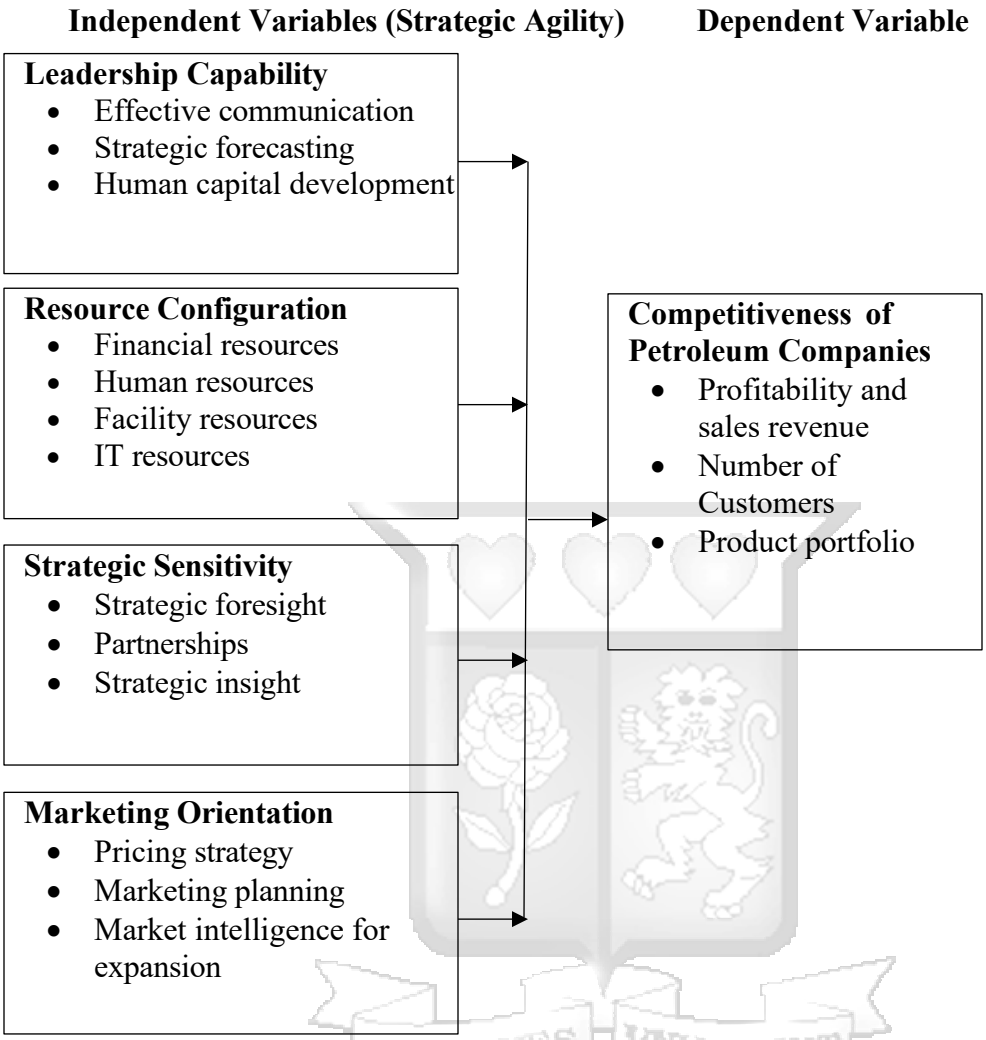
Namagembe, S. (2022)	Marketing strategy, capability and orientation of oil and gas firms	Marketing strategy, marketing capability and marketing orientation had an influence on marketing strategy. The capability of a firm to market had an influence on the strategy employed by the firms in Marketing. A partial mediation effect of marketing capability of the firm on the association between marketing orientation and marketing strategy was observed	The investigation failed to interrogate the impact of leadership capability, resource configuration and strategic sensitivity to petroleum companies presenting contextual and conceptual gaps	The current Research dwells on the effect of leadership capabilities, resource configuration, strategic sensitivity and marketing orientation on the competitiveness of petroleum entities in Kenya

Source: Researcher, 2025

2.5 Conceptual Framework

A conceptual framework outlines the association between variables in a research. In this investigation, the independent variables were leadership capability, resource configuration, strategic sensitivity and marketing orientation and the dependent variable was the competitiveness of petroleum firms, as depicted in Figure 2.1.

Figure 2.1: Conceptual Framework



Source: Researcher, 2025

Adapted from dynamic capability theory by Teece et al. (1997) and evolutionary theory by Coase (1937)

2.5 Operationalization of Variables

Strategic agility aspects namely leadership capabilities, resource configuration, strategic sensitivity and marketing orientation could have an effect on the competitiveness of petroleum firms in Kenya. The current investigation seeks to study this effect.

Table 2.2: Operationalisation of Research Variables

Variable	Measures	Scale	Author
Leadership Capability	• Effective communication • Strategic forecasting • Human capital development	5-Point Likert Scale	Abdow (2019), Thomas (2020) and Zulkifli (2022)
Resource configuration	• Human resources • Financial resources • Infrastructural/facility resources • IT resources	5-Point Likert Scale	Al-Frijawy and Militaru (2018), Al-Hanshi et al. (2022) and Santana-Sarmiento et al. (2019)
Strategic sensitivity	• Strategic foresight • Partnerships • Strategic insight	5-Point Likert Scale	Fakunmoju et al. (2020), Hamed (2023), Adim and Maclayton (2021)
Market Orientation	• Pricing strategy • Marketing planning • Market intelligence for expansion • Product differentiation	5-Point Likert Scale	Alao et al. (2020), Adefulu et al. (2020) and Fakhreddin and Foroudi (2022), Ekaterina and Dornberger (2014); Porter (2011)
Competitiveness of petroleum companies	• Profitability and sales revenue • Number of Customers • Product portfolio	5-Point Likert Scale	Cahyono et al. (2023), Arokodare and Asikhia (2020), Holbeche (2022)

Source: Researcher, 2025

2.6 Chapter Summary

The chapter presents literature review covering both empirical and theoretical literature review. The theories guiding the study included evolution theory of the firm and dynamic capabilities theory. Furthermore, an empirical literature review was undertaken according to the objectives of the study that is on leadership capability, resource configuration, strategic sensitivity and marketing orientation. It also outlines the conceptual framework, operationalization of variables, and research gaps.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter presents the methods adopted to guide this research on strategic agility and competitiveness of petroleum companies in Nairobi County, Kenya. The methods covered include research philosophy, data collections techniques, research design, research procedures, sampling design, population, research procedures, how data analysis was done and the ethical issues to be observed during the investigation.

3.2 Research Philosophy

This entails the beliefs guiding the methods of collection, analysis and usage of data. The philosophy provides a guide for the discoveries in science through their principles and assumptions (Sliirima, 2020). The quality of research findings and whether the findings identify gaps and support scientific research in generating sound evidence is illuminated by understanding the specific assumptions of paradigm. The investigation utilized a positivist research philosophy. Positivism research philosophy believes that only valid knowledge comes from measurable and observable phenomena. Thus, according to positivism research philosophy, reality is objective and can be understood via scientific methods (Park et al., 2020). The philosophy uses large samples to test hypothesis scientifically and only relying on empirically verifiable information. The philosophy rests on the reason and measurement that the revelation of knowledge is from a measurable and neutral observation reaction, action or activity. Thus, the philosophy premises on the need of following certain scientific approach to address research questions.

3.3 Research Design

A research design is plan that the researcher adopted while undertaking a research. It outlines the framework of methods and techniques that have been adapted by other scholars providing answers to the research questions in a manner that is logical. Thus, it entails a plan that directs the overall research procedure (Salter, 2023). The study at hand used a descriptive cross-sectional survey design in answering research questions. In cross-

sectional research design, the variables are observed without being influenced. Descriptive cross-sectional studies characterize the prevalence of one or multiple attributes in a specified population (Wang & Cheng, 2020). This is because the investigation sought to investigate the association between strategic agility and competitiveness of the petroleum companies. The design is focused on collecting information about prevailing situations or conditions for the purposes of analysis and interpretation.

3.4 Population and Sampling

3.4.1 Population

The target population involved the 60 registered petroleum companies in Nairobi City County, licensed and registered by EPRA as of December 2024 (List in Appendix IV). The study contacted three respondents from each of the 60 petroleum entities in Nairobi. The respondents included the operations manager, sales manager and one of the pump attendants. The personnel are involved in the strategic operations, leadership, resource mobilization and marketing in the petroleum companies. Thus, they have important information about strategic agility and its imapct on the competitiveness of petroleum companies.

3.4.2 Sampling and Sample Size

The investigation undertook a census study of the 180 respondents (60*3) who were contacted to take part in the study. Census is appropriate for small sample sizes. According to Israel (2013), census is done for sample sizes less than 200 observation. Thus, the study contacted the operations manager, sales manager and one of the pump attendants in the 60 licensed petroleum companies operating in the 17 subcounty within Nairobi County. The investigation used simple random sampling to select the petroleum firms as the unit of analysis. The study randomly picked one station for each of 60 licensed petroleum entities operating in Nairobi County. However, purposive sampling was employed in selecting operations and sales managers in each of the petroleum entities to participate in the investigation as unit of observation.

3.5 Data Collection Methods

The investigation used primary data that was gathered by employing a structured questionnaire that contained a set of structured questions that are meant to collect the data that is meaningful to the study (Burns & Burns, 2008). The questionnaire comprised of closed-ended questions presented in a Likert Scale ranging from point 1 to 5 where point 1 represents strongly disagree, 2 for disagree, 3 for neutral, 4 for agree and 5 for strongly agree. The researcher hired and trained two research assistants on the ethics and code of conduct during the investigation and who helped in administering the questionnaires to the respondents. Prior to the administration of the structured questionnaires, the management of the petroleum companies were adequately informed of the intention of research and intention of collecting data from these companies and data privacy issues to be observed. The questionnaires were then distributed to the sales and operations managers and one pump attendant from each of the 60 petroleum companies under study by issuing the questionnaires and giving the respondents ample time to fill before collected later.

3.6 Data Analysis

Quantitative data analysis was effected because the questionnaires had closed ended questions. After receiving filled out questionnaires, the researcher conducted data cleaning to check for completeness of the questionnaires. Data entry was then done on an MS excel prior uploading the data on excel sheet to SPSS software for coding and analysis. The data analysis results were presented as inferential and descriptive statistics. The inferential statistics entail correlation and regression statistics. The descriptive statistics on the other hand entailed frequencies, means, percentages and standard deviations. Regression analysis was conducted using multiple regression models to explore the influence of leadership capability, resource configuration, strategic sensitivity and marketing orientation on the competitiveness of the petroleum companies in Nairobi County, Kenya. The multiple regression model provided below was used. The model that was estimated that was resourceful in answering research questions was:

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

Where,

Y is competitiveness of the petroleum companies, β_0, β_1, β_2, β_3, β_4 are constant terms, X_1 stands for leadership Capability, X_2 stands for resource configuration, X_3 stands for strategic sensitivity and X_4 stands for marketing orientation while e stands for the error term.

3.7 Statistical Assumptions

A number of statistical tests were conducted to verify the validity of the OLS multiple regression analysis. They include Multicollinearity, Heteroscedasticity and Normality test.

3.7.1 Multicollinearity Test

Variance Inflation Factor (VIF) was employed to check multicollinearity between study variables (Vörösmarty & Dobos, 2020. A VIF value below 5 was deemed acceptable, suggesting that there is no severe multicollinearity present (Shrestha, 2021).

3.7.2 Heteroscedasticity Test

A scatter plot of the residuals helped identify heteroscedasticity. If the residuals display a random distribution around the mean, homoscedasticity can be assumed; otherwise, the presence of heteroscedasticity may indicate a violation of regression assumptions (Rosopa et al, 2013). Advanced methods like the Brant test may also be used to check for violations of the homoscedasticity assumption in OLS multiple regression models.

3.7.3 Normality Test

Kolmogorov Smirnov test was employed in testing for normality (Drezner et al., 2010). The tested null hypothesis was that error terms in the data collected follows normal distribution. A computed p- value>0.05, the study fails to reject the null hypnosis. However, if the p- value<0.05, the null hypothesis is rejected and data errors does not follows normal distribution (Kwak, 2023).

3.8 Research Quality

To enhance the quality of research, the investigation conducted reliability and validity of the data collection instrument. A pilot study was done on 10% of the sample size (18 respondents) participated to test the research instruments for validity and reliability.

3.8.1 Reliability

The reliability test is significant because the results determine whether the questionnaire/instrument is able to gather data, that when analyzed can give meaning and reliable conclusions (Joppe, 2010). Thus, carrying out the test is essential before the actual data collection exercise is conducted. The study adopted Cronbach's Alpha method with values >0.7 implying that the data collection instrument is reliable. If the Cronbach's Alpha values are <0.7, then the outcomes imply that instrument is not reliable and the statements should either be omitted or improved (Daud et al., 2018).

Table 3.1: Reliability Test Results

Variable	Cronbach's Alpha
Leadership Capability	0.874
Resource Configuration	0.984
Strategic Sensitivity	0.870
Marketing Orientation	0.768
Competitiveness of Petroleum Companies	0.779

It can be observed that the Cronbach's Alpha values for all the variables were >0.7 implying that the questionnaire was reliable and thus reliable to be used in the main data collection exercise.

3.8.2 Validity

The test for validity is used in assessing whether the questionnaire can adequately measure what it is intended to measure of if the data collection instrument can adequately achieve the objective of the investigation (Joppe, 2010). Content and construct validity were measured in the study. For content validity, the input of the other experts and supervisors were sought to improve the contents instrument of data collection. For construct validity, the researcher conducted Kaiser–Meyer–Olkin (KMO) tests.

3.9 Ethical Considerations

A letter introducing the researcher was sought by the researcher from Strathmore University Institutional Review Board for approval to collect data from the petroleum companies in Nairobi County, referenced SU-ISERC2275/24. A research permit from NACOSTI, reference number 382651. Before collecting data, the researcher ensured the respondents on the intention of the research and the confidentiality of the information from them. Thus, consent was sought from all the participants, and they were informed that their participation in the investigation was not mandatory. However, they were encouraged to participate.

3.10 Summary of the chapter

The chapter outlined the methods used during the investigation including research philosophy, the target population encompassing the target population, sampling and sample size, the data gathering instrument, research design, data analysis, research quality as well as the ethical considerations.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

4.1 Introduction

The chapter presents how data was analysed and presented. In this investigation, primary data was collected by use of a structured questionnaire. The investigation purposely sought to explore how strategic agility affects the competitiveness of petroleum firms. In particular, the investigation sought to establish how leadership capability, resource configuration, strategic sensitivity and marketing orientation affect competitiveness of petroleum firms.

4.2 Response Rate

The sample size for the study was 180 respondents comprising operations manager, sales manager and one of the pump attendants in each of the petroleum firms in Nairobi County. Thus, 180 questionnaires were administered to the participants. However, 133 questionnaires were duly filled and received back and hence a response rate of 73.9% which sufficient for research studies. A response rate of approximately 60% according to Fincham (2008) is sufficient for a research study.

Table 4.1: Response Rate

	Frequency	Percent
Response	133	73.9
Non-Response	47	26.1
Total	**180**	**100**

4.3 Demographic Information

This relates the characteristics pertaining to the respondents in the investigation. The investigation sought to analyze the demographic information of the participants including the length of time the respondents in the firms under study in years, their gender as well as the competitiveness of the firms under review.

4.3.1 Length of Service

The investigation was intended to explore the number of years the respondents had been

serving in the firms under review as at the time of research.

Table 4.2: Length of Service

Years	Frequency	Percent
Below 5	46	34.6
5 - 10	34	25.6
11 - 15	24	18
15 years and above	29	21.8
Total	**133**	**100**

From the results, 34.6% of the participants had been working in their respective companies for 5 years and below, 25.6% for between 5 to 10 years, 21.8% for 15 years and above and finally 18% for between 11 and 15 years. These outcomes give the implication that majority of the respondents had been working in the firms under investigation and hence were likely to be knowledgeable on the strategic agility practices adopted by the firm to enhance its competitiveness.

4.3.2 Rate of Competitiveness of the Company

The investigation sought to explore the competitiveness of the companies under review.

Table 4.3: Rate of Competitiveness of the Company

	Frequency	Percent
Low	15	11.3
Moderate	68	51.1
High	50	37.6
Total	**133**	**100**

From the outcomes, 51.1% of the participants indicated that the Petroleum companies they were working in were moderately competitive, 37.6% indicated that their companies were highly competitive with 11.3% indicating that the competitiveness of their companies was low. The outcomes indicated that more than 80% of the firms under study were at least moderately competitive.

4.3.3 Gender

Table 4.4 presents the analysis outcomes of the gender of participants in the study.

Table 4.4: Gender

	Frequency	Percent
Male	87	65.4
Female	46	34.6
Total	**133**	**100**

From the outcomes, majority of those who took part in the investigation were male (65.4%) while 34.6% were female. This points out that majority of the management as well as the pump attendants in the Petroleum companies in Nairobi City County were male. The outcomes indicate that at least a third of the respondents were female implying the firms under study had likely achieved the two-third gender rule.

4.4 Descriptive Statistics

The outcomes in the form of mean, SD and percentages. Primary data was used and questionnaires were to collect the data. A Likert scale of 1 to 5 was used in the measurement of the responses with the value of 5 representing strongly agree, 4 for agree, 3 neutral, 2 for disagree and 1 representing strongly disagree. Thus, a mean of 5 indicates that the average responses were strongly in disagree, 2 for disagreement, 3 for neutral, 4 for agreement and a mean of 5 implying that the responses were strongly in tandem.

4.4.1 Leadership Capability

Table 4.5 presents summarized responses on the questions relating to leadership capability.

Table 4.5: Descriptive Outcomes for Leadership Capability

	M	S Dev
Effective communication is essential in ensuring the competitiveness of petroleum companies	3.88	1.16
Consultative leadership is key in ensuring petroleum firms' competitiveness	3.91	1.20
Providing for human capital development is a competitiveness for petroleum firms	3.97	1.19
Developing regular strategic forecasts is essential in ensuring competitiveness of petroleum entities	3.94	1.12
Timely implementation of strategic plans helps in ensuring competitiveness of petroleum entities	3.92	1.13

Providing staff welfare goes a long way in ensuring competitiveness of petroleum firms	3.86	1.13
Developing online presence is critical in ensuring competitiveness of petroleum entities	3.89	1.11
Aggregate Mean and SD	**3.95**	**1.15**

The statement on whether effective communication is essential in ensuring competitiveness of petroleum companies had a line mean and SD of the statement were 3.88 and 1.16 implying the responses were on average in concurrence. The question, consultative leadership is key in ensuring competitiveness of petroleum entities had an SD and a mean of 3.91 and 1.2 respectively. Furthermore, with a mean of 3.97 and SD of 1.19 the participants indicated that providing human capital development is a competitiveness for petroleum companies. Developing regular strategic forecasts is essential in ensuring competitiveness of petroleum entities received a mean of 3.94 and an SD of 1.12.

Furthermore, the participants were in tandem with a mean of 3.92 and an SD of 1.13 that timely implementation of strategic plans helps in ensuring competitiveness of petroleum companies. Providing staff welfare goes a long way in ensuring competitiveness of petroleum firms received a mean of 3.86 and SD of 1.13. Finally, the question, developing online presence is critical in ensuring competitiveness of petroleum entities recorded a mean of 3.89 and an SD of 1.11. The aggregate mean and SD for the questions on leadership capability were 3.95 and 1.15 in that order meaning that the respondents were in tandem largely with the questions on leadership capability.

4.4.2 Resource Configuration

The summary of responses that relates to the questions on resource configuration are presented in the subsequent sections.

Table 4.6: Descriptive Outcomes for Resource Configuration

	M	S Dev
Petroleum firms remain competitive when they align the staff to the vision and goals of the company	3.86	1.09
Petroleum companies remain competitive when the staff take part in achieving the vision and goals of the company	3.88	1.21
Petroleum entities companies remain competitive when they inculcate positive attitude towards the company	3.92	1.07

Developing adequate financial muscle is significant in ensuring competitiveness of petroleum companies	3.99	1.14
Quality infrastructure is essential in ensuring the competitiveness of petroleum companies	3.84	1.13
Adequate staffing is critical in ensuring competitiveness of petroleum companies	3.87	1.14
Adequate space is critical in ensuring competitiveness of petroleum companies	3.93	1.08
Aggregate Mean and SD	**3.90**	**1.12**

The question on whether petroleum firms remain competitive when they align the staff to the vision and goals of the company attracted a mean and a corresponding SD of 3.86 and 1.09 meaning that the participants were in concurrence on average. The question, Petroleum companies remain competitive when the staff take part in achieving the vision and goals of the company had an SD and a mean of 3.88 and 1.21 in that order. Additionally, the respondents were in agreement that Petroleum companies remain competitive when they inculcate positive attitude towards the company with a mean of 3.92 and SD of 1.07. Developing adequate financial muscle is significant in ensuring competitiveness of petroleum entities had a mean of 3.99 and an SD of 1.14.

Furthermore, the respondents were in tandem with a mean of 3.84 and an SD of 1.13 that quality infrastructure is essential in ensuring competitiveness of petroleum entities. Adequate staffing is critical in ensuring the competitiveness of petroleum firms received a mean and SD of the question were 3.87 and 1.14 in that order. Finally, the statement that adequate space is critical in ensuring competitiveness of petroleum firms recorded a mean of 3.93 and an SD of 1.08. The aggregate mean and SD for the questions on resource configuration were 3.90 and 1.12 in that giving the implication that the responses were in concurrence largely with the questions on resource configuration.

4.4.3 Strategic Sensitivity

Table 4.7 presents a summary of the responses on questions relating to strategic sensitivity.

Table 4.7: Descriptive Results for Strategic Sensitivity

	M	S Dev
The strategic location of the business is significant in ensuring the competitiveness of petroleum companies	3.85	1.07

Enhancing retail expansion is critical in ensuring competitiveness of petroleum companies	3.88	1.12
Mergers are a critical way of ensuring the competitiveness of petroleum companies	3.92	1.04
Acquisitions are essential in ensuring competitiveness of petroleum companies	3.76	1.07
Developing a brand name is significant in ensuring competitiveness of petroleum companies	3.89	1.05
Market innovation is a critical way of ensuring petroleum companies' competitiveness	3.92	1.13
Partnerships go a long way in ensuring competitiveness of petroleum entities	3.85	1.14
Aggregate Mean and SD	**3.87**	**1.10**

The question on whether the strategic location of the business is significant in ensuring competitiveness of petroleum companies attracted a mean and SD of 3.85 and 1.07 meaning that the participants were in concurrence. The statement, enhancing retail expansion is critical in ensuring competitiveness of petroleum firms had an SD and a mean of 3.88 and 1.12 in that order. Additionally, the respondents were in tandem that mergers are a critical way of ensuring the competitiveness of petroleum companies with a mean of 3.92 and its SD of 1.04. Acquisitions is essential in ensuring the competitiveness of petroleum companies had a mean of 3.76 and an SD of 1.07.

Furthermore, the responses concurred with a mean of 3.89 and an SD of 1.05 that developing a brand name is significant in ensuring competitiveness of petroleum entities. Market innovation is a critical way of ensuring competitiveness of petroleum entities received a mean and SD of 3.92 and 1.13 in that order. Finally, the question, partnerships go a long way in ensuring competitiveness of petroleum firms recorded a mean of 3.85 and an SD of 1.14. The aggregate mean and SD for the questions on strategic sensitivity were 3.87 and 1.10 in that meaning that the responses were in concurrence to a great extent with the questions on strategic sensitivity.

4.4.4 Marketing Orientation

Table 4.8 presents responses on the questions relating to marketing orientation.

Table 4.8: Descriptive Outcomes for Marketing Orientation

	M	S Dev
Quality market analysis largely helps in ensuring the competitiveness of petroleum firms	3.94	1.09
Maintaining product quality is significant in enhancing competitiveness of petroleum entities	3.86	1.12
Reliability in product availability is critical in ensuring competitiveness of petroleum firms	3.77	1.10
Product price competitiveness is essential in ensuring petroleum firms' competitiveness	3.85	1.07
Adequate market planning helps in ensuring competitiveness of petroleum entities	3.99	1.03
Developing staff reliability is critical in enhancing petroleum companies' competitiveness	4.01	1.08
Strategic business location is an ingredient that enhances the competitiveness of petroleum companies	3.94	1.14
Aggregate Mean and SD	**3.91**	**1.09**

The statement on whether quality market analysis largely helps in ensuring competitiveness of petroleum companies received a respective mean and SD of 3.94 and 1.09 meaning that the responses were in agreement. The statement, maintaining product quality is significant in enhancing competitiveness of petroleum entities had an SD and a mean of 3.86 and 1.12 respectively. Furthermore, the responses were in agreement that providing for human capital development is a competitiveness for petroleum companies with a mean of 3.77 and SD of 1.10. Product price competitiveness is essential in ensuring competitiveness of petroleum firms received a mean of 3.85 and an SD of 1.07.

Furthermore, the respondents concurred strongly with a mean of 3.99 and an SD of 1.03 that adequate market planning helps in ensuring the competitiveness of petroleum companies. The statement, developing staff reliability is critical in enhancing competitiveness of petroleum entities had a mean and SD of 4.01 and 1.08 in that order. Finally, the statement, strategic business location is an ingredient that enhances the competitiveness of petroleum firms, which attracted a mean of 3.94 and an SD of 1.14. The overall mean and SD for the questions on marketing orientation were 3.91 and 1.09 in that

order, meaning that the responses were in concurrence to a great extent with the questions on marketing orientation.

4.4.5 Competitiveness of Petroleum Companies

Table 4.9 outlines the responses on the questions relating to the competitiveness of petroleum companies.

Table 4.9: Descriptive Statistics for Competitiveness of Petroleum Companies

	M	S Dev
This petroleum company is price competitive	3.88	1.12
This petroleum company is product competitive	3.75	1.06
This petroleum company is financially competitive	3.91	1.09
This petroleum company is brand competitive	3.86	1.08
This petroleum company is market competitive	3.85	1.17
Aggregate Mean and Standard Deviation	**3.85**	**1.10**

The statement on whether petroleum Company is price competitive received a mean and SD of 3.88 and 1.12 meaning that the responses were on average in concurrence. The statement, this petroleum company is product competitive had an SD and a mean of 3.75 and 1.06 respectively. Furthermore, the participants were in tandem with a mean of 3.91 and an SD of 1.09 that the petroleum company is financially competitive. The question on this petroleum company is brand competitive had a mean and SD of 3.86 and 1.08 in that order. Finally, the question of whether this petroleum company is market competitive recorded a mean of 3.85 and an SD of 1.17. The aggregate mean and SD for the questions on competitiveness of petroleum firms were 3.85 and 1.10 respectively meaning that the participants were in tandem largely with the questions on competitiveness of petroleum companies.

4.5 Diagnostic Tests

The diagnostic tests estimated in the research included multicollinearity, normality test, and Heteroscedasticity. The diagnostic tests were carried out to determine the suitability of the model for estimation.

4.5.1 Test for Multicollinearity

The investigation used Variance Inflation Factor to determine the degree of correlation among the independent variables in the study. As a decision rule, a VIF value below 5 was deemed acceptable, suggesting that there is no significant multicollinearity present (Shrestha, 2021). In case of highly correlated independent variables, one of the variables would be eliminated in the investigation.

Table 4.10: Multicollinearity Test Outcomes

	Collinearity Statistics	
	Tolerance	**VIF**
(Constant)		
Leadership Capability	.711	1.406
Resource configuration	.820	1.219
Strategic sensitivity	.664	1.507
Market orientation	.650	1.539

The outcomes of the investigation indicated that VIF values for all the independent variables in the study were <5. Thus, the study makes the conclusion that there is no multicollinearity in the dataset and hence the investigation retained all independent variables for further analysis.

4.5.2 Normality Tests

Kolmogorov Smirnov test was employed in testing for normality.

The null hypothesis is that error terms of the data is normally distributed. As a rule of thumb, a significance value <0.05 would imply that the investigation rejects the null hypothesis but a significance value >0.05 means that the data follows normal distribution and hence can be used for further analysis.

Table 4.11: Normality Test Results

	Kolmogorov-Smirnova		
	Statistic	**df**	**Sig.**
Leadership Capability	0.088	180	0.958
Resource configuration	0.079	180	0.057
Strategic sensitivity	0.074	180	0.184
Market orientation	0.083	180	0.087

From the outcomes, the normality test results pointed out that all the significance values for all the variables were >0.05. Thus, the study makes the conclusion that the data used in the investigation follows a normal distribution and hence is fit to be used for further analysis.

4.5.3 Heteroscedasticity

Heteroscedasticity measures the variability of an error term variance and OLS predicts that constant variance of error term is crucial in getting unbiased estimates. With graphical technique, the error variances are drawn and illustrated in a plot graph. Heteroscedasticity presence is shown by existence of con shape (Wiedermann et al., 2017). Homoscedasticity will be denoted by linear graph indicating that residual errors are homoscedastic. Satisfying the assumption of homoscedasticity implies sample populations truly represents the study populace. The finding of Heteroscedasticity results is presented figure 4.1.

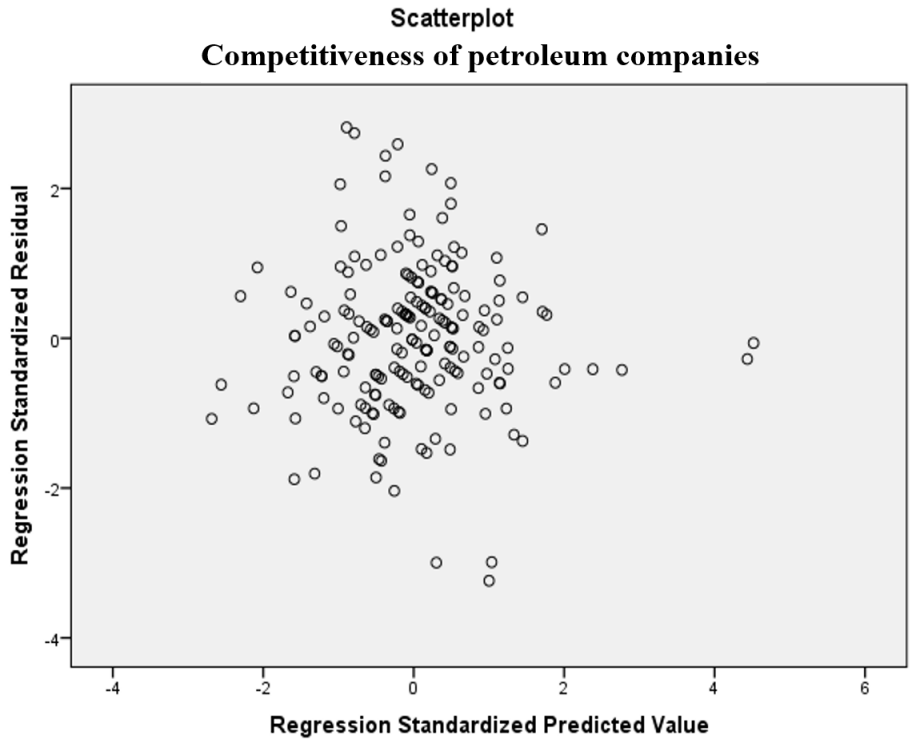


Figure 4.1: Heteroscedasticity results

It can be observed that Figure 4.1 indicates a rectangular scatter diagram, implying homoscedasticity and no heteroscedasticity.

4.6 Inferential Analysis

This entailed regression and correlation analysis carried out by the investigation.

4.6.1 Correlation Analysis

Correlation analysis was used to explore the strength and direction of relationship between leadership capability, resource configuration, strategic sensitivity, marketing orientation and competitiveness of petroleum companies in Nairobi City County.

Table 4.12: Correlation Statistics

		Competitiveness of Petroleum Companies	Leadership Capability	Resource Configuration	Strategic Sensitivity	Marketing Orientation
Competitiveness of Petroleum Companies	Pearson Correlation	1	.561**	.559**	.540**	.567**
	Sig. (2-tailed)		0.000	0.000	0.000	0.000
	N	133	133	133	133	133
Leadership Capability	Pearson Correlation	.561**	1	.404**	.289**	.297**
	Sig. (2-tailed)	0.000		0.000	0.001	0.001
	N	133	133	133	133	133
Resource Configuration	Pearson Correlation	.559**	.404**	1	.322**	.343**
	Sig. (2-tailed)	0.000	0.000		0.000	0.000
	N	133	133	133	133	133
Strategic Sensitivity	Pearson Correlation	.540**	.289**	.322**	1	.381**
	Sig. (2-tailed)	0.000	0.001	0.000		0.000

	N	133	133	133	133	133
Marketing Orientation	Pearson Correlation	.567**	.297**	.343**	.381**	1
	Sig. (2-tailed)	0.000	0.001	0.000	0.000	
	N	133	133	133	133	133

It can be observed that leadership capability attracted a positive and statistically significant association with competitiveness of petroleum companies (r = 0.561, p = 0.000<0.05). Resource configuration significantly and positively correlates with competitiveness of petroleum firms (r = 0.559, p=000<0.05). The outcomes pointed out a significant positive correlation between strategic sensitivity and competitiveness of petroleum entities under review (r = 0.540, p=000<0.05). Marketing orientation positively and significantly correlated with the competitiveness of petroleum entities under review (r=.540, p=000<0.05).

4.6.2 Regression Analysis

The analysis purposed to assess the linear association between the variables in the investigation. The dependent variable was competitiveness of petroleum firms in Nairobi City County while the independent variables were leadership capability, resource configuration, strategic sensitivity and marketing orientation.

Table 4.13: Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.784a	0.615	0.603	0.56238

The outcomes in the estimated model pointed out that the model provides explanations to the tune of 61.5% of the total changes in competitiveness of petroleum companies in Nairobi City County. This is provided for by the estimated R Square value of 0.615. Therefore, the independent variables under review including leadership capability, resource configuration, strategic sensitivity and marketing orientation are significant in explaining competitiveness of petroleum firms. The remaining 38.5% of the variations is explained by other factors not included in the investigation that are also significant in explaining competitiveness of petroleum entities.

Table 4.14: ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	64.756	4	16.189	51.188	.000b
Residual	40.482	128	0.316		
Total	**105.238**	**132**			

The outcomes point out that the model estimated is significant. This is evidenced by the p value (0.000<0.05) in the estimated model and the calculated F value 51.188 > 2.3719 from the F tables. Table 4.15 shows the regression outcomes.

Table 4.15: Multiple Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-0.114	0.283		-0.401	0.689
Leadership Capability	0.281	0.058	0.295	4.8	0.000
Resource Configuration	0.242	0.06	0.255	4.056	0.000
Strategic Sensitivity	0.243	0.057	0.261	4.258	0.000
Marketing Orientation	0.275	0.058	0.293	4.73	0.000

The estimated model was;

$$\mathbf{Y = -0.114 + 0.281X_1 + 0.242X_2 + 0.243X_3 + 0.275X_4}$$

Where,

Y is competitiveness of the Petroleum companies, X_1 - leadership Capability, X_2 - resource configuration, X_3 - strategic sensitivity and X_4 - marketing orientation.

The outcomes indicated that leadership capability had a significant and positive coefficient (0.281, 0.000<0.05). Thus, increasing leadership capability by the firms under review by a unit leads to a significant 0.281 units increase in the competitiveness of petroleum firms. The investigation therefore concluded that leadership capability determines significantly the competitiveness of the petroleum firms under review.

The outcomes pointed out that resource configuration had a significant and positive coefficient (0.242, 0.000<0.05). Hence, improving resource configuration by a unit leads to a significant 0.242 units increase in competitiveness of the petroleum firms. The study thus concluded that resource configuration determines significantly the competitiveness of the petroleum entities under review.

The outcomes pointed out that strategic sensitivity had a significant and positive coefficient (0.243, 0.000<0.05). Thus, increasing strategic sensitivity by a unit leads to a significant 0.243 units increase in the competitiveness of the petroleum firms. Hence, the study concluded that strategic sensitivity determines significantly the competitiveness of the petroleum entities under review.

The outcomes pointed out that marketing orientation had a significant and positive coefficient (0.275, 0.000<0.05). This means that a unit improvement on the marketing orientation leads to a significant 0.275 unit increase in the competitiveness of petroleum entities. Therefore, the investigation concluded that marketing orientation determines significantly the competitiveness of the petroleum firms under review.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The chapter presents the discussion of the key outcomes, presentation of conclusion and recommendations. The presentation was done according to the objectives of the research.

5.2 Summary of the study

The petroleum sector continues to play a critical role in driving development of economies globally, influencing key policy objectives such as decarbonization, inflation control, and improvements in living standards. However, the sector faces mounting challenges due to rapid technological advancements, globalization, shifting customer preferences to other sources of energy, and heightened sustainability expectations. These dynamics necessitate greater innovation and strategic agility among firms to sustain competitiveness. This research investigated the influence of strategic agility on the competitiveness of petroleum companies in Kenya. The investigation was anchored on the dynamic capabilities theory and evolutionary theory. A descriptive survey design and a positivist research design was used. The target population comprised 60 registered petroleum companies in Kenya targeting one operations manager, sales manager and one of the pump attendants from each of the petroleum firm hence a census population of 180 employees. Primary data was used and was analysed using SPSS software. The results were presented using both descriptive and inferential statistics in tables and charts.

The first goal of the investigation was to determine the effect of leadership capability on competitiveness of petroleum entities in Kenya. The aggregate mean and SD for the questions on leadership capability were 3.95 and 1.15 in that order meaning that the respondents were in tandem largely with the questions on leadership capability. Correlation results observed that leadership capability had a positive and statistically significant nexus with competitiveness of petroleum companies ($r = 0.561$, $p = 0.000<0.05$) while regression coefficient results indicated that leadership capability had a significant and positive coefficient (0.281, $0.000<0.05$). Increasing leadership capability by the entities under

review by a unit leads to a significant 0.281 units improvement in the competitiveness of the petroleum firms.

The second objective of the investigation was to explore the effect of resource configuration on competitiveness of petroleum companies in Kenya. The aggregate mean and SD for the questions on resource configuration were 3.90 and 1.12 in that giving the implication that the responses were in concurrence largely with the questions on resource configuration. Resource configuration significantly and positively correlates with competitiveness of petroleum firms ($r = 0.559$, $p=000<0.05$). The outcomes of the regression coefficient results pointed out that resource configuration had a significant and positive coefficient (0.242, $0.000<0.05$). Thus, a unit increase on the resource configuration leads to a significant 0.242 units increase in the competitiveness of the petroleum firms.

The third aim was effect of strategic sensitivity on competitiveness of petroleum companies in Kenya. The aggregate mean and SD for the questions on strategic sensitivity were 3.87 and 1.10 in that meaning that the responses were in concurrence with the questions on strategic sensitivity. The outcomes pointed out a significant positive correlation between strategic sensitivity and competitiveness of petroleum entities under review ($r = 0.540$, $p=000<0.05$). The outcomes pointed out that strategic sensitivity had a significant and positive coefficient (0.243, $0.000<0.05$). Thus, a unit increase in the strategic sensitivity leads to a significant 0.243 units improvement in the competitiveness of the petroleum firms.

Finally, the fourth objective of the study was to determine the effect of marketing orientation on competitiveness of petroleum companies in Kenya. The overall mean and SD for the questions on marketing orientation were 3.91 and 1.09 in that order, meaning that the responses were in concurrence to a great extent with the questions on marketing orientation. Marketing orientation positively and significantly correlated with the competitiveness of petroleum firms under review ($r = 0.540$, $p=000<0.05$). Similarly, regression coefficient results pointed out that marketing orientation had a significant and positive coefficient (0.275, $0.000<0.05$). This means that a unit improvement on the

marketing orientation leads to a significant 0.275 unit increase in the competitiveness of the petroleum entities.

5.3 Discussion

5.3.1 Leadership Capability and Competitiveness of Petroleum Companies

The outcomes indicated that the relationship between leadership capability and competitiveness of the petroleum firms under investigation was positive and significant. Furthermore, leadership capability had a significant and positive coefficient. This means that a unit improvement in the leadership capability by the firms under review leads to a significant increase in the competitiveness of the petroleum firms. The investigation therefore concluded that leadership capability determines significantly the competitiveness of the petroleum firms under review. The outcomes are consistent with the findings of Abdow (2019) which postulated that corporate communication, strategic forecasting, development of human capital and strategic controls significantly influenced strategic leadership on organizational change. Another investigation by Arami (2016) indicated that status, group oriented and value-based leadership styles as well as face saving are emphasized in the Middle East. Project managers exhibited some differences in their leadership styles compared to the countries in the west.

Thomas (2020) pointed out effective leadership motivates its staff towards the direction of the vision of the entity. Thus, to achieve the objective of the organization as well as achieving its sustainability in the petroleum sector, the role of leaders is critical. In the long term, the democratic style of leadership is efficient while in the short term, autocratic style of leadership is effective. Gajere and Nimfa, (2021) argued that managerial culture, the flexibility of organizations and strategic resilience significantly and positively related with the culture of Nigerian petroleum organizations. Zulkifli (2022) indicated that the companies under review ought to be agile considering the dynamic nature of the business to enhance their performance. Thus, these companies must influence their operational performance by integrating and combining dynamic capability variables including absorptive capacity, competency, culture and leadership to remain competitive. Through unity in leadership, commitments and collective efforts towards taking actions in response

to emerging threats/opportunities would be effective. Onyango (2017) pointed out that focus strategies, differentiation and cost leadership are positive and significantly related with competitiveness of the firms. Thus, a combination of all three brings forth a higher competitive edge.

The outcomes also concur with the propositions of evolutionary theory of the firm which postulates that a firm during its tenure accumulates substantial knowledge as it builds its portfolio of a set of skills that are unique that are utilized in its operations. Wright (2007) indicates that the set of unique skills and capabilities inherent within the firm gives it a comparative advantage and enhances its sustainability and adaptability in the dynamic environment. Thus, overtime, organizations tend to develop more skill and capabilities that that are suitable to the changing environments hence become agile. This an evolutionary path that the firm follows involving the firm as a knowledge processor (Holsapple & Li, 2008). According to the theory, the evolutionary approach explains the behavior of firms in adapting to dynamic market conditions through the interaction between natural selection and innovation (Lo, 2004).

5.3.2 Resource Configuration and Competitiveness of Petroleum Companies

Resource configuration significantly and positively correlates with competitiveness of petroleum firms. The outcomes further pointed out that resource configuration had a significant and positive coefficient. This means that a unit improvement on the resource configuration leads to a significant improvement in the competitiveness of the petroleum firms. The investigation thus concluded that resource configuration determines significantly the competitiveness of the petroleum firms under review. The outcomes are in concurrence with the findings of Al-Frijawy and Militaru (2018) which indicated that there should be participation of human resource management in implementation and establishment of the strategies of the company in achieving competitiveness. This includes offering services to customers that are superior to those of the competitors in terms of pricing and quality. This can be achieved by employing qualified labor, enhancing service quality, productivity and considering market changes. Al-Hanshi et al. (2022) pointed out that the attributes of resources including organizational support and value influenced

innovative environment and dynamic capabilities and related positively with the competitiveness. However, the attributes including inimitability and rareness exhibited less evolution. The proper alignment of human resources, financial and facility resources drive competitiveness in a firm.

Santana-Sarmiento et al. (2019) pointed out that the complementary wind power sector resource endowment in Island of Gran Canaria, is better while the value of its basic resources is low. Gran Canaria outperforms Tenerife in terms of capabilities due to proximity, innovation and demand. There is more robust institutional and governmental support in Tenerife. For the wind energy sector competitiveness to be possible, the development of capabilities is a key factor to exploit. The findings of Maina (2022) pointed out that the practices of strategic agility contributed positively towards enhancing the competitiveness of the entities under review.

The outcomes are in line with the propositions of the dynamic capability theory which puts emphasis on the reconfiguration and deployment of firm resources (Teece, 2014). The dynamic capability theorem investigates the manner at which firms or organization build, harness resources, integrate and reconfigure firm resources including both the financial and human resources. The reconfiguration of these firm resources is meant to create competitiveness to the firm over its peers.

5.3.3 Strategic Sensitivity and Competitiveness of Petroleum Companies

The outcomes pointed out a significant positive association between strategic sensitivity and competitiveness of petroleum entities under review. The outcomes pointed out that strategic sensitivity had a significant and positive coefficient. This implies that a unit improvement on the strategic sensitivity leads to a significant improvement in the competitiveness of the petroleum entities. Hence, the investigation concluded that strategic sensitivity determines significantly the petroleum entities' competitiveness. The outcomes are in line with the findings of Fakunmoju et al. (2020) which postulated that strategic foresight and information technology capability exhibited combined moderating effect on the nexus between strategic agility and competitiveness in the petroleum marketing entities. Hamed (2023) pointed out a significant positive association was exhibited between

sustainable competitiveness and strategic sensitivity. The strategic insight indicator portrayed the greatest influence on sustained competitiveness followed by strategic foresight.

Ekanem et al. (2023) postulated that the strategic sensitivity and the selected banks competitiveness of the positively related. In addition, the performance of the banks with low strategic sensitivity was lower compared to the performance of the banks with higher strategic sensitivity. Thus, it is necessary for the organizations to improve on their state to as a way of enhancing their commitment towards strategic sensitivity. Adim and Maclayton (2021) further argued that the strategic sensitivity and the responsiveness of the companies positively related. Strategic insight and strategic foresight correlated significantly and positively with the corporate responsiveness of the companies under review. The findings of Majimbo and Namusonge (2020) pointed out that product innovation, market innovation and organizational innovation exhibited a positive association with performance. Hence, strategic innovation positively and strongly influences the performance of oil marketing entities. Nderitu and Njuguna (2017) pointed out that retail network expansion significantly and positively influences Vivo energy's competitiveness. Mwachia et al. (2023) pointed to a positive strong relation between online business and hotel industry performance in the counties along the Kenyan coastal region.

The outcomes also concur with the propositions of evolutionary theory of the firm which postulates that a firm during its tenure accumulates substantial knowledge as it builds its portfolio of a set of skills that are unique that are utilized in its operations. Wright (2007) indicates that the set of unique skills and capabilities inherent within the firm gives it a comparative advantage and enhances its sustainability and adaptability in the dynamic environment. Thus, overtime, organizations tend to develop more skill and capabilities that that are suitable to the changing environments hence become agile. This an evolutionary path that the firm follows involving the firm as a knowledge processor (Holsapple & Li, 2008). According to the theory, the evolutionary approach explains the behavior of firms in adapting to dynamic market conditions through the interaction between natural selection and innovation (Lo, 2004).

5.3.4 Marketing Orientation and Competitiveness of Petroleum Companies

The correlation between marketing orientation and competitiveness of petroleum firms was positive and significant statistically. The outcomes further pointed out that marketing orientation had a significant and positive coefficient. This implies that a unit improvement on the marketing orientation leads to a significant improvement in the competitiveness of the petroleum entities. Therefore, the study concluded that marketing orientation determines significantly the competitiveness of the petroleum firms under review. The outcomes are in concurrence with the findings of Alao et al. (2020) which pointed out a positive and further significant nexus between strategic marketing and competitiveness and no significant moderating effect of resource capability on the association between competitiveness and strategic marketing. Oyakhire and Akpan (2021) further argued that the petroleum business is highly competitive and turbulent and thus the need for these firms to be competitive by providing superior services to its customers. They should also learn to adapt to dynamic environment utilizing competitive strategies to enhance their performance. The outcomes indicated that competitive strategy and financial performance were positively and significantly related.

Fakhreddin and Foroudi (2022) pointed out that the performance of new products is influenced significantly by market orientation. Ekaterina and Dornberger (2014) indicated that responsiveness, intelligence dissemination and intelligence generation were utilized in measuring market orientation. High-tech companies working in sectors such as engineering, biotechnology and chemical industries were sampled. In knowledge-intensive industries, the performance of non- financial and financial businesses is positively influenced by market orientation. Namagembe (2022) argued that marketing strategy, marketing capability and marketing orientation had an influence on marketing strategy. The capability of a firm to market had an influence on the strategy employed by the firms in Marketing. Furthermore, a partial mediation effect of marketing capability of the firm on the association between marketing orientation and marketing strategy was observed. Adefulu et al. (2020) indicated that strategic marketing dimensions including marketing decision, marketing planning, marketing analysis and marketing orientation positively and significantly related to competitiveness and innovation culture of the selected petroleum

products marketing companies.

An investigation by Mansouri et al. (2022) pointed out a positive mediating role of market orientation in the association between entrepreneurial orientation and internal marketing. Ogolla et al. (2017) postulated that strategic agility and the performance of organizations positively and significantly related. Individual strategic agility components positively related to organizational performance. The components including organizational position, work experience and age significantly related with strategic agility. Gender and educational level had no significant relationship.

The outcomes are consistent with the propositions of the dynamic capability theory which puts emphasis on the reconfiguration and deployment of firm resources (Teece, 2014). The dynamic capability theorem investigates the manner at which firms or organization build, harness resources, integrate and reconfigure firm resources including both the financial and human resources. The reconfiguration of these firm resources is meant to create competitiveness to the firm over its peers.

5.4 Conclusion

Leadership capability in the firms under investigation is a significant determinant of competitiveness of the petroleum companies. Leadership capability enhances ability of the companies to conform to dynamic market conditions, leverage technological advancements and implement sustainable practices. Leadership capability is demonstrated using strategic decision-making as well as fostering innovation. Competitiveness is further driven by agility in navigating geopolitical uncertainties, optimizing supply chains, and attracting top talent to drive growth.

Resource configuration was also found to have a significant determinant of competitiveness of the petroleum companies. Companies that effectively leverage advanced technologies such as automation can streamline processes and reduce costs, thereby improving profitability. Efficient capital allocation, robust supply chain management, and a skilled workforce enhance competitiveness. Thus, companies that strategically configure resources to balance traditional operations with innovation and sustainability are better placed to thrive in the evolving energy landscape.

The study concluded that strategic sensitivity determines significantly the competitiveness of the petroleum companies. The strategic sensitivity crucial in navigating an industry is characterized by shift in energy demands, increasing regulatory and environmental pressures as well as rapid technological advancements. Companies with high strategic sensitivity are better positioned to anticipate market trends, embrace innovation and adapt to disruptions. This agility enables them to identify opportunities, mitigate risks and sustain growth.

The study concluded that marketing orientation determines significantly the competitiveness of the petroleum companies. Marketing orientation is closely linked to their ability to understand and respond to customer needs, market trends and societal expectations. Companies should adopt a customer-centric approach supported by comprehensive market research to tailor their offerings to meet evolving energy demands and preferences. Effective branding, transparent communication, and alignment with sustainability goals enhance reputation and stakeholder trust.

5.5 Recommendations

The investigation recommended that the petroleum companies in Nairobi County out to prioritize cultivating adaptive, visionary leaders who can navigate the industry's evolving opportunities and challenges. Leaders should focus on fostering innovation, integrating digital technologies and driving sustainable practices to meet the rising demand for environmental accountability. Laying emphasis on workforce development, diversity, and inclusion strengthens organizational resilience and attracts top talent.

The petroleum companies in Nairobi County should prioritize the integration of advanced technologies and automation to optimize operations and reduce costs. Companies should also focus on efficient capital allocation, maintaining robust supply chains and fostering a highly skilled and agile workforce. Collaborating with technology providers and stakeholders can unlock new efficiencies and innovation.

The petroleum firms under study should establish robust mechanisms for monitoring industry trends, regulatory changes, and technological advancements. Investing in risk management and stakeholder collaboration enables companies to anticipate and respond

effectively to market disruptions and evolving energy demands. The companies should also emphasize innovation and sustainability practices.

The petroleum entities should also prioritize understanding customer needs and aligning their offerings with evolving energy demands and sustainability expectations. Investing in advanced market research and customer relationship management systems enables companies to anticipate trends and deliver tailored solutions. Transparent communication and effective branding that highlights sustainability initiatives can build trust and enhance reputation.

5.6 Study contribution

The study makes significant contribution to practice, theory and policy. Practicing strategic agility significantly enhances the competitiveness of petroleum companies by enabling them to swiftly adapt to regulatory changes, volatile market conditions and advancements in technologies. In a sector characterized by fluctuating oil prices, geopolitical risks, and a growing emphasis on sustainability, strategic agility allows firms to reallocate resources, pivot business models, and innovate more effectively. This responsiveness not only helps in mitigating risks but also in seizing emerging opportunities such as renewable energy integration, digital transformation, and low-carbon solutions. As a result, petroleum companies that embed strategic agility into their operations are better positioned to maintain market relevance, drive long-term growth as well as realizing competitiveness that is sustainable.

The study findings make significant contribution to theory particularly the dynamic capability theory. The investigation found that strategic agility has significant influence on competitiveness of petroleum companies. Dynamic capabilities theory founded by Teece et al. (1997) and offers a more dynamic approach to achieving competitiveness, building on earlier resource-based frameworks. This theory focuses on how firms reconfigure, deploy, and integrate their resources in response to dynamic market conditions. Unlike static theories, which emphasize possessing valuable resources, The importance of adapting and aligning a entity's resource base to maintain competitiveness over time is underscored by the theory (Teece, 2014).

Finally, the investigation makes significant contribution to policy. The integration of strategic agility into policy frameworks can significantly strengthen the competitiveness of petroleum companies by promoting adaptive, forward-looking governance that supports innovation and resilience. Policymakers can foster environments that encourage agile practices through flexible regulations, incentives for technological advancement, and support for workforce development tailored to rapidly evolving energy markets. Strategic agility allows petroleum companies to respond more effectively to policy shifts related to decarbonization, environmental compliance, and global market dynamics. By aligning policy with the principles of strategic agility, governments can help ensure that petroleum companies remain competitive, sustainable, and capable of contributing to national energy security and economic growth in a transitioning global energy landscape.

5.7 Limitations for the Study

Several research philosophies guide research investigations. However, the investigation was limited to a descriptive cross sectional survey design and a positivism research philosophy. The study was also limited to 60 petroleum companies in Nairobi City County licensed and approved by EPRA as of December 2024. The respondents were limited to the operations manager, sales manager and one of the pump attendants. Thus, a census study of the 180 respondents and questionnaires were used in collection of primary data. There are many other forms of strategic agility like IT agility, awareness/sensing, decision and implementation, resilience, versatility and transformation. However, the study narrowed down to leadership capability, resource configuration, strategic sensitivity and marketing orientation. Future research may incorporate these other forms of strategic agility. Lastly, the study was largely cross-sectional design that is limited in establishing relationships between strategic agility and competitiveness of petroleum companies over time.

5.8 Suggestions for Further Studies

Based on the scope and limitations of the current investigation, several avenues for future research are proposed. First, future studies could widen the geographic scope beyond Nairobi City County to include petroleum companies from other regions of Kenya or across East Africa. This would enable researchers to compare how regional differences affect competitiveness and strategic management practices. Secondly, subsequent research should consider including a broader category of respondents, such as senior executives, frontline staff, customers, and regulatory bodies. This would offer more comprehensive insights into how competitiveness is perceived and enacted across different organizational levels and stakeholder groups. Thirdly, researchers could employ mixed-methods or longitudinal research designs, which would allow the tracking of strategic changes and competitiveness outcomes over time and also provide in-depth qualitative understanding of internal dynamics and strategic processes.

Additionally, future investigations could explore other potential determinants of competitiveness that were beyond the scope of this study, such as technological innovation, corporate social responsibility, environmental sustainability practices, and governance structures. Comparative studies across different energy sectors—such as renewables, geothermal, or solar—could also yield valuable insights into how competitiveness is managed in emerging versus traditional energy industries. Furthermore, the impact of evolving environmental regulations, climate policies, and international carbon standards on the strategic direction and agility of petroleum entities could form another critical area of research. Studies may also delve into how digital transformation—through technologies like AI, IoT, and blockchain—affects operational efficiency and competitive positioning in the petroleum sector. Lastly, researchers should consider evaluating how petroleum companies have strategically adapted in the aftermath of the COVID-19 pandemic, focusing on supply chain resilience, shifting consumer behavior, and long-term strategy adjustments in response to global disruptions.

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APPENDICES

Appendix I: Informed Consent

This study is about influence of strategic agility on competitive advantage in petroleum companies in Nairobi County, Kenya.

1. I, voluntarily, agree to participate in this study.

2. I am aware that though I have agreed to participate, I can withdraw any-time or decline to answer any question without any consequences of any type.

3. I am aware that I can withdraw rights to use data for any other purpose other than the one intended for.

4. The aim and nature of the research was explicitly explained to me and had the chance to make inquiries on where I did not understand.

5. I am aware that participation involves collecting data on the influence of strategic agility on competitive advantage in petroleum companies in Nairobi County, Kenya.

6. I am aware that there are no benefits whatsoever that I shall accumulate for agreeing to participate in this research.

7. I am aware that any information I provide in this research shall be held confidentially.

8. That in the reporting of this results, my anonymity will be observed though use of unique identifiers that shall conceal any details of me or the identity of people I speak about.

9. I understand that disguised information from my participation may be cited in dissertation, conferences, published materials etc.

10. I understand that by informing the researcher on any potential harm to myself or any other individual of participating in this study, they can report to appropriate authorities; they may decide to report to me first or report to the relevant authority without my permission.

11. The undersigned consent form will be kept at Strathmore University and shall be granted access upon permission by relevant authorities, School of Business.

12. I am aware that I can access the information any time as required by freedom of information legalization.

13. I am free to engage any person who participated in the study to ask for more clarification and information.

---------- ----------

Signature of participant Date

I believe the participant is giving informed consent to participate in this study.

---------- ----------

Signature of principal investigator Date

For more information, contact the principal researcher (Christa Kiprop), student Strathmore University

Contact email address: seinchrista22@gmail.com

Appendix II: Questionnaire

The questionnaire is meant for gathering information to determine the effect of **Strategic Agility on the Competitiveness of the Petroleum Companies in Nairobi County, Kenya.** The information to be collected is for the purpose of academic research and will not be used for any commercial use.

INSTRUCTIONS

Tick (√) as appropriate.

SECTION A: DEMOGRAPHIC INFORMATION

1. Which Petroleum company do you work in?

……

2. How long have you been working in this company?

Less than 5 years	[ ]	5 - 10 years	[ ]
11- 15 years	[ ]	More than 15 years	[ ]

3. How do you rate the competitiveness of this oil and gas company?

Low	[ ]	Moderate	[ ]	High	[ ]

4. Gender

Male	[ ]	Female	[ ]

Section B: Leadership Capability

In the Likert Table, fill the questionnaire by ticking (√) appropriately. Indicate the level of agreement to which the following aspects of leadership capability affect the competitiveness of the petroleum companies. *The scale is a Likert scale of 5 points, where 5=Strongly Agree (SA) 4=Agree (A) 3=Neutral (N) 2=Disagree (D) and 1=Strongly Disagree (SD)*.

#	Statements	SD	D	N	A	SA
a	Effective communication is essential in ensuring competitiveness of oil and gas companies					
b	Consultative leadership is key in ensuring competitiveness of oil and gas companies					
c	Providing for human capital development is a competitiveness for oil and gas companies					
d	Developing regular strategic forecasts is essential in ensuring competitiveness of oil and gas companies					
e	Timely implementation of strategic plans helps in ensuring competitiveness of oil and gas companies					
f	Providing for staff welfare goes a long way in ensuring competitiveness of oil and gas companies					
g	Developing online presence is critical in ensuring competitiveness of oil and gas companies					

Section C: Resource Configuration

In the Likert Table, fill the questionnaire by ticking (√) appropriately. Indicate the level of agreement to which the following aspects of resource configuration affect the competitiveness of the petroleum companies. *The scale is a Likert scale of 5 points, where 5=Strongly Agree (SA) 4=Agree (A) 3=Neutral (N) 2=Disagree (D) and 1=Strongly Disagree (SD)*.

#	Statements	SD	D	N	A	SA
a	Oil and gas companies remain competitive when they align the staff to the vision and goals of the company					
b	Oil and gas companies remain competitive when the staff take part in achieving the vision and goals of the company					
c	Oil and gas companies remain competitive when they inculcate positive attitude towards the company					
d	Developing adequate financial muscle is significant in ensuring competitiveness of oil and gas companies					
e	Quality infrastructure is essential in ensuring competitiveness of oil and gas companies					
f	Adequate staffing is critical in ensuring competitiveness of oil and gas companies					

g	Adequate space is critical in ensuring competitiveness of oil and gas companies					

Section D: Strategic Sensitivity

In the Likert Table, fill the questionnaire by ticking (√) appropriately. Indicate the level of agreement to which the following aspects of strategic sensitivity affect the competitiveness of the petroleum companies. *The scale is a Likert scale of 5 points, where 5=Strongly Agree (SA) 4=Agree (A) 3=Neutral (N) 2=Disagree (D) and 1=Strongly Disagree (SD).*

#	Statements	SD	D	N	A	SA
a	Strategic location of the business is significant in ensuring competitiveness of oil and gas companies					
b	Enhancing retail expansion is critical in ensuring competitiveness of oil and gas companies					
c	Mergers is a critical way of ensuring competitiveness of oil and gas companies					
d	Acquisitions is essential in ensuring competitiveness of oil and gas companies					
e	Developing a brand name is significant in ensuring competitiveness of oil and gas companies					

f	Market innovation is a critical way of ensuring competitiveness of oil and gas companies					
g	Partnerships goes a long way in ensuring competitiveness of oil and gas companies					

Section E: Marketing Orientation

In the Likert Table, fill the questionnaire by ticking (√) appropriately. Indicate the level of to which the following aspects of marketing orientation affect the competitiveness of the oil and gas companies. *The scale is a Likert scale of 5 points, where 5=Strongly Agree (SA) 4=Agree (A) 3=Neutral (N) 2=Disagree (D) and 1=Strongly Disagree (SD)*.

#	Statements	SD	D	N	A	SA
a	Quality market analysis largely helps in ensuring competitiveness of oil and gas companies					
b	Maintaining product quality is significant in in enhancing competitiveness of oil and gas companies					
c	Reliability in product availability is critical in ensuring competitiveness of oil and gas companies					
d	Product price competitiveness is essential in ensuring competitiveness of oil and gas companies					
e	Adequate market planning helps in ensuring competitiveness of oil and gas companies					

f	Developing staff reliability is critical in enhancing competitiveness of oil and gas companies					
g	Strategic business location is an ingredient that enhances the competitiveness of oil and gas companies					

Section F: Competitiveness of Petroleum Companies

In the Likert Table, fill the questionnaire by ticking (√) appropriately. Indicate the level of agreement with the following aspects of competitiveness of the petroleum companies. *The scale is a Likert scale of 5 points, where 5=Strongly Agree (SA) 4=Agree (A) 3=Neutral (N) 2=Disagree (D) and 1=Strongly Disagree (SD)*.

#	Statements	SD	D	N	A	SA
a	This oil and gas company is price competitive					
b	This oil and gas company is product competitive					
c	This oil and gas company is financially competitive					
d	This oil and gas company is brand competitive					
e	This oil and gas company is market competitive					

THANK YOU.

Appendix III: Budget

	ITEMS	**COST (KES)**
1	Stationary	11,000
2	Data collection	4,800
3	Printing and typing	25,060
4	Photocopying/Binding	14,420
5	Analysis	35,600
6	Miscellaneous	5,000
	Total	**95,880**

Appendix IV: Work Plan

	Oct 2023	Nov 2023	Dec 2023	Jan 2024	Feb 2024	March 2024	Jan 2025	May 2025	May 2025
Developing Chapter 1									
Developing Chapter 2 & 3									
Data Collection									
Data Analysis									
Developing Chapter 4 & 5									
Final Submission									

Appendix V: List of Registered Oil Companies in Kenya

1. ACER PETROLEUM
2. AFRO PETROLEUM
3. AFTAH PETROLEUM(K)LTD
4. AINUSHAMSI ENERGY LIMITED
5. ALBA PETROLEUM LIMITED
6. ARECH PETROLEUM LIMITED
7. ASHARAMI SYNERGY LIMITED
8. ASPAM ENERGY KENYA LIMITED
9. ASTROL PETROLEUM COMPANY LIMITED
10. AXON ENERGY LIMITED
11. BACHULAL POPATLAL (KENYA) LIMITED
12. BANODA OIL LIMITED
13. BE ENERGY LIMITED
14. BENMATT ENTERPRISES LIMITED
15. BILHAN COMPANY LIMITED
16. BLUE SKY ENERGY LIMITED
17. BUSHRA ENERGY LIMITED
18. CITY OIL (K) LIMITED
19. COAST OIL SUPPLIES LIMITED
20. COSTALINA ENERGY LIMITED
21. DALBIT PETROLEUM LIMITED
22. EAST AFRICAN GASOIL LIMITED

23. EMKAY INTERNATIONAL LIMITED

24. ENGEN KENYA LIMITED

25. EVON INTERNATIONAL ENERGY LIMITED

26. FASTNETT ENERGY LIMITED

27. FINEJET LIMITED

28. FLAMEX PETROLEUM LIMITED

29. FOSSIL SUPPLIES LIMITED

30. FUEL LINK ENERGY LIMITED

31. GALANA OIL KENYA LIMITED

32. GAPCO KENYA LIMITED

33. GASLINE PETROLEUM LIMITED

34. GLOBAL PETROLEUM PRODUCTS KENYA LIMITED

35. GREATWAY LOGISTICS (K) LTD

36. GULF ENERGY LIMITED

37. HARED ENERGY LIMITED

38. HASMACK COMPANY LIMITED

39. HASS PETROLEUM KENYA LIMITED

40. HELLER PETROLEUM LIMITED

41. ILADE OIL CO. LIMITED

42. INSIGNIA GROUP

43. JAGUAR PETROLEUM LIMITED

44. JOJES OIL DEALERS LIMITED

45. KAYMAN ENERGY LIMITED

46. KENCOR PETROLEUM LIMITED
47. KENOLKOBIL LIMITED
48. KOSMOIL PETROLEUM (EA) LIMITED
49. LAKE OIL LIMITED
50. LEXO ENERGY KENYA LIMITED
51. LIBYA OIL KENYA LIMITED
52. LINK OIL LTD
53. LUQMAN PETROLEUM LIMITED
54. MADIEAN COMPANY LIMITED
55. MERIDIAN ENERGY LIMITED
56. MOBILE KINETIC LIMITED
57. MOGAS KENYA LIMITED
58. MOIL KENYA LIMITED
59. MS OIL LIMITED
60. NATIONAL OIL CORPORATION OF KENY

Source: Energy and Regulatory Commission 2024

Appendix VI: NACOSTI Permit

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **382651**

Date of Issue: **26/November/2024**

RESEARCH LICENSE

This is to Certify that Miss.. CHRISTA SEIN KIPROP of Strathmore University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: Influence of Strategic Agility on Competitive Advantage in Petroleum Companies in Nairobi County, Kenya for the period ending : 26/November/2025.

License No: **NACOSTI/P/24/414149**

382651

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

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See overleaf for conditions

The National Commission for Science, Technology and Innovation, hereafter referred to as the Commission, was the established under the Science, Technology and Innovation Act 2013 (Revised 2014) herein after referred to as the Act. The objective of the Commission shall be to regulate and assure quality in the science, technology and innovation sector and advise the Government in matters related thereto.

CONDITIONS OF THE RESEARCH LICENSE

1. The License is granted subject to provisions of the Constitution of Kenya, the Science, Technology and Innovation Act, and other relevant laws, policies and regulations. Accordingly, the licensee shall adhere to such procedures, standards, code of ethics and guidelines as may be prescribed by regulations made under the Act, or prescribed by provisions of International treaties of which Kenya is a signatory to
2. The research and its related activities as well as outcomes shall be beneficial to the country and shall not in any way;
    i. Endanger national security
    ii. Adversely affect the lives of Kenyans
    iii. Be in contravention of Kenya's international obligations including Biological Weapons Convention (BWC), Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), Chemical, Biological, Radiological and Nuclear (CBRN).
    iv. Result in exploitation of intellectual property rights of communities in Kenya
    v. Adversely affect the environment
    vi. Adversely affect the rights of communities
    vii. Endanger public safety and national cohesion
    viii. Plagiarize someone else's work
3. The License is valid for the proposed research, location and specified period.
4. The license any rights thereunder are non-transferable
5. The Commission reserves the right to cancel the research at any time during the research period if in the opinion of the Commission the research is not implemented in conformity with the provisions of the Act or any other written law.
6. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before commencement of the research.
7. Excavation, filming, movement, and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
8. The License does not give authority to transfer research materials.
9. The Commission may monitor and evaluate the licensed research project for the purpose of assessing and evaluating compliance with the conditions of the License.
10. The Licensee shall submit one hard copy, and upload a soft copy of their final report (thesis) onto a platform designated by the Commission within one year of completion of the research.
11. The Commission reserves the right to modify the conditions of the License including cancellation without prior notice.
12. Research, findings and information regarding research systems shall be stored or disseminated, utilized or applied in such a manner as may be prescribed by the Commission from time to time.
13. The Licensee shall disclose to the Commission, the relevant Institutional Scientific and Ethical Review Committee, and the relevant national agencies any inventions and discoveries that are of National strategic importance.
14. The Commission shall have powers to acquire from any person the right in, or to, any scientific innovation, invention or patent of strategic importance to the country.
15. Relevant Institutional Scientific and Ethical Review Committee shall monitor and evaluate the research periodically, and make a report of its findings to the Commission for necessary action.

National Commission for Science, Technology and
Innovation(NACOSTI),
Off Waiyaki Way, Upper Kabete,
P. O. Box 30623 - 00100 Nairobi, KENYA
Telephone: 020 4007000, 0713788787, 0735404245
E-mail: dg@nacosti.go.ke
Website: www.nacosti.go.ke

Appendix VII: Strathmore Ethical Review Approval

Strathmore UNIVERSITY

4th October 2024

Ms Kiprop Christa,
christa.kiprop@strathmore.edu

Dear Ms Kiprop,

RE: Influence of Strategic Agility on Competitive Advantage in Petroleum Companies in Nairobi County, Kenya

This is to inform you that SU-ISERC has reviewed and **approved** your above **SU-masters** research proposal. Your application reference number is **SU-ISERC2275/24.** The approval period is from **4th October 2024 to 3rd October 2025.**
This approval is subject to compliance with the following requirements:

i. Only approved documents including (informed consents, study instruments, MTA) will be used.
ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by SU-ISERC.
iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to SU-ISERC within 72 hours of notification.
iv. Any changes anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to SU-ISERC within 72 hours.
v. Clearance for the export of biological specimens must be obtained from relevant institutions.
vi. Submission of a request for renewal of approval at least 60 days prior to the expiry of the approval period. Attach a comprehensive progress report to support the renewal.
vii. Submission of an executive summary report within 90 days of completion of the study to SU-ISERC.

Before commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology, and Innovation (NACOSTI) https://research-portal.nacosti.go.ke/ and obtain other clearances needed.

Yours sincerely,

Mr Ambrose Rachier,
Chairperson; SU-ISERC

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