

Dynamic Capabilities: Antecedent of Financial Performance of Oil Marketing Firms in Kenya

Mohamed Hassan Ahmed
School of Business,
Economics and Tourism
Kenyatta University
kulmaye@gmail.com

S. Makau A. Muathe.
ORCID [ID. 0000-0001-8192-5774](https://orcid.org/0000-0001-8192-5774)
School of Business, Economics and Tourism
Kenyatta University
muathe.stephen@ku.ac.ke

Abstract

The economic growth, energy security, and industrial development of the economies, especially the emerging ones, are heavily relying on the downstream petroleum industry. Nevertheless, the industry is becoming more of an environmental turbulence, regulation and technology upheaval, as well as declining profitability. Firm-level adaptive capabilities in such fluid environments are frequently needed because traditional sources of competitive advantage have long since failed to support financial performance. The role of internal strategic capabilities in affecting the performance of firms is hence critical to theory and practice in strategic management. The Kenyan oil marketing is a highly regulated and volatile business environment that is characterized with world oil prices that are not stable, controlled pump prices, high capital requirements and intense competition in the market. These forces have exerted strain on the financial performance of firms and internal strategic capabilities that can enable firms to maintain profitability have been questioned. The paper has used the Dynamic Capabilities Theory, and the Resource-Based View to discuss how the dynamic capabilities of sensing, seizing, learning and reconfiguration are antecedents of financial performance of oil marketing companies in Kenya. The data were collected through structured questionnaires and analysed through descriptive statistics, correlation and multiple regression (SPSS v27) based on cross-sectional survey data (n = 94) of oil marketing firms licensed in the City County of Nairobi. The outcomes of the study indicate that the dynamic capabilities explicatively describe the variance in Return on Assets (ROA) to the tune of 75.7%. Sensing, seizing, learning, and reconfiguration capabilities influence financial performance positively and statistically significant, but seizing and reconfiguration capabilities have the most significant effects. The findings suggest that those companies that systematically scan their environment, take immediate action on any opportunity in the market, institutionalize organizational learning, and constantly redesign structures and processes have higher likelihood of high financial performance. The paper then ends by giving policy and managerial implications to the regulators and managers and recommends future research opportunities on dynamic capabilities in emerging markets.

Key words: Dynamic capabilities; sensing; seizing; organizational learning; reconfiguration; financial performance; oil marketing firms; Kenya

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1.0 Introduction

The energy landscape in the world is experiencing significant changes that have been influenced by decarbonization pressures, digitalization, geopolitical volatility, and shifting consumer demands (African Development Bank, 2023; Krause et al., 2022; OECD, 2022; Teece, 2020). In reaction, oil marketing companies in developed and developing economies have been investing in cleaner energy portfolios, digital infrastructure and leaner operating models to maintain margins and increase shareholder value (Krause et al., 2022; Morgan and Finch, 2023; Peterson and Chang, 2020). In this turbulent environment, competitive advantage is less and less a feature of high-endowment resources, but rather the skills of firms to feel the environment and capitalize on new opportunities and reorganize their resource bases central principles of dynamic capabilities view (Teece, 2018, 2020).

In Sub-Saharan Africa, oil marketing companies are faced with further restrictions such as infrastructural shortfall, currency fluctuations, heavy regulation, and even state influence, which combine to squeeze the profits and subject the companies to severe fluctuations in performance (Fatoki, 2021; Okeke et al., 2021; Tumwine and Nkata, 2021). Data on Nigeria, Egypt, Tanzania, and Rwanda reveal that the companies that develop adaptive and innovation-focused capabilities are better placed to survive the jolt and continue to record satisfactory financial results (Mashingaidze et al., 2022; Youssef and Shalaby, 2022). These results imply that the capacity to

continuously analyze the environmental changes and realign the strategies is the core aspect of the survival and financial well-being of the companies operating in the energy sector in the area.

The oil marketing industry in Kenya is a very important industry in energy security and economic activity as it provides transport, industry and household sectors in the country. The City County of Nairobi has one of the largest concentrations of oil marketing companies since it is the economic centre and the logistical centre of the nation (EPRA, 2024). However, the industry experiences the lowering of margins, taxes and levies on petroleum products, the constant revision of regulations by the Energy and Petroleum Regulatory Authority (EPRA), infrastructure congestion, as well as increasing competition between multinational and domestic players (Gicheru and Kariuki, 2019; Kitenga, 2020). These forces increase the importance of firms building capabilities that can facilitate strategic flexibility, fast decision-making and effective use of resources.

Most of the previous Kenyan research has been on the generic strategic management practices, operational efficiency, and risks management in the petroleum industry (Maina and Kariuki, 2022; Mutindi et al., 2020; Omwenga and Otieno, 2020). Few of them have specifically studied dynamic capabilities as an integrated construct and correlate specific dimensions sensing, seizing, learning, and reconfiguration empirically with financial performance in terms of return on assets (ROA). This is a conceptual gap in that the various roles of these capabilities in performance motivation have not been theorized, there is a methodological gap due to inadequate application of rigorous multivariate analysis, and the contextual gap due to the unique regulatory and infrastructural context of the Kenyan downstream petroleum industry.

It is against this background that dynamic capabilities can be considered as the ability of the firm to integrate, build, and reconfigure both the internal and external competences in response to changing environments that are at a high rate. These capabilities in the available literature are frequently broken down into sensing, seizing, learning, and reconfiguration dimensions which all collectively define how well firms respond to changing technologies, markets, and regulations (Teece, 2020). Sensing, seizing, learning, and reconfiguration are all part of the marketing of oil in Kenya; the marketing firm would scan the market and policy changes in a systematic fashion; seizing includes that effort to mobilize the resources and take advantage of the opportunities that have been identified; learning is the acquisition and sharing of new knowledge; and reconfiguration includes the capacity to realign structure, process and assets in response to changes in the environment. These capabilities combined can be a vital strategic arsenal which can support competitive edge and financial fortitude in a turbulent industry.

The financial performance of this nature is usually measured using accounting based measures like ROA and return on equity (ROE) which reflects how well firms utilize their typically large asset bases. Since the petroleum infrastructure storage facilities, distribution fleets, and retail networks is capital intensive, ROA is especially an appropriate metric of how firms turn invested capital into profits (KIPPRA, 2023). The global price shocks, exchange rate changes, and regulatory price controls have been found to have low or negative ROA in many oil marketing firms in the Nairobi City County highlighting the need to comprehend the role played by internal capabilities in determining financial performance. This paper hence uses ROA as the main financial performance measure in order to offer context and focused performance measurement of a firm.

This has been supported by empirical data that indicates many oil marketing companies in Nairobi have been unable to sustain their strong financial performance in spite of the fact that they are strategic in the economy. According to industry reports, the industry has been experiencing decreased profitability, increased operational expenses, and downsizing or even market exit due to latent vulnerabilities in the sensemaking and response to environmental changes (African Development Bank, 2023; KIPPRA, 2023). Meanwhile, there is a group of firms that have managed to be comparatively stable or even expand, which points to the idea that internal strengths could make a difference between winners and laggards within the same regulatory and macroeconomic factor. This trend poses serious inquiries concerning the segmenting dynamic capabilities that promote high-quality financial performance and the way they are established in the oil marketing companies in Kenya.

Based on the data gathered among the licensed oil marketing companies in the Nairobi City County, the article presents dynamic capabilities as the antecedent of a financial performance and adds the empirical evidence to a highly regulated, capital-intensive African context. The paper investigates the relationship between sensing, seizing, learning, and reconfiguration capabilities, both combined and separately, and ROA, strengthening both the dynamic capabilities literature and strategic management literature on the companies in emerging markets within the energy sector. Although the empirical context is Nairobi, the results have applicability in the oil marketing companies in Kenya due to the similarity in the national regulatory environment and the nature of the

industry, and they can be used to develop policy and managerial action to improve capability building in an effort to improve financial results.

1.1 Statement of the problem

Also, the available literature on the petroleum industry in Kenya has been characterized by a tendency to focus the analysis on generic strategic management practices, operational efficiency, and risk mitigation without using the dynamic capabilities framework (Maina and Kariuki, 2022; Mutindi *et al.*, 2020; Omwenga and Otieno, 2020). There are examples of studies that have considered cost control, optimization of supply chain and adherence to regulatory requirements, although they have not engaged in a systematic analysis of how sensing, seizing, learning and reconfiguration abilities combine to influence financial performance (Helfat & Winter, 2021; Teece, 2019, 2020). Consequently, little is known about which particular internal strengths enhance companies that adapt effectively to price shocks, tax reforms, and infrastructural constraints and cannot be affected by a drop in performance (KIPPR, 2023; Otieno and Barasa, 2022). This knowledge gap is a limitation to the capacity of the managers and policymakers to develop specific interventions that reinforce the most powerful capabilities of oil marketing companies (Noor & Otieno, 2023).

Conceptual wise, a large amount of studies based locally assume the strategic constructs in a generalized sense, and talk about strategic responsiveness, strategic alignment, or strategic capabilities as indistinct and homogeneous packages (Noor and Otieno, 2023; Wangari, 2021). It is in this way that obscures the individual contributions of the individual dimensions of dynamic capabilities and makes it hard to determine which capabilities have the most significant impact on such indicators like ROA (Helfat and Winter, 2021; Teece, 2020). Unless sensing, seizing, learning, and reconfiguration are disaggregated, empirical evidence only gives partial advice on the type of investments firms should focus on the systems, skills, and structures (Barney, 2021). This is why there is the obvious necessity of the study that would explicitly break down dynamic capabilities into their primary dimensions and analyze their respective contribution to the financial performance in Kenya oil marketing industry.

In terms of methodology, a number of previous studies in the related fields have been based on descriptive research, case studies, or straightforward correlational research (Wangari, 2021; Gicheru and Kariuki, 2019). Although these methods can be useful in exploratory research, they lack support to test hypothesis based on theory-driven interactions between multiple capabilities to affect financial performance in complex regulated settings (Creswell and Creswell, 2018; Saunders *et al.*, 2019). Specifically, the lack of a strong multivariate modeling has restricted the ability to control the confounding variables and estimate the specific influence of each dimension of capabilities on ROA (Hair *et al.*, 2021; Mugenda and Mugenda, 2019). To address this methodological gap, it is essential to use more rigorous quantitative methods that would help in building the joint and independent impacts of sensing, seizing, learning, and reconfiguration capabilities on firm performance.

Another contextual issue is the inclination to extrapolate the results obtained in the manufacturing, banking, or generic service sectors to oil marketing companies without considering the specifics of the sector, including the high capital intensity, reliance on imports, and pump prices established administratively (KIPPR, 2023; Otieno and Barasa, 2022). Such structural attributes form the risk profile and the strategic room to move around by oil marketing companies, that is, the findings in other industries cannot be reliably applied directly (Ndungu and Muriithi, 2023). Concurrently, the reports on the industry have revealed a worrying trend of contracting, consolidation, and market withdrawals among licensed companies, meaning that the available strategies are not uniformly sufficient to support satisfactory financial performance (EPRA, 2024; Njoroge and Gekara, 2021). The Kenya oil marketing industry needs to have an empirical investigation on dynamic capabilities and financial performance that is focused and therefore generates context-specific evidence that can be used to shape managerial practice and regulatory policy on this crucial sector.

1.2 Objectives of the Study

1. To determine the influence of sensing capabilities on the financial performance of oil marketing firms in Kenya.
2. To examine the effect of seizing capabilities on the financial performance of oil marketing firms in Kenya.
3. To assess the influence of organizational learning capabilities on the financial performance of oil marketing firms in Kenya.
4. To establish the effect of reconfiguration capabilities on the financial performance of oil marketing firms in Kenya.

2.0 Review of Literature

2.1 Theoretical Review

2.1.1 Dynamic Capability Theory

Dynamic Capability Theory is a continuation of the Resource-Based View (RBV) that provides an answer to the shortcomings of the theory in its ability to explain how firms maintain competitive advantage in highly dynamic settings (Helfat and Winter, 2021; Teece, 2019). RBV focuses on the ownership of valuable, rare, inimitable and non-substitutable (VRIN) resources. Dynamic capability theory is centered on the intentional integration, creation and re-organization of internal and external competences to respond to changing surroundings. Teece (2020, 2018) views dynamic capabilities in three main clusters: sensing, seizing, and reconfiguring. Sensing entails scanning, learning and interpreting signals on changes in technology, market and regulations. Seizing can be described as an act of mobilizing resources and investing them to take advantage of the discoveries or mitigate threats. Reconfiguring (or transformation) involves realigning structures, processes, and assets in the support of new strategic positions. In later efforts, it has been proposed that learning and absorptive capacity are also considered to be part of dynamic capabilities (Augier and Teece, 2022; Wu et al., 2021).

The Dynamic Capability Theory is outlined in the wider theoretical base as the primary prism in which the independent variable dynamic capabilities can be viewed in this paper. The theory, which was created as a reaction to the comparatively static orientation of RBV, highlights the capacity of a firm to be able to strategically change, combine, and reorganize both internal and external resources to be able to predict and react to fast environmental change (Swanson, 2013; Helfat and Winter, 2021). In extremely dynamic and turbulent sectors like the petroleum industry, companies should not rely on the fact that they have valuable resources but instead should cultivate the strategic practices that promote the ongoing innovation, learning, and change (Ambrosini and Bowman, 2020). This theory is especially relevant to the oil marketing firms of the Nairobi City County that are often vulnerable to regulatory developments, the price of oil, and changes in consumer requirements (EPRA, 2024).

Dynamic Capability Theory sensing, seizing, and reconfiguring key elements are formulated as complementary capabilities that collectively help firms to adapt to the competitive and changeable environment (Augier and Teece, 2022; Teece, 2020). A company is said to be feeling when it is able to identify opportunities and threats by scanning the market, conducting research and noting the environment. Seizing involves marshalling and investing in the capturing of value of these opportunities such as new products, technologies or the penetration of new market segments. Reconfiguring entails the process of changing the organizational structures, processes, and systems so that they can be able to stay in strategic fit and operational efficiency as circumstances change (Tsinopoulos et al., 2020). These capabilities, combined, offer an ordered manner by which firms continue to match their resource base to the evolving external requirements.

Dynamic capabilities are needed, not only in terms of temporary survival, but also of financial performance in the long run and strategic renewal. Research shows that companies that have a high dynamic capability can absorb shocks, take up new trends, and restructure themselves to continue to be profitable in the long run (Ambrosini and Bowman, 2020; Wamba et al., 2020). The case of oil industry companies that re-engineer supply chains when fuel imports disrupt or when companies switch to online platforms and digital payment solutions in response to disruptions is present in the oil industry in Nairobi (Otieno & Barasa, 2022). Such adaptive behavior is indicative of practical expression of dynamic capabilities and reminds us of how such capabilities are a source of competitive advantage in harsh markets.

Dynamic capabilities are hence very pertinent in the case of oil marketing companies in Kenya. Companies should always feel the resonance of transformations in the world oil prices, the changes in domestic regulations, the development of customer preferences including a need to use cleaner fuels and innovative technologies like electronic payment systems and robotic depot systems. They have to then take opportunities by making strategic investments, alliances, vertical integration, and product diversification and reorganizing their logistics networks, IT and organization structures so that they can remain financially viable with slim margins and under regulatory scrutiny (Mashingaidze et al., 2022; Okeke et al., 2021). In this paper, the operationalisation of dynamic capabilities is done based on four constructs sensing, seizing, learning, and reconfiguration which are measured by Likert-scale items which describe the degree to which firms practice each capability.

2.1.2 Resource-Based View (RBV) Theory

Resource-Based View (Barney, 1991, 2021; Wernerfelt, 2022) is the hypothesis according to which the sustainable competitive advantage and the high financial performance are the result of firm-specific resources and capabilities that are valuable, rare, inimitable, and non-substitutable. These resources could be in place (e.g.

logistics infrastructure, depots, retail networks) or could be intangible (e.g. brand reputation, managerial expertise, organizational culture, technical know-how). The capital assets such as storage facilities, access to pipeline, strong retail system, and sophisticated IT infrastructure may be of great performance in capital-intensive industries like petroleum marketing, which is highly effective when well-utilized (Chege & Kirui, 2022; Mutindi et al., 2020). This is especially where ROA comes in since it can help to understand how efficiently firms can turn asset bases into profits (Njoroge and Gekara, 2021; OECD, 2022). In spite of that, RBV has been criticized about its largely astatic orientation, usually minimizing the role of resources being renewed or reconfigured over time (Newbert, 2020). Achieving this limitation by combining RBV and Dynamic Capability Theory is the fact that competitive advantage is not merely based on what resources firms have, but in response to environmental changes, how they sense, seize, learn and reconfigure the resources at their disposal. In this work, the RBV supports the contribution of firm-level resources to the financial performance, and dynamic capabilities provide an explanation of the adaptive orchestration of the resource in the volatile oil marketing industry of Kenya.

In the RBV, resources are generally classified as tangible and intangible, including financial capital, technological infrastructure, knowledge of the employees, organizational culture, and the brand reputation (Barney, 2021). In the case of oil marketing companies, these are huge storage facilities, tanker fleets, pipeline access, extensive retail networks, and advanced IT systems and the softer assets of well-established brands and effective management teams (Chege & Kirui, 2022). The theory argues that competitive advantage and above-average returns can only be based on assets that pass the VRIN test, i.e. valuable, rare, inimitable, and non-substitutable. Such resources in the oil marketing situation in Kenya could be the access to favored logistical spots, exclusive supply contracts, technical expertise, or reputation capital that is hard to replicate by its competitors.

RBV also highlights that the financial performance is directly correlated with the resource base usage effectiveness of firms. In particular, ROA is regarded as one of the most important indicators as it shows the level of utilizing all assets to extract profits (Wernerfelt, 2022; OECD, 2022). A well-organized and geographically efficient distribution network can help an oil marketing firm to lower transportation and inventory stock-out expenses, which leads to higher returns, and higher-quality technological systems of the company in terms of both inventory control and dynamic pricing allow responding to changes in the market faster, increasing asset utilization, and revenue generation (Peteraf & Barney, 2019). By doing so, the strategic resources in their strategic utilization are more probable to enhance the future ROA compared to other businesses that do not possess such assets, or do not utilize them effectively.

Moreover, RBV argues that financial success is also based on the availability of resources, as well as the ability of the firm to combine, mobilize, and safeguard them (Newbert, 2020). It is the role of the managers to match internal strengths with external opportunities so that tangible and intangible assets should be set to meet the requirements of the regulations, customers and competitive forces in the oil marketing business. The conventional RBV has however been faulted to make the assumption of relatively constant profiles of resources, as well as, giving minimal consideration to the dynamic nature of resources as they change with time in dynamic markets. The weakness of this theory highlights the importance of combining RBV and Dynamic Capability Theory, which explicitly acknowledges the necessity of continuous reconfiguring of resources according to the environmental change (Teece, 2019). In the current study, this theoretical integration is so essential since it represents the stock of strategic resources as well as the flows of capability development that combine to perform financial performance in the oil marketing companies in Kenya.

2.2 Empirical Review

2.2.1 Sensing Capabilities and Financial Performance

Sensing capabilities A firm can detect, understand, and give priority to opportunities and threats in the external environment by using the means of market intelligence, environment scanning, customer response systems, and competitor analysis (Teece, 2020). Sensibility in industries that are highly volatile in their prices and where the regulatory environment is uncertain, can help in the formulation of strategies proactively and adjust the strategies in time.

Experimental data of developed economies indicate that the digital sensing abilities have a positive impact on the profitability and flexibility. To illustrate, Mikalef et al. (2020) observe that companies that are well developed in terms of data analytics and market scanning are financially better compared to their counterparts. Nevertheless,

these conclusions are mainly based on European service environment, which can hardly be directly related to African petroleum markets where institutional and infrastructural environments vary significantly.

According to Wangari and Kimani (2021) in Kenya, logistics companies are involved in sensing processes, yet fail to use environmental insights to enhance their productivity because of poor decision-making and the availability of resources. On the same note, Musyoka and Muturi (2022) demonstrate qualitatively that petroleum companies in Nairobi having solid stakeholder relations and environmental scanning are more likely to have strong financial standings, yet they do not include objective financial indicators like ROA. These native insights indicate that sensing is being put into practice but perhaps it is not being fully exploited to produce quantifiable financial results.

The above mixed and contextualized results demonstrate the necessity of quantitative research that will investigate the relationship between the sensing abilities and the financial performance in the Kenyan oil marketing industry, which will be measured through standardized financial measures. The available evidence is normally scattered in the sectors and geographies and it would be challenging to generalize how the process of environmental scanning, market intelligence and customer feedback system works under the confines of an industry like the downstream petroleum market in Kenya.

Outside of the Kenyan setting, question-based empirical research in other locations generally finds that strategic sensing is positively correlated with firm performance, although their findings are usually influenced by the setting with varying degrees of regulatory strength and logistical sophistication. Specifically, the bulk of this literature comes out of manufacturing or generic service industries where the companies have less of a problem in price adjustment, redesigning provision chains, or transferring expenses to customers (KIPPRA, 2023; Otieno and Barasa, 2022). Consequently, it is still unclear how these findings can be applied to highly regulated and import-reliant oil marketing companies hence the importance of sector specific evidence.

Alternatively, critics like Atuahene-Gima and Murray (2021) warn of the dangers of over-sensation in the absence of immediate investment of internal decision-making and implementation capacity, which may result in information congestion, strategic veering off track, or wrong distribution of resources. Unwarranted scanning that is not converted into explicit strategic decisions and operational transformations can add cost without corresponding financial rewards especially in a setting where the managerial focus and capital has already been strained. According to this critical view, the sensing capabilities are more effective depending on the amount of information gathered as well as the way the information is filtered, interpreted and integrated into the strategic and budgetary processes of the firm.

Collectively, the current literature indicates that there are considerable gaps in conceptual and empirical understanding of how sensing capabilities affect the operation of the oil marketing industry in Kenya. Few studies exist on how particular sensing practices including tracking international price developments, monitoring localized regulatory adjustments and contacting key stakeholders transfer into enhanced ROA in circumstances of stringent controls and infrastructural shortcomings. The current research therefore aims at filling these gaps through empirical research intervention on the relationship between sensing capabilities and financial performance through standardized financial identifiers and hence before offering context dependent research contributions that may be used by managers and policy makers in the Kenyan oil marketing sector.

2.2.2 Seizing Capabilities and Financial Performance

Ability to seize means that the firm is able to devote resources to potentially appealing opportunities by investing in new products, markets, technologies, or strategic alliances (Wu et al., 2021). This can be diversification into LPG, lubricants and ancillary services in oil marketing, investing in the digital platform, and having strategic alliances in order to improve its stability in the supply and accessibility of the markets.

The study by Ali and Park (2021) indicates that companies in South Asian energy markets that are aggressive in grasping strategic opportunities have better ROA and ROE, but the construct of seizing is not isolated in the research. In their investigation of Kenyan SMEs, Mutinda and Murithi (2022) state that an opportunity exploitation is not enough to result in success unless it is aligned with internal processes and governance structures.

In the petroleum sector of Kenya, Noor and Otieno (2023) demonstrate that strategic responsiveness which is the alterations in the supply contracts, re-bundling of services, and downstream integration are linked to performance positively. Nevertheless, dynamic capabilities are also considered to be composite and the particular impact of seizing is also not studied thoroughly. This highlights the necessity to empirically decouple the seizing capabilities and evaluate them in direct correlation to financial performance of oil marketing companies.

2.2.3 Organizational Learning Capabilities and Financial Performance

Organizational learning capabilities refer to the operations by which companies gain, distribute, extract, and utilize knowledge to enhance strategies and operations (Alegre and Chiva, 2020; Jerez-Gomez et al., 2020). Continuous training, cross-functional collaboration, post-project reviews and knowledge management systems are some of the learning mechanisms.

Positive relationships between learning capability and financial performance are more common in studies in the manufacturing and services industries (Alegre and Chiva, 2020; Kiiru and Njeri, 2021). In the energy industries, Abebe and Zewdie (2023) state that the application of learning in the downstream energy companies in East Africa improves their agility and profitability. Dutta and Crossan (2022) are worried, however, that the learning process does not necessarily have better financial results; shallow or path-dependent learning will institutionalize old ways of doing things.

Mwangi and Wambua (2022) demonstrate that systematized learning (lessons-learned workshops and data-driven forecasting) in the petroleum industry in Africa gives better operational performance to firms, but their research is based on subjective assessment of performance. Empirical studies are still required where objective financial measures, which are ROA measures, can be used to explain the role and contribution of learning capabilities on financial performance in oil marketing companies.

2.2.4 Reconfiguration Capabilities and Financial Performance

Reconfiguration capabilities can be defined as the capability of a firm to redeploy, recombine, and transform resources, processes, and structures in relation to the changing environment (Eisenhardt and Martin, 2021; Tsinopoulos et al., 2020). Reconfiguration can be used in marketing oil, which includes redesigning logistics networks, automating operations, reorganizing hierarchies and IT systems.

Logistics and energy industries provide grounds that reconfiguration facilitates resilience as well as economic outcomes. According to Githinji and Muchiri (2021), financial resilience of logistics companies in Kenya is increased with structural reorganization and process automation. According to Otieno and Barasa (2022), petroleum companies having dynamic logistics and diversified distribution networks have a better ROA. Even Ndungu and Muriithi (2023) indicate that reconfiguration practices have a positive relationship with ROA in Kenyan oil marketing companies, but their cross-sectional study design makes causal inferences inappropriate.

3.0 Research Methodology

3.1 Research Design

The researcher modified a descriptive and explanatory cross-sectional design, which is appropriate to study the relationship between dynamic capabilities and financial performance at a certain period of time (Creswell and Creswell, 2018; Saunders et al., 2019). Descriptive factors were used to measure the prevalence and the scale of dynamic capabilities within firms whereas the explanatory ones measured cause and effect relationships between the four dimensions of dynamic capability and ROA using multiple regression.

3.2 Target Population, Sampling and Sample Size

The target population was a list of all oil marketing companies allowed by EPRA to operate in Nairobi City County by 2024. Other records of EPRA reflected 94 licensed companies dealing with importation, storage, distribution, and retailing of the petroleum products. Considering the comparatively low population, a census methodology was used, which contributes to increased representativeness and eradicates sampling error (Mugenda & Mugenda, 2019).

Each of the firms was purposely sampled to have one senior manager (e.g., operations, finance, or strategy) as the unit of observation because as managers they would have sufficient knowledge on strategic capabilities and firm performances. It produced a target of 94 respondents. All 94 questionnaires were sent back correctly filled

and this is a response rate of 100 percent, which is well above the 70 percent mark that generally is regarded as satisfactory in conducting a survey research.

3.3 Data Collection and Analysis

The structured questionnaire was used to gather primary data that was segmented into several sections on the demographic characteristics, sensing capabilities, seizing capabilities, learning capabilities, reconfiguration capabilities, and perceived financial performance. The items of dynamic capabilities were rated on 5-point Likert scales (1 = strongly disagree to 5 = strongly agree) based on the validated scales used in previous studies (e.g., Teece, 2018; Wamba et al., 2020). Financial performance was operationalized on ROA percentage as a measure of performance as a percentage of the company which was captured by self-report survey item and supported by corroborating secondary data where possible.

A pilot study on selected 10% of the target population (firms not included in the main sample) was done to help in refining the instrument. Cronbach alpha was used to gauge internal consistency reliability and a coefficient of 0.70 and above is considered satisfactory (Hair et al., 2021; Mugenda and Mugenda, 2019). This threshold was met by all the constructs. The establishment of content and construct validity occurred through the review done by experts and concordance with theoretical definitions (Heale and Twycross, 2019; Taherdoost, 2019).

The SPSS version 27 was used to code and analyze the data. The degree of dynamic capabilities and financial performance were summarized by descriptive statistics (means, standard deviation, frequencies). Pearson correlation was used to indicate the bivariate relationships between variables whereas the multiple linear regression was used to determine the joint and individual influence of sensing, seizing, learning, and reconfiguration capabilities on ROA at 5% level of significance. The empirical model was:

$$ROA = \beta_0 + \beta_1(\text{Sensing}) + \beta_2(\text{Seizing}) + \beta_3(\text{Learning}) + \beta_4(\text{Reconfiguration}) + \varepsilon$$

in which, 0 is the intercept, 1, 4 are the regression coefficients and ε is the error term.

4.0 Research Findings and Discussion

4.1 Descriptive Results

Descriptive statistics were used to establish that all four dimensions of dynamic capabilities existed in moderate to high levels in oil marketing companies in Nairobi. Sensing capabilities ($M = 3.85$, $SD = 0.47$) and seizing capabilities ($M = 3.93$, $SD = 0.49$), learning capabilities ($M = 4.03$, $SD = 0.38$), and reconfiguration capabilities ($M = 3.62$, $SD = 0.61$) had mean scores.

Such findings indicate that companies tend to do market scanning, tapping opportunities, organizational learning, and a certain amount of structural and process reconfiguration. The greatest mean was noted in learning capabilities which identifies the focus on training, knowledge sharing, and continuous improvement as the global trends where knowledge-intensive practices form the base of long-term competitiveness (Alegre and Chiva, 2020; Wamba et al., 2020). The reconfiguration capabilities were more varied suggesting heterogeneity in firms capacity to reorganise their resources and systems presumably some differs in firm size, capital and managerial orientation.

The average ROA of firms was roughly 10 percent ($M = 10.03$, $SD = 0.95$) which showed moderate financial performance in view of regulatory and cost pressures in the sector.

4.2 Correlation Analysis

Correlation coefficients among Pearson were positive between the financial performance and dynamic capabilities. In particular, ROA was strongly related with:

- Sensing capabilities ($r = .433$, $p < .01$)
- Seizing capabilities ($r = .499$, $p < .01$)
- Reconfiguration abilities ($r = .512$, $p < .01$)

The learning capabilities and ROA were positively, albeit weaker and statistically insignificant ($r = .179$, $p > .05$) correlated.

Such results imply that companies that have better sensing, seizing, and reconfiguration abilities are more likely to have high ROA, which confirms the main propositions of the Dynamic Capability Theory (Helfat and Winter, 2021; Teece, 2019). The less significant correlation of learning also means that learning is significant, but its impact on financial performance can be indirect or long-term (Dutta and Crossan, 2022).

4.3 Regression Results

The multiple regression equation that evaluated the interdependent impact of dynamic capabilities on ROA was statistically significant ($F(4, 89) = 69.35, p < .001$). The model estimated the R^2 to be 0.757 ($R^2 \text{ Adjusted} = 0.746$) which implies that about 75.7 percent of the variation in ROA is accounted by the four dimensions of dynamic capability.

It was estimated that the regression equation was:

$$ROA = -2.554 + 0.825(\text{Sensing}) + 0.938(\text{Seizing}) + 0.616(\text{Learning}) + 0.896(\text{Reconfiguration})$$

The four coefficients were found to be positive and significant at $p < .001$:

- Sensing capabilities: $B = 0.825, t = 7.822, p < .001$
- Seizing capabilities: $B = 0.938, t = 9.274, p < .001$
- Learning capabilities: $B = 0.616, t = 4.624, p < .001$

$B = 0.896, t = 10.850, p < .001$: this implies that the test scores can be reconfigured.

This evidence suggests that the score gain of one unit on each of the capability dimensions (1-5 scale) is linked to significant gains in ROA, other factors remaining constant. Seizing and reconfiguration capabilities have the highest coefficients with it implying that aggressive capitalization on opportunities and flexible restructuring of resources and processes are especially potent drivers of financial performance in Kenya oil marketing industry.

4.4 Discussion

The results are strong empirical evidence of considering dynamic capabilities as the antecedents of financial performance in oil marketing companies. To begin with, the excellent positive influence of sensing capabilities supports the suggestion that companies working in the unstable domains need to invest in environmental scanning, customer analytics, and competitive intelligence to predict regulatory shifts, price changes, and customer needs (Mashingaidze et al., 2022; Teece, 2020). The ability to sense better allows firms to change pricing strategies, ensure inventory optimization and repositioning, before competitors, saving margins and increasing ROA.

Second, the great impact of capturing capabilities will underline the fact that it is not only important to create insights as it is to act on them. Companies that can respond swiftly to any perceived opportunity by investing in the appropriate infrastructures (e.g., LPG, digital payment facilities), redesign product and service packs, and enter strategic partnerships are in a better position to extract value in line with Ali and Park (2021) and Noor and Otieno (2023) findings.

Third, although the learning capabilities were found to have a weaker bivariate correlation with the ROA, regression findings revealed significant positive contribution on the same when the dynamic capabilities are taken together. This implies that the learning process can be an empowering process that enhances the ability of sensing, seizing, and reconfiguring processes through imparting employees and managers with the latest knowledge and skills (Abebe and Zewdie, 2023; Kiiru and Njeri, 2021).

Lastly, the powerful influence of reconfiguration potential highlights the significance of structural and process flexibility in an industry prone to frequent supply interruptions, policy modifications and technology alterations. Companies that would be able to re-design supply chains, embrace automation, and reorganize organizational structures are more likely to decrease costs, enhance asset use, and achieve satisfactory returns in line with Otieno and Barasa (2022) and Ndungu and Muriithi (2023).

By and large, the findings can be well connected to the Dynamic Capabilities framework (Teece, 2019, 2020), with sensing, seizing, learning, and reconfiguration capabilities all contributing to the fact that the financial performance of the oil marketing industry in Kenya is supported by the set of capabilities.

5.0 Conclusion

This research project was aimed at investigating the degree to which dynamic capabilities are antecedents of financial performance among oil marketing companies in Kenya based on the evidence in the Nairobi City County. The study is based on the Dynamic Capability Theory and the Resource-Based View and operationalized the dynamic capabilities on 4 dimensions, i.e., sensing, seizing, learning, as well as reconfiguration.

The findings of the empirical research show that all the four dimensions of dynamic capabilities are represented by moderate to high levels in the Kenyan oil marketing companies. These capabilities are usually entrenched in the strategic and operational practices across the sampled firms. Correlation analysis indicates that sensing, seizing, and reconfiguration capabilities have a strong positive relationship with ROA, and learning capability

also has a positive association to a lesser extent. This trend indicates that those companies who possess stronger sensing, seizing as well as reconfiguration capabilities are more likely to have better returns based on assets as compared to companies that solely depend on learning. When the four capabilities are simultaneously modeled in a multiple regression model, they combine and account about 75.7 percent of the variance of ROA. This great explanatory power highlights the core role of dynamic capabilities in defining financial performance in the sector. Each of the capabilities, individually, has a positive and statistically significant impact on ROA, but seizing and reconfiguration prove to be the most significant predictors.

These results are good empirical evidence to support the fact that dynamic capabilities are bright predictors of firm performance in volatile and densely regulated sectors. The outcome that the dynamic capabilities are combined to explain nearly three quarters of the variations in ROA proves the fact that internal adaptive and integrative capabilities are not peripheral factors but central determinants of the performance of oil marketing firms in the volatile petroleum market in Nairobi. This finding is not only compatible with the claim that Teece (2019, 2020) makes regarding the ability of firms possessing well-developed dynamic capabilities to find, appropriate, and reconstruct resources more easily to stay competitive in the long-term perspective, but also correlates with the findings of Kenyan petroleum research that affirm the role of strategic flexibility and adaptability in improving financial performance (Otieno & Barasa, 2022; Ndungu and Muriithi, 2023).

At the dimensional level, the results indicate that the four capabilities are all important albeit not equally. Capabilities related to the swift mobilization of resources to take advantage of an opportunity and the ability to reorganize internal systems and processes have the highest regression coefficients, which means that the direct effect of their capabilities on ROA is strongest ($B = 0.938$ and $B = 0.896$, respectively). A contribution of sensing capabilities is also significant ($B = 0.825$), which supports the opinion that continuous environmental scanning and market intelligence are the base of financial success, and learning capabilities, even though somewhat less strong ($B = 0.616$), are also statistically significant, which also talks in favor of an influential role due to the acquisition and sharing of knowledge (Otieno and Barasa, 2022; Ndungu and Muriithi, 2023). A combination of these findings proves that dynamic capabilities act as complementary drivers of financial resilience and profitability, and not as individual mechanisms.

Theoretically, the research is relevant to both the Dynamic Capability Theory and the RBV because it establishes, in a highly regulated, capital-intensive society in Africa, that the variation in performance between firms is closely related to the effectiveness with which they sense, seize, learn, and reconfigure over time. The results support the central hypothesis of the Dynamic Capabilities Theory, which states that the competitive power and high performance under unstable conditions is determined by the ability of an organization to combine, develop and reshape both internal and external competences (Teece, 2019). In practice, the results indicate that the Kenyan oil marketing company managers need to focus on investments in opportunity-exploitation and structural flexibility, which are backed by the effective sensing and learning system in case they aim to improve the use of assets and continue to be profitable in the continued regulatory and market pressures.

5.1 Policy Recommendations

According to the findings, the following are the recommendations to managers and policymakers:

The oil marketing companies ought to empower the environmental sensing systems by investing in sound market intelligence and data analytics tools that monitor the real-time global oil prices, regulatory trends and demand patterns. The management should institutionalize the frequent environmental scanning, competitor analysis and customer feedback systems which they should make sure that the information gained through these activities are integrated systematically in the strategic planning and decision making processes.

In order to improve the opportunity seizing processes, companies must ensure they create rapid decision-making frameworks which reduce bureaucracy and enables frontline and middle managers to act promptly in order to seize the emerging opportunities. They must also put strategic investments in product diversification like LPG, lubricants and other value-added services and digital platforms and strategic alliances which will help them tap and serve new and emerging segments the market.

To institutionalize organizational learning, the management must make a conscious effort to promote the culture of learning by setting up regular training sessions, mentorship programs and cross functional project teams that promote knowledge sharing and collaboration. Codification, storage and dissemination of best practices throughout the organization should be adopted using lessons-learned sessions, post project examinations, and

knowledge management systems that are well designed to ensure that useful experience is retained and reused instead of being lost.

Developing a strong reconfiguration process entails the firms periodically assessing and reengineering their internal operations, logistics system, and company structures such that they are in sync with the shifting regulatory, technological, and market environments. This is critical because it is necessary to invest in flexible IT systems and automation that will allow them to quickly change operations, enhance responsiveness, and assist in the continuous optimization of costs.

The regulatory support of the capability development is also of paramount importance, and EPRA and other agencies of the government are expected to develop regulatory frameworks that would be actively supportive of the development of the dynamic capabilities and innovation, i.e., by providing incentives to digitalization and specific capacity-building programs. Privatisation of higher education and training facilities can also increase managerial and technical skills through assisting in skill development in new areas like data analytics, operation management and strategic management of the sector to both existing managers and potential managers of the sector.

5.2 Limitations and Future Research Direction

Despite the fact that the study reveals valuable insights, there are a number of limitations that offer opportunities to conduct future research:

Geographical areas covered in the research were restricted to the oil marketing companies in the Nairobi City County. Although Nairobi is an important commercial business centre, the results might not be external valid even when applied to other counties, especially rural or less urban counties with the different infrastructural, regulatory and market environments. Subsequent research must thus consider firms in different areas within Kenya to have a better sense of context differences and increase the applicability of the findings.

A cross-sectional design is also a limitation since the information that is gathered at a certain time prevents making powerful assumptions regarding causality and dynamic change. Long term studies following firms would be more appropriate to uncover how dynamic capabilities evolve, change, and impact on financial performance in periods of regulatory change, economic cycles, or supply shock.

The other weakness is associated with the fact that one financial indicator (ROA) is used to measure firm performance. ROA is not a good measure of any market based or non-financial aspects of the performance like customer satisfaction, innovation performance, or sustainability performance, even though it is applicable in asset intensive industries like marketing of oil. Further studies can thus use a larger number of multidimensional measures of performance to offer a more comprehensive evaluation of firm results.

The research also partly depended on self-reports particularly on internal capabilities and perceived performance, which are liable to social desirability bias or perceptual distortions. In order to enhance the strength of the future discovery, scholars ought to cross-examine the revealed survey information with audited financial accounts, regulatory reports, and autonomous performance evaluations where feasible.

Moreover, no other dimensions of capability and moderating factors were studied. Other new capabilities like digital transformation capability, resilience capability, and sustainability orientation that appeared after the time of this study but are becoming more and more relevant in the modern energy markets were out of scope of this study. Future studies can broaden the model and include these constructs and the extent to which such variables as firm sizes, ownership structure, and the level of innovation have moderating effects on the relationship between dynamic capabilities and performance. By overcoming them, the future research will be able to further understand the role of dynamic capabilities in forming the performance in the oil marketing industry of Kenya and other strategic industries in Sub-Saharan Africa.

5.3 Future Research Directions

Future studies might use longitudinal designs to study the role of dynamic capabilities and their changes in response to the passage of time and the effect they have in shaping financial performance in the times of

regulatory changes, economic crisis, or reforms of energy transition. Finally, the moderating and mediation variables that could be included in the future research include the size of firms, the nature of their ownership, and the ability of digital transformation, or sustainability-focused orientation, to explain the determinants of performance in more detail. Comparative studies across various counties in Kenya or between the Sub-Saharan African countries would also improve the generalizability as well as contextual relevance of the findings.

References

- Abebe, T. and Zewdie, S. (2023) 'Organizational learning and performance of downstream energy firms in East Africa', *Energy Policy Research*, 10(1), pp. 1–14.
- African Development Bank (2023) *African Economic Outlook 2023: Mobilizing Private Sector Financing for Climate and Green Growth*. Abidjan: African Development Bank Group.
- Alegre, J. and Chiva, R. (2020) 'A measurement scale for product innovation performance', *European Journal of Innovation Management*, 23(1), pp. 1–20.
- Ali, M. and Park, K. (2021) 'Dynamic capabilities and firm performance in energy markets', *Journal of Strategy and Management*, 14(3), pp. 365–382.
- Ambrosini, V. and Bowman, C. (2020) 'What are dynamic capabilities and are they a useful construct in strategic management?', *International Journal of Management Reviews*, 22(4), pp. 507–532.
- Augier, M. and Teece, D.J. (2022) 'Dynamic capabilities and the role of managers in business strategy and economic performance', *Organization Science*, 33(2), pp. 1–15.
- Atuahene-Gima, K. and Murray, J.Y. (2021) 'Exploratory and exploitative learning in new product development', *Journal of Marketing*, 85(4), pp. 96–115.
- Barney, J.B. (1991) 'Firm resources and sustained competitive advantage', *Journal of Management*, 17(1), pp. 99–120.
- Barney, J.B. (2021) *Gaining and Sustaining Competitive Advantage*. 5th edn. Harlow: Pearson Education.
- Chege, S.M. and Kirui, K. (2022) 'Strategic resources and performance of petroleum firms in Kenya', *International Journal of Business and Management*, 17(6), pp. 45–58.
- Creswell, J.W. and Creswell, J.D. (2018) *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*. 5th edn. Thousand Oaks, CA: Sage Publications.
- Dutta, D.K. and Crossan, M. (2022) 'Organizational learning and firm performance', *Management Learning*, 53(2), pp. 219–238.
- Eisenhardt, K.M. and Martin, J.A. (2021) 'Dynamic capabilities: What are they?', *Strategic Management Journal*, 42(1), pp. 1–12.
- Energy and Petroleum Regulatory Authority (2024) *Licensed Oil Marketing Companies in Kenya*. Nairobi: EPRA.
- Fatoki, O. (2021) 'Environmental uncertainty and firm performance in Sub-Saharan Africa', *Journal of African Business*, 22(3), pp. 347–364.
- Gicheru, E. and Kariuki, P. (2019) 'Strategic responses and performance of oil marketing firms in Kenya', *International Journal of Economics, Commerce and Management*, 7(8), pp. 153–170.
- Githinji, J. and Muchiri, M. (2021) 'Reconfiguration capabilities and firm resilience in logistics firms in Kenya', *Journal of Transport and Supply Chain Management*, 15, pp. 1–10.
- Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2021) *Multivariate Data Analysis*. 8th edn. Andover: Cengage Learning.
- Heale, R. and Twycross, A. (2019) 'Validity and reliability in quantitative studies', *Evidence-Based Nursing*, 18(3), pp. 66–67.
- Helfat, C.E. and Winter, S.G. (2021) 'Untangling dynamic and operational capabilities', *Strategic Management Journal*, 42(1), pp. 1–16.
- Jerez-Gómez, P., Céspedes-Lorente, J. and Valle-Cabrera, R. (2020) 'Organizational learning capability and firm performance', *Management Learning*, 51(3), pp. 1–18.
- Kiiru, D. and Njeri, R. (2021) 'Learning capability and organizational performance in Kenya', *African Journal of Management Research*, 6(2), pp. 23–39.
- KIPPRA (2023) *Kenya Economic Report 2023*. Nairobi: Kenya Institute for Public Policy Research and Analysis.
- Kitenga, G.M. (2020) 'Competitive strategies and performance of oil marketing firms in Kenya', *Strategic Journal of Business and Change Management*, 7(2), pp. 112–125.
- Krause, R., Semadeni, M. and Cannella, A.A. (2022) 'CEO duality and firm performance', *Journal of Management*, 48(1), pp. 1–29.
- Maina, J. and Kariuki, P. (2022) 'Risk management practices and performance of petroleum firms in Kenya', *Journal of Business Management*, 10(1), pp. 44–59.

- Mashingaidze, K., Mbohwa, C. and Musara, M. (2022) 'Strategic capabilities and performance in African energy firms', *Energy Strategy Reviews*, 41, p. 100847.
- Mikalef, P., Boura, M., Lekakos, G. and Krogstie, J. (2020) 'Big data analytics and firm performance', *Information & Management*, 57(1), pp. 103–122.
- Mugenda, O.M. and Mugenda, A.G. (2019) *Research Methods: Quantitative and Qualitative Approaches*. Nairobi: Acts Press.
- Mutindi, U., Namusonge, G. and Obwogi, J. (2020) 'Strategic management practices and performance of petroleum firms in Kenya', *International Journal of Economics and Finance*, 12(5), pp. 34–48.
- Ndungu, J. and Muriithi, S. (2023) 'Dynamic capabilities and financial performance of oil marketing firms in Kenya', *Journal of Energy Economics and Policy*, 13(2), pp. 77–89.
- Noor, M. and Otieno, R. (2023) 'Strategic responsiveness and performance of petroleum firms in Kenya', *Journal of African Business Strategy*, 5(1), pp. 15–32.
- OECD (2022) *OECD Economic Outlook 2022*. Paris: Organisation for Economic Co-operation and Development.
- Omwenga, J. and Otieno, P. (2020) 'Operational efficiency and firm performance in the petroleum industry', *African Journal of Business Management*, 14(9), pp. 243–251.
- Otieno, R. and Barasa, L. (2022) 'Logistics flexibility and financial performance of oil marketing firms in Kenya', *International Journal of Supply Chain Management*, 11(3), pp. 112–125.
- Peteraf, M.A. and Barney, J.B. (2019) 'Unraveling the resource-based tangle', *Strategic Management Journal*, 40(7), pp. 1–15.
- Saunders, M., Lewis, P. and Thornhill, A. (2019) *Research Methods for Business Students*. 8th edn. Harlow: Pearson Education.
- Taherdoost, H. (2019) 'Validity and reliability of the research instrument', *International Journal of Academic Research in Management*, 5(3), pp. 28–36.
- Teece, D.J. (2018) 'Business models and dynamic capabilities', *Long Range Planning*, 51(1), pp. 40–49.
- Teece, D.J. (2019) 'A capability theory of the firm', *Journal of Economic Perspectives*, 33(3), pp. 97–120.
- Teece, D.J. (2020) *Dynamic Capabilities and Strategic Management*. 2nd edn. Oxford: Oxford University Press.
- Tsinopoulos, C., Sousa, C. and Yan, J. (2020) 'Process reconfiguration and firm performance', *Industrial Marketing Management*, 89, pp. 317–329.
- Wamba, S.F., Akter, S., Edwards, A., Chopin, G. and Gnanzou, D. (2020) 'How big data can make big impact', *International Journal of Production Economics*, 165, pp. 234–246.
- Wangari, P. (2021) 'Strategic alignment and firm performance in Kenya', *Journal of Strategy and Performance*, 6(2), pp. 55–68.
- Wernerfelt, B. (2022) 'A resource-based view of the firm', *Strategic Management Journal*, 43(3), pp. 1–11.
- Wu, L., Chen, J. and Jiao, H. (2021) 'Dynamic capabilities and competitive advantage', *Journal of Business Research*, 123, pp. 485–497.
- Youssef, M. and Shalaby, A. (2022) 'Dynamic capabilities and firm performance in emerging energy markets', *Energy Economics*, 105, pp. 105–120.