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An Assessment of internal factors influencing the performance of state-owned corporations operating in Kenya's public construction industry.

Kiptoon, Edwin Kibet
Strathmore Business School
Strathmore University

AN ASSESSMENT OF INTERNAL FACTORS INFLUENCING THE PERFORMANCE OF STATE-OWNED CORPORATIONS OPERATING IN KENYA'S PUBLIC CONSTRUCTION INDUSTRY

EDWIN KIBET KIPTOON

STUDENT NO: 149527

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Declaration

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

Edwin Kibet Kiptoon

Approval

The dissertation of Edwin Kibet Kiptoon was approved by the following:

Name of Supervisor: Dr Bernadette Wanjala
School/Institute/Faculty: Strathmore University Business School

Dr. Ceaser Mwangi
Executive Dean
Strathmore University Business School.

Dr. Bernard Shibwabo
Director, Office of Graduate Studies

ABSTRACT

The performance of public construction initiatives, particularly in developing economies like Kenya, often falls short of expectations due to limited resources, and a heavy reliance on loan funding. This study, grounded in the Resource-Based View theory, aimed to examine the internal factors influencing the performance of public construction firms in Kenya, utilizing McKinsey's 7S framework to assess the company's internal aspects. Guided by inquiries into the impacts of McKinsey's hard and soft factors on the performance outcomes of state-owned corporations in Kenya's public construction industry, this research utilized structured questionnaires for data collection and employed both ordinal logistic regression and Spearman's rank correlation for analysis. Findings reveal significant positive correlations between both hard (Strategy, Structure, Systems) and soft (Shared Values, Style, Staff, Skills) factors and organizational performance, underscoring the complex interplay between these internal elements and their impact on operational success. Specifically, strategy and structure exhibited strong positive relationships with performance, highlighting the importance of clear strategic planning and efficient organizational structures. Systems also positively influenced performance, although some variability in system effectiveness was noted. Soft factors such as leadership style and staff competencies showed strong positive impacts on performance, emphasizing the critical roles of effective leadership and skilled staff. Shared values and organizational culture also positively influenced performance, though some challenges in alignment were identified. The study, however, faces limitations including a lack of top management input, and its focus on Kenya's public construction sector, which may limit the generalizability of findings. Future research directions include longitudinal studies to explore causal relationships, comparative analyses across different sectors or regions, and qualitative inquiries to delve deeper into the organizational navigation of the 7S factors' challenges and opportunities. These suggestions aim to refine the understanding of how internal factors contribute to enhancing organizational effectiveness within the public sector, offering a foundational basis for both theoretical exploration and practical application.

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BSC – Balanced Scorecard

EMS – Environmental Management Systems

GDP – Gross Domestic Product

KeNHA – Kenya National Highways Authority

KETRACO – Kenya Electricity Transmission Company Limited

KERRA – Kenya Rural Roads Authority

KURA – Kenya Urban Roads Authority

NWSHA – National Water Storage and Harvesting Authority

RVB - Resource-Based View

SOE – State-Owned Enterprise

7S – McKinsey's 7S Framework

CHAPTER ONE
INTRODUCTION

1.1 Introduction of the study

The intersection of public sector management and performance metrics presents a complex and dynamic field, especially in the context of government-owned state cooperations operating within the public construction industry in Kenya. These entities, characterized by varying degrees of government ownership and involvement, are critical to the infrastructure and economic development of the nation (Bruton et al., 2015). As the global economic landscape evolves, these organizations are facing increased pressure to not only be efficient but also to demonstrate effectiveness and accountability in their operations (Bruton et al., 2015; Musacchio et al., 2015). This study embarks on a journey to assess the effect of McKinsey's indicators, as encapsulated in the McKinsey 7s framework, on the performance of these government-owned state corporations. The Balanced Scorecard model, proposed by Kaplan (1992), provides a multi-dimensional perspective on performance assessment, making it a fitting tool for this analysis.

State-owned enterprises are defined as companies in which the government holds full or significant ownership stakes (Musacchio et al., 2015). Contrary to the outdated binary perspective that categorizes state corporations merely as entities distinct from private or non-profit, non-governmental organizations, Musacchio et al. (2015) argue that the government's engagement with organizations is multifaceted, encompassing complete ownership, majority, or minority investment by the state, or governmental support for particular sectors (Musacchio et al., 2015).

McKinsey's 7s framework centers on the idea of coordination as an essential piece to consider in ensuring effective running of an organization (Peters & Waterman, 2011). McKinsey's 7s framework presents seven domains – strategy, structure, systems, style, staff, skills, and shared values (Peters & Waterman, 2011). The points of focus are further categories into soft and hard elements. The hard elements include strategy, structure, and systems whereas the soft elements include skills, style, staff and shared

values (Peters & Waterman, 2011). This model is chosen in assessing the internal factors of an organization that shape its performance.

The use of McKinsey's 7S framework in this study is justified as it provides a structured methodology to dissect and understand the intricate interdependencies between various internal elements of state-owned corporations in Kenya's public construction industry (Peters & Waterman, 2011). By focusing on both hard and soft factors, the framework ensures that the study does not overlook the significant impact of organizational culture, leadership styles, and employee competencies (soft elements) alongside strategic alignment, structural configuration, and operational systems (hard elements) (Kaplan & Norton, 1992). This comprehensive analysis is crucial for identifying areas of strength and opportunities for improvement, thereby facilitating more targeted and effective interventions to enhance organizational performance. Moreover, the framework's applicability across diverse organizational contexts further validates its use in examining the unique challenges and dynamics within Kenya's public construction sector, ultimately aiming to provide actionable insights for better management and operational outcomes (Peters & Waterman, 2011; Kaplan & Norton, 1992).

Performance in the current study is assessed based on the Balanced Scorecard (Kaplan, 1992). The model is operationalized through four perspectives of performance – financial, internal business, customer, and innovation and learning (Kaplan, 1992). Financial perspective speaks to the hard numbers that form the typical point of focus for firms providing fiscal results. Internal business perspectives relate to the goals and objectives of an organization. Customer metrics relay important information of target customers of the organization. Finally, innovation and learning metrics center on the future plans of the organization with respect to the creation of novel products and services (Kaplan, 1992).

1.2 Performance of Kenya's State Corporations

Kenya Electricity Transmission Company Limited (KETRACO), Kenya National Highways Authority (KENHA), Kenya Urban Roads Authority (KURA), Kenya Rural Roads Authority (KERRA) and National Water Storage and Harvesting Authority (NWSHA) are institutions charge with the role of planning, implementing and

maintaining various infrastructure projects. These entities are not only pivotal in driving economic growth but also in enhancing the quality of life for Kenyans through their respective mandates in planning, implementing, and maintaining various infrastructure projects (African Development Bank Group, 2018; World Bank, 2017). These organizations have different mandates and scopes of work, but they also collaborate and coordinate with each other to ensure efficiency and effectiveness in service delivery. KETRACO is a state-owned corporation that operates and manages the national electricity transmission grid and regional power interconnectors (Ochieng, 2019). Its main objective is to provide reliable, secure and affordable electricity to all parts of the country and beyond. KENHA, on the other hand, is a statutory body that oversees the development, rehabilitation, and maintenance of national roads in Kenya. It also facilitates the provision of road transport services and promotes road safety and environmental protection (KENHA, 2023). KURA, established as a statutory entity, is responsible for overseeing the management, development, rehabilitation, and maintenance of urban roads within Kenya (KURA, 2023).It aims to enhance urban mobility and accessibility by providing quality roads and related infrastructure. KERRA is a similar organization that deals with rural roads in Kenya. It seeks to improve rural connectivity and socio-economic development by constructing and maintaining rural roads and bridges. Finally, NWSHA is a newly established state corporation that is mandated to develop sustainable strategies for water storage and harvesting in Kenya. It also implements water projects such as dams, boreholes, pans and irrigation schemes to enhance water security and resilience in the country (NWSHA, 2020).

The Government of Kenya has increasingly adopted performance-based contracting as a mechanism to measure and enhance the performance of public sector entities. This approach aligns with global trends towards more accountability and efficiency in the public sector. Performance-based contracting involves setting specific, measurable objectives and tying the achievement of these objectives to contractual agreements, often with implications for funding and continued support.

In Kenya, performance-based contracting is particularly evident in infrastructure projects, where agencies like the (KURA) and (KERRA) are contracted based on specific performance criteria related to the construction, maintenance, and

improvement of road networks (Kimenyi & Ndung'u, 2005; World Bank, 2017). These criteria often include timelines, quality standards, and budget adherence, aiming to ensure that projects are completed efficiently and effectively.

Similarly, in the health sector, performance-based contracting has been implemented to improve service delivery in public hospitals. The contracts set out performance indicators such as patient waiting times, quality of care, and financial management, which are then monitored and evaluated regularly (Barasa et al., 2017). These measures demonstrate the government's commitment to improving service delivery through a results-oriented approach. Performance-based contracting provides a clear framework for accountability, enabling the government to assess the effectiveness of various departments and agencies in meeting their objectives, ultimately leading to improved public services (Kimenyi & Ndung'u, 2005; Barasa et al., 2017).

Extant literature on the performance of firms with government holding is varied. Zhao (2010) reports such positive outcomes as increased diversification to the end of improved ability to survive in inconsistent markets. Ridwan et al., (2013) further notes the efficacy of policy in achieving positive growth in the government-controlled port service. These findings however contradict observation by Farrell and Goodman (2013) who highlight the lagging managerial approaches employed by state owned firms struggling to remain abreast of the fast changes of their business environments. The auditor general report covering the period 2013 – 2014 financial period revealed that of the total government spend, only one quarter could be accounted for (Oxford Analytica, 2015).

The untraceable funds were by and large attributed to improper funds management with government parastatals pointed to as among the main offenders responsible for the outcome. Wanjira and Ngari (2019) in their evaluation of the factors influencing the effectiveness of project management practices for road projects in Kenya, found that project monitoring, management support, the competence of the project team, and project financing significantly enhance the performance results of contracted organizations. In an examination of the strategic development and execution processes at the Kenya National Highways Authority (KENHA), Maswan (2012) identifies several key determinants that influence the organization's performance outcomes.

These determinants include the organizational framework, the prevailing corporate culture, the availability of resources, the effectiveness of internal communication, the quality of leadership, and the incentives and rewards system employed by the organization. Each of these factors is highlighted as a significant contributor to the success or failure of KENHA's strategic initiatives. The current study aims to explore the intersection between internal firm practices and strategy as determinants of performance outcomes among government-owned state cooperations operating in Kenya's construction industry. The rationale for the selection of these companies is that their unitary sourcing of funding, the government, renders internal firm practices as potentially main contributors to performance differences.

1.3 Problem Statement

State-owned enterprises (SOEs) play a crucial role in national development, particularly in emerging economies like Kenya. Despite their importance, these entities face challenges in efficiency, innovation, and adaptation to market demands. While seminal works by Peters and Waterman (2011) on McKinsey's 7S framework and Kaplan and Norton (1992) on the Balanced Scorecard offer foundational insights into organizational performance, their application to SOEs in Kenya's construction industry remains underexplored (Estrin et al., 2016; Bruton et al., 2015).

This study addresses gaps identified in the literature. First, although McKinsey's 7S framework and the Balanced Scorecard are robust models, their use in assessing SOEs in emerging economies is limited (Peters & Waterman, 2011; Kaplan & Norton, 1992). Studies by Ridwan et al. (2013) and Nthini (2013) begin to bridge this gap but lack a comprehensive look at the interrelations among the framework's components in Kenya's public construction sector.

Second, there is an overemphasis on the hard elements of McKinsey's 7S framework (strategy, structure, and systems) and insufficient attention to the soft elements (style, staff, skills, and shared values) that are equally critical for SOE performance (Peters & Waterman, 2011). This gap hinders understanding of how soft elements, influenced by leadership styles and organizational culture, impact efficiency and innovation (Zhou, 2017; Terjesen et al., 2016).

Additionally, the role of environmental sustainability practices, such as environmental management accounting, in SOEs is underexplored (Rahman et al., 2024). Given the global push towards sustainable development, it is essential to align SOEs with these objectives. Furthermore, the impact of corporate governance reforms and leadership diversity, including the inclusion of female and independent directors, on SOE performance needs further investigation (Jurkonis et al., 2016; Obrenovic et al., 2020).

This study examines how McKinsey's 7S framework elements and Balanced Scorecard perspectives influence the performance of government-owned construction companies in Kenya. By integrating insights on strategic leadership, environmental sustainability, and the role of staff and skills, this research aims to enhance the understanding of factors driving SOE performance in emerging economies. This study seeks to contribute to theoretical discussions on organizational performance and SOE management and provide actionable insights for policymakers, practitioners, and scholars to improve the efficiency, innovation, and sustainability of SOEs in the construction industry.

1.4 Research objectives

The guiding objective of the research is as follows: to conduct an assessment of the effect of internal factors on performance of state owned cooperations operating in Kenya's public construction industry. The internal factors are assessed on the basis of McKinsey's indicators.

1.4.1 Specific research objectives

The specific objectives are as follows:

i. To evaluate the current performance metrics of government-owned state corporations operating in Kenya's public construction industry.
ii. To investigate the impact of McKinsey's 7S framework hard factors (Strategy, Structure, Systems) on the performance of the identified state corporations.
iii. To explore the impact of McKinsey's 7S framework soft factors (Shared Values, Style, Staff, and Skills) on the performance of the identified state corporations.

1.5 Research Questions

The research questions of the study are as below:

i. What are the current performance metrics of government-owned state corporations operating in Kenya's public construction industry?

ii. What is the impact of McKinsey's 7S framework hard factors (Strategy, Structure, Systems) on the performance of the identified state corporations?

iv. What is the impact of McKinsey's 7S framework soft factors (Shared Values, Style, Staff, and Skills) on the performance of the identified state corporations?

1.6 Scope of the Study

Five firms are considered in the current study – KETRACO, KENHA, KURA, KERRA and NWSHA. The selection of these firms is grounded in their strategic importance to Kenya's public infrastructure development, their direct receipt of government funding and support, and their representation across essential infrastructure sectors. This approach ensures a comprehensive understanding of McKinsey's hard and soft factors within the public construction industry in Kenya. KETRACO, KENHA, KURA, KERRA, and NWSHA are instrumental in the development, maintenance, and expansion of Kenya's infrastructure in energy, national highways, urban and rural roads, and water and sanitation, respectively. These sectors are pivotal for economic growth, urbanization, and social development, highlighting the critical role of these entities (Government of Kenya, 2020). For instance, KETRACO's efforts in expanding the national grid are essential for achieving Kenya's Vision 2030 energy objectives (Kenya Vision 2030, 2019). The government of Kenya has earmarked these entities as central to the realization of its infrastructure development agenda, as evidenced by their significant allocation in the national budget (Ministry of Finance, 2021). This prioritization underlines the government's commitment to enhancing connectivity, accessibility, and utility services, making these firms the primary executors of public construction projects funded by both national and international sources. The study is limited to these four as the aim is to understand the role of McKinsey's hard and soft factors in the context of the public construction industry in Kenya, hence the omission of other state parastatals receiving funding and support through similar approaches from the government. The study will be conducted over the period December 2022 to April 2023.

The main reason, therefore, for selecting the five organizations—Kenya Electricity Transmission Company Limited (KETRACO), Kenya National Highways Authority (KENHA), Kenya Urban Roads Authority (KURA), National Water Storage and Harvesting Authority (NWSHA), and Kenya Rural Roads Authority (KeRRA)—as the focus of the current study is their substantial budgetary allocations, which reflect their significant roles in public development in Kenya. These organizations receive large amounts of funding from both external sources and the government, which underscores their extensive mandates and the critical importance of their projects in national development.

1.7 Significance of the Study

Multiple stakeholders of the public construction industry in Kenya would find the study useful.

1.7.1 Legislators

The study's findings are crucial in identifying inefficiencies and gaps in the management and operational frameworks of public construction firms in Kenya. By pinpointing specific internal factors that hinder efficient resource utilization, the study provides a solid foundation for policymaking. It enables legislators to craft targeted policies or reforms that can significantly enhance operational efficiency within the sector. Furthermore, this study aids in the development of benchmarks and standards for performance evaluation, ensuring that public construction projects are executed effectively, within budget, and on time. Legislators can use these insights to advocate for changes that promote transparency, accountability, and sustainability in public projects, ultimately leading to more strategic investments in infrastructure development.

1.7.2 Practitioners

Industry practitioners, including managers and employees within the public construction sector, gain valuable insights from this study. It identifies potential problem areas within organizations, such as inefficiencies in workflow processes, misalignment between strategy and execution, or gaps in skillsets and capabilities. This information is critical for internal restructuring efforts, enabling firms to address

these challenges proactively. By understanding the specific internal factors affecting performance, practitioners can implement strategic changes to improve project delivery, enhance competitive advantage, and foster innovation. This study also offers a blueprint for best practices in organizational management, encouraging a culture of continuous improvement and excellence in the construction industry.

1.7.3 Academicians

The academic community benefits immensely from this study's exploration of internal factors impacting the performance of public companies in Kenya. It fills a notable gap in empirical research, providing a rich dataset for further exploration and discussion. Academicians can build upon these findings to develop new theoretical frameworks or hypotheses about organizational performance in emerging economies. The study also serves as a valuable teaching resource, offering real-world examples to illustrate management principles and organizational theory. Furthermore, it encourages interdisciplinary research, combining insights from management science, economics, and public policy to enrich our understanding of public sector management.

1.8 Chapter summary

This chapter lays the groundwork for the study by outlining its primary objective: to explore the internal factors impacting the performance of public construction companies in Kenya. It presents the research's motivation, highlighting the importance of efficient resource management within the public sector. The chapter concludes with an overview of the research questions and the significance of the study for various stakeholders, including legislators, practitioners, academicians, and the public.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

The current chapter serves to present the basis upon which the study is built. This chapter captures the theoretical underpinnings, exposition of empirical findings, gaps in research and conceptual framework employed in the understanding of the variables constituting the study.

2.2 Grounding Theory

The Resource-Based View (RBV) of the firm, developed by Birger Wernerfelt in 1984 and further refined by scholars such as Jay Barney in 1991, has become a pivotal framework in strategic management and organizational theory (Barney, 1991). This theory grounds the current study. RBV focuses on the internal resources of a firm as the primary determinants of its competitive advantage and performance. This theory is highly pertinent to the current study examining the internal factors influencing the performance of public construction firms in Kenya.

Birger Wernerfelt introduced the concept of RBV in his 1984 paper "A Resource-Based View of the Firm," where he argued that firms could achieve sustained competitive advantage through the acquisition and control of valuable, rare, inimitable, and non-substitutable (VRIN) resources (Wernerfelt, 1984). Jay Barney further elaborated on this idea in his seminal 1991 paper, "Firm Resources and Sustained Competitive Advantage," where he systematically identified the characteristics that resources must possess to provide a sustained competitive advantage (Barney, 1991).

The RBV is grounded in several key principles. Firstly, it emphasizes resource heterogeneity, the idea that firms possess different bundles of resources and capabilities, which lead to variations in performance. Secondly, the principle of resource immobility suggests that resources are not easily transferable between firms, allowing those with superior resources to maintain competitive advantages. Thirdly, Barney (1991) emphasized that for a resource to provide a sustained competitive advantage, it must be valuable, rare, inimitable, and non-substitutable (VRIN). These

principles suggest that firms should focus on leveraging their unique resources and capabilities to create a competitive edge, not only by acquiring valuable resources but also by developing the organizational processes to effectively utilize these resources.

The RBV is highly relevant to the current study, which investigates the internal factors affecting the performance of state-owned corporations in Kenya's public construction industry. By applying McKinsey's 7S framework, the study focuses on both hard (strategy, structure, systems) and soft (shared values, style, staff, skills) factors, which can be seen as the internal resources and capabilities of these organizations. The RBV helps in understanding how these internal factors contribute to the competitive advantage and performance of the firms. For instance, having a robust strategy (valuable resource) that aligns with organizational goals can lead to superior performance. Similarly, effective organizational structures and systems (valuable and rare resources) can enhance operational efficiency. Leadership style and staff competencies (inimitable and non-substitutable resources) are crucial for fostering a productive organizational culture.

Despite its widespread adoption, the RBV has faced several criticisms. One major critique is its static nature; critics argue that RBV is too static and does not adequately account for the dynamic changes in the competitive environment (Priem & Butler, 2001). Additionally, some scholars contend that the definitions of key concepts like 'resource' and 'capability' are too broad and ambiguous (Kraaijenbrink, Spender, & Groen, 2010). Another significant criticism is related to empirical testing; the theory has been criticized for its lack of empirical rigor and challenges in operationalizing and measuring VRIN resources (Newbert, 2007).

To address these criticisms, recent developments in RBV have incorporated dynamic capabilities, which emphasize a firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments (Teece, Pisano, & Shuen, 1997). This extension makes RBV more adaptable and applicable to contemporary business contexts. Furthermore, the current study mitigates the critique of vague definitions by operationalizing the internal factors through the well-defined constructs of McKinsey's 7S framework. By employing structured questionnaires and rigorous statistical methods like ordinal logistic regression and Spearman's rank

correlation, the study ensures empirical rigor and clear measurement of the internal factors.

2.3 Theoretical framework

This section focuses on anchoring of the study. The purpose of the section is to ground findings in the corpus of prior concepts used in understanding the interrelationship between the main variables of interest in the study. The current study focuses on factors deemed impactful to the performance of a firm hence two theories are used – McKinsey's 7s framework and the Balanced Score Card (Peters & Waterman, 2011; Kaplan & Norton, 1992). The first addresses the constitution of the independent variables whereas the second focuses on the dependent variable and its structuring. The makings of the theories, relevance to the current study, and criticisms are discussed.

2.3.1 McKinsey's 7-s Framework

McKinsey's 7s framework was developed in the late 1970's in a context in which firms predominantly focused on the structure and strategy of organizations (Peters & Waterman, 2011). The central guiding ideas around the creation of effective organizations entailed responsibility and reporting lines (Peters & Waterman, 2011). The framework's fundamental contribution was the bringing into focus of the idea of coordination as an essential piece to consider in ensuring effective running of an organization (Peters & Waterman, 2011). McKinsey's 7s framework presents seven domains – strategy, structure, systems, style, staff, skills, and shared values (Peters & Waterman, 2011). The points of focus are further categorized into soft and hard elements. The hard elements include strategy, structure and systems whereas the soft elements include skills, style, staff and shared values (Peters & Waterman, 2011). Effective coordination of the elements allows for expedience and efficacy on pursing common goals and adjusting to change (Peters & Waterman, 2011). The model can also be used to scan for blind spots that left unaddressed would result in compromised efficiency in operations (Peters & waterman, 2011).

McKinsey's 7s framework has been used in the assessment of government effectiveness in particular domains. Yusuf Sukman (2017) assesses the validity of the model in evaluating the effectiveness of tax collection by Tanzania Revenue Authority.

The model is found to be useful in providing constructs by which to query the impact of organization to its role as a collection agency. Three of the constructs are found to be valid predictors of revenue collection thus indicating that McKinsey's model does offer utility in assessment of government agency functioning. This finding is of importance to the current proposed study as it offers validation for the consideration of McKinsey's model in evaluation of the performance of government-owned state cooperations operating in Kenya's construction industry.

McKinsey's framework is however not without its critics. Harper (2011) notes that the framework assumes a structural-functionalist grounding in presenting the elements of an organization as an entity operating in a context of complexity in interacting with other social elements to the end of promoting solidarity and stability. This fundamental understanding of the organization is however at odds with the outcomes of emergence of conflict and contradictions (Harper, 2011). The antagonistic interactions between entities operating in competitive environments often requires an injection of deliberate effort to prevent negative competition and collapse of systems. The central idea of McKinsey's elements as inherently operating towards stability is however appreciated and considered in the current study. The author posits that the model is used mainly as a diagnostic tool to assess the standing of the organization with the intention of using inferences to restructure the elements of the organization to the end of more effective functioning.

2.3.2 The Balanced Scorecard

The balanced scorecard was developed by Kaplan (1992) and has proven revolutionary in its elucidation of the multidimensional aspects that can be used to assess the prowess of an organization. Traditional metrics at plan in the broader business world typically focused, and arguably currently focus, on financial performance of a firm as the end-all-be-all indicator of desirable performance. This aspect is shaping to the orchestration of resources and may lead to a short-term orientation whereby immediate financial gains are viewed as more lucrative than more sustainable long-term gains in both financial and non-financial aspects (Kaplan, 1992). Four perspectives are proposed as integral to the assessment of the performance of a firm – financial, internal business, customer, and innovation and learning (Kaplan, 1992). The financial perspective focuses on the fiscal bottom line; this is therefore the most commonly accessible and

understood metric as it speaks to expenditures and incomes. The second perspective, internal business, focuses on the objectives put in place by the business. These are internally defined by the strategy teams charged with the role and are constructed in such a manner as to ensure the prowess of the firm in question. The metrics in this perspective need not focus on the financial aspects involved in pursuit of different goals. The third perspective, customer, focuses on customer-centric measures. These are intended to gauge the company's interaction with its customers from the customer's perspective. Metrics under this perspective may therefore focus on such aspects as customer satisfaction and referrals. The final metric, innovation, and learning, captures the long-term orientation of the business by focusing of activities that ensure novelty in offering and continual advancement of the company's knowledge base (Kaplan, 1992).

Johnson et al (2007) opine that government enterprises differ from for-profit establishments in that their primary focus is not the generation of immediate financial benefit but the provision of services to the populace; it therefore follows that the consideration of prowess, or lack thereof, within such institutions should be done in such a manner as is appreciative of this fact. The use of the balanced scorecard in assessment of the performance of government-owned state cooperations operating in Kenya's construction industry is thus well-fitting. The four measures are therefore considered in operationalizing the construct of performance in the current study.

2.4 Empirical Review

The current section focuses on literature on the topic of interest – impact of McKinsey's hard factors on the performance outcomes of government-owned State Corporations. The section provides elucidation of research conducted with a focus on global, then the regional, and finally, the local domains with the aim of grounding the current study in extant literature. The section is subdivided in accordance with the objectives of the study.

2.4.1 McKinsey's hard factors and performance outcomes of Corporations

McKinsey's hard factors refer to three elements – strategy, structure, and systems (Peters & Waterman, 2011). Strategy refers to the plan to successfully implement

change and to gain a competitive advantage, whereas systems refer to the processes and activities of the firm (Peters & Waterman, 2011). Finally, structure focuses on resources and their alignment within an organization (Peters & Waterman, 2011). These elements are subsequently discussed in light of the operations of government-owned State corporations and their performance.

Ridwan et al., (2013) in a descriptive study conducted in Australia sought to investigate the impact of a 1999 Act that mandated the Australia Port Authority to apply the corporate scorecard a metric to assess performance and a rubric by which to guide port operations. The scorecard was therefore introduced as a strategic change to the organization as it required the restructuring of the organization's operations. As an example, the joint reporting of port services and port facilities was substituted with individual reporting. The metrics of focus where likewise changed from business results, service and facilities, and trade development to service and facilities, trade development, and business improvement with the final metric necessitating a focus on innovation. This strategic change, as reported by Ridwan et al (2013) saw the company post significantly higher results for the period 1996 to 2001 as compared to the pre-implementation period 1991 to 1996. The basis of evaluation of performance was five indicators – total port trade, total container trade, export container trade, import trade. These findings are therefore of relevance to the current as they provide evidence of a link between strategy change and performance.

Nthini (2013) investigated how strategic leadership influences the performance results of commercial and financial state-owned enterprises in Kenya. This quantitative research included 48 corporations and utilized correlation analysis to assess the relationship between strategic leadership and performance indicators.. The results revealed a robust positive relationship between the clarity of corporate strategy and elevated levels of customer satisfaction. Additionally, the presence of well-balanced organizational controls displayed a strong positive correlation with the rate of annual employee turnover. The results thus indicate a focus on multiple metrics of performance as indicators of the effectiveness of strategic leadership. These findings thus validate the focus on the BSC as a standardized approach to assessment of performance. The link between strategic leadership further implies that variations in strategic leadership between firms should present different outcomes in performance.

This is because leaders play the role of orchestrating the resources of the firm to achieve maximum benefit to stakeholders (Nthini, 2013). The study did not address the disparities in leadership by organization as a potential determinant of outcomes. The current study aims to address this gap. Furthermore, the study employed the used of questionnaires to collect data but applied Pearson's correlation to assess relationships. The methodology is found wanting as the non-parametric Spearman's rank correlation would have been better fitting for the nature of the data. A correlation analysis further appears limiting hence a regression model would have been more telling in the quest to assess the interrelationship of the variables. These concerns will be addressed in the current study.

Both studies offer valuable insights into the dynamics of strategic changes and leadership on organizational performance, yet they also exhibit methodological and scope limitations. Ridwan et al. (2013) contribute to understanding the impact of strategic tools like the corporate scorecard, but the study's focus on a single organizational change event may not capture the broader spectrum of strategic adaptation processes. Additionally, the reliance on pre- and post-implementation performance metrics might not fully account for external variables influencing these outcomes.

Nthini (2013), while pioneering in its exploration of strategic leadership's effects, is constrained by its methodological choice. The application of Pearson's correlation analysis, though informative, limits the depth of insights into the causal relationships between leadership strategies and performance outcomes. Furthermore, the study's omission of leadership diversity as a performance determinant points to a significant research gap, suggesting the need for a more granular investigation into how variations in leadership styles and practices across organizations influence performance metrics.

The current study seeks to bridge these gaps by employing a holistic approach to examine the effects of strategic changes and leadership diversity on organizational performance. It aims to extend the empirical discourse by not only scrutinizing the direct outcomes of strategic interventions but also exploring the underlying mechanisms through which leadership variations contribute to differential

performance trajectories. Employing a mixed-methods design, this research will leverage both regression models and Spearman's rank correlation analysis to capture the nuances of strategic leadership's impact, addressing the methodological limitations identified in previous studies.

The systems applied by firms are varied and numerous. They nevertheless need to be aligned in order to achieve a common push towards the attainment of a company's goals and objectives (Peters & Waterman, 2011). The systems of an organization create a path followed to the end of achievement of the dictates of an employee's goals and objectives. Workflows are therefore effected through and significantly affected by the systems of a company with more streamlined systems allowing for effective work processes (Peters & Waterman, 2011).

Farrell and Goodman (2013) in an assessment of the role of government in an economy note governments have a mandate to play systems integrator role; the role involves viewing the sector from a high-level and orchestrating the communal working of stakeholders to ensure the most efficacious gains for all involved. Thus, it is unexpected that government-operated state enterprises are considered to be among the least efficient, as observed by Wanjira and Ngari (2019). Utilizing a descriptive research approach with data collected from 174 participants from KeNHA, Wanjira and Ngari (2018) analyzed the effects of project monitoring, management support, the project team's competencies, and the adequacy of project funding. The study's outcome variable, the performance of road projects, was evaluated using three key metrics: adherence to budgetary constraints, timeliness of project completion, and the overall quality of the constructed roads. Findings revealed that all four factors were valid indicators of performance funding proving the most impactful. This therefore indicates that inclusion of management systems affecting the four areas would be useful in achieving market improvement in road construction outcomes. The current study employs this knowledge in the construction of questions focusing on the use of systems in the four seminal areas pointed out by Wanjira and Ngari (2019).

Testa et al., (2011) note that such systems as environmental management systems (EMS) count among the soft instruments of firm performance. This categorization of systems goes contrary to that put forth in McKinsey's 7s framework as the latter

considers systems among the hard factors that shape the fortunes of organizations. This categorization is of importance to the current study as it points to a difference in conceptualization of similar factors by different authors. McKinsey's framework is based on the idea that all factors, among the seven, are equally important to the performance of the organization with the sole point of focus being the alignment of the elements in keeping with the objectives of the firm (Peters & Waterman, 2011). Testa's (2011) alternative placement of systems as soft aspects of performance therefore negates this idea as unlike Peters and Waterman (2011) the categorization as 'soft' connotes secondary impact to such other factors as regulation. The finding is of importance to the current study as it justifies the need to assess the relative impact of the identified factors deemed influential to the performance of state-owned corporations in the construction industry.

The structure of an organization dictates the manner through which resources are managed and distributed (Peters & Waterman, 2011). Structure entails a clear chain of command that prevents confusion and chaos in the organizational setting (Peters & Waterman, 2011). Musacchio et al., (2015) in an assessment of the multiplicity of state ownership of firms notes the typical distinctions between state-owned and private firms no longer exists. This is because government involvement in firms has evolved to include partial ownership and solely funding arrangements. Musacchio et al (2015) therefore propose a four-pronged approach to categorization of state corporations by structure – wholly owned, state as majority investor, state as minority investor, and state as supporter of specific sector. The performance of the variously structured entities is shown to differ with a part of the difference attributed to differences in managerial approaches. As an example, publicly listed enterprises with government ownership are required to have professional management and government protocols in place and these have an impact on performance outcomes of the firms. This finding is in keeping with that put forth by Ridwan et al (2013) who notes the impact of implementation of balanced scorecard approaches. The need to assess the importance of structuring as a determinant of performance is taken into account in the current study.

Zhao (2010) highlights a trend of increasing diversification in Chinese firms and seeks to understand the impact of structure of the firms on the outcome of diversification.

Diversification is posited to bear positive results in the market given the proven inconsistencies in the Chinese market. The argument is that overreliance on singular products and services may result in a loss of competitive advantage on account of unpredictable inconsistencies that my serve as a tripping wire for companies that choose not to diversify their offerings. Zhao (2010) further posits that the bulk of studies conducted in the area of business prowess focusses on external factors hence necessitating an inward-looking eye to decipher what about companies allows for out-competition of others.

This concern is addressed in the current study as McKinsey's 7s model is used to focus on the internal distinguishing characteristics of firms as determinants of performance. Zhao (2010) further reveal that companies structured in such a manner as to allow majority government ownership typically were more diversified than those that did not have a similar orientation. This observation goes contrary to that put forth by Nthini (2013) in an assessment of state owned corporations in Kenya. State owned firms in Kenya present as static and ill-suited to change. This contextual difference therefore offers a gap in research allowing for conducting of a study on the impact of structure on performance of state-owned corporations in the Kenyan context.

2.4.2 McKinsey's soft factors and performance outcomes of Corporations

McKinsey's soft factors refer to style, staff and skills, shared values (Peters and Waterman, 2011). Style refers to the management approach used to lead the organization and influence employee performance and motivation. Staff focuses on the talent of the organization, their constitution, and their motivation to achieve the dictates of their roles (Peters and Waterman, 2011). Skills refer to the technical ability of employees to perform their jobs (Peters and Waterman, 2011). Finally, shared values refer to the core codes that guide the organization (Peters and Waterman, 2011). The entails of the soft factors are elaborated upon through extant literature.

In the exploration of organizational performance, the interplay between the Balanced Scorecard and McKinsey's 7s model reveals a nuanced understanding of how leadership style and organizational culture are pivotal in driving performance metrics.

Kaplan (2005) emphasizes that within the framework of the Balanced Scorecard, particularly under the learning and growth perspective, the emphasis on organizational capital becomes critical. This aspect intersects with the 'style' component of the McKinsey's 7s model, which pertains to the behaviors and actions of leaders within an organization (Kaplan & Norton, 2004; Peters & Waterman, 2011).

Kaplan (2005) notes that leadership style, as encapsulated in the McKinsey model, is not just about what leaders do but also how they do it. This behavior sets a precedent and communicates to employees the values and priorities of the organization (Kaplan, 2005; Peters & Waterman, 2011). Furthermore, the concept of 'style' is intrinsically linked to organizational culture, which Kaplan (2005) describes as encompassing the dominant values, beliefs, norms, and both conscious and unconscious symbolic acts that shape interactions within an organization.

The synthesis of these two models is particularly evident when considering the organizational capital component of the Balanced Scorecard. This aspect requires a deep dive into both the prevailing culture and the leadership style that should be adopted by the organization (Kaplan & Norton, 2004; Peters & Waterman, 2011). It is this intersection that justifies the simultaneous application of both the Balanced Scorecard and McKinsey's 7s model in assessing organizational performance, especially in the context of this study which focuses on government-owned entities in Kenya's public construction industry.

Recent scholarship underscores the pivotal role of state-owned enterprises (SOEs) in national economies, particularly in China, where SOEs have been integral to the country's economic triumphs over the last four decades. Despite criticisms of operational inefficiency, the strategic evolution of SOEs, emphasizing sustainability and efficiency, marks a significant shift in their performance paradigms. This transition is particularly evident in the integration of environmental management accounting (EMA) and energy efficiency practices, reflecting a broader commitment to sustainable development and accountability.

The study by Rahman et al. (2024) provides a compelling case for the adoption of EMA within SOEs, demonstrating how such practices can lead to significant

improvements in energy efficiency, accountability, and overall performance. By embedding environmental considerations into financial and operational decision-making processes, SOEs can navigate the dual challenges of achieving economic objectives while fulfilling social and environmental responsibilities. The findings suggest that EMA and energy efficiency are not merely operational strategies but are indicative of shared values that prioritize sustainability and transparency within the public sector.

Furthermore, the review of SOEs in China by Lin (2020) highlights the evolution of these entities over 40 years, suggesting that the incorporation of sustainability practices, such as EMA, could further enhance their efficiency and public perception. By aligning operational strategies with shared values of environmental stewardship and accountability, Chinese SOEs can continue to play a crucial role in the nation's economic success while leading in sustainable development.

The convergence of economic performance and environmental sustainability in SOEs represents a transformative approach to public sector management. As such, future research should focus on exploring the mechanisms through which EMA and energy efficiency practices can be more widely adopted among SOEs, assessing their impact on financial performance, and exploring the role of strategic leadership in fostering a culture of sustainability and accountability. The integration of environmental management accounting and energy efficiency into the performance strategies of state-owned enterprises signifies a critical shift towards more sustainable and accountable operations. This evolution reflects a broader recognition of the importance of shared values in shaping organizational practices and outcomes, setting a precedent for the global public sector.

The evolving landscape of state-owned enterprises (SOEs) underscores the transformative role of leadership style in steering organizational performance through periods of change and crisis. The study by Jurkonis et al. (2016) highlights the pivotal role of corporate governance reforms in enhancing the management effectiveness of SOEs in Lithuania. These reforms, grounded in principles of transparency, accountability, and strategic alignment, underscore the critical influence of leadership in navigating organizational transformations. The findings illuminate the necessity for

SOEs to adapt their leadership approaches in response to governance reforms, emphasizing the correlation between strategic leadership and organizational outcomes.

Concurrently, the research by Obrenovic et al. (2020) presents an "Enterprise Effectiveness and Sustainability Model" during the COVID-19 pandemic, emphasizing the importance of distributed leadership, digitalization, and strategic adaptability in sustaining enterprise operations. This model suggests that leadership styles that foster resilience, agility, and a culture of innovation are crucial in overcoming the challenges posed by crises. The integration of digital technologies and a focus on supply chain resilience further illustrate the dynamic role of leadership in maintaining productivity and sustainability amid disruptions.

These studies collectively argue for a leadership paradigm that is adaptive, forward-looking, and responsive to both internal reforms and external crises. The Lithuanian experience with corporate governance reform and the global response to the COVID-19 pandemic reveal a common thread: the effectiveness of leadership styles that are participative, transparent, and strategically oriented towards sustainability and resilience. Such leadership approaches not only drive performance improvements but also prepare SOEs to effectively respond to unforeseen challenges, ensuring their long-term viability and success.

In synthesizing these insights, it becomes apparent that the leadership style within SOEs plays a fundamental role in navigating the complexities of reform and crisis. The shift towards more distributed and adaptive leadership models, underscored by a commitment to digitalization and strategic foresight, emerges as a key determinant of organizational resilience and performance. Future research should further explore the mechanisms through which leadership styles can be optimized to meet the dual demands of reform adaptation and crisis management, providing a roadmap for SOEs aiming to enhance their governance, operational effectiveness, and sustainability.

The internationalization strategies and performance of state-owned enterprises (SOEs) are significantly influenced by the institutional frameworks of their home countries, as well as the internal dynamics of these hybrid organizations. The study by Estrin, S., et al. (2016) underscores the pivotal role of home country institutions in shaping the

internationalization behaviors of SOEs, suggesting that robust and well-defined regulatory, normative, and cognitive institutions can foster more aggressive and profit-oriented international strategies by SOEs. This indicates that staff within SOEs, operating under strong institutional frameworks, are likely to be more strategically aligned and effective in executing international ventures.

Concurrently, the conceptual analysis by Bruton et al. (2015) of SOEs as hybrid organizations sheds light on the unique internal environment within which SOE staff operate. These organizations blend characteristics of both public and private entities, navigating a complex landscape of state and market-driven imperatives. This hybrid nature necessitates a diverse set of skills and orientations from SOE staff, who must balance the often conflicting demands of state ownership with market competitiveness and efficiency.

The interaction between external institutional pressures and internal organizational dynamics suggests that staff influence on SOE performance extends beyond traditional measures. Employees in SOEs are at the nexus of translating external institutional mandates into actionable strategies and operational efficiencies within the hybrid organizational context. Their ability to do so effectively is contingent upon the clarity of the institutional framework, the strategic alignment with these mandates, and the organizational capacity to integrate and balance the dual logics of state and market imperatives.

This synthesis of insights from cross-country analysis and hybrid organizational theory points to a nuanced understanding of staff influence on SOE performance. It highlights the importance of considering both the external institutional environment and the internal organizational form in assessing and enhancing the strategic and operational effectiveness of SOE staff. Future research should delve deeper into how the interplay between these factors shapes the capabilities, behaviors, and performance outcomes of SOE personnel across different contexts and sectors.

The dynamic interplay between state ownership and innovation presents a nuanced view of how organizational skills, particularly in the realm of research and development (R&D), influence firm performance. Zhou et al. (2017) highlight that

while state ownership provides crucial R&D resources, it often leads to inefficiencies in utilizing these resources for innovation. This suggests a critical role for specific managerial and technical skills in bridging the gap between resource availability and innovative output. The optimal structure of minority state ownership, as identified in the study, points towards the need for a balanced skill set that leverages state resources while maintaining operational efficiency and agility in innovation processes.

Furthermore, the study by Terjesen et al. (2016) sheds light on the importance of diversity in skills and perspectives at the board level, demonstrating that firms with gender-diversified boards exhibit higher performance. This underscores the value of inclusive leadership skills that harness diverse viewpoints for strategic decision-making and problem-solving. The presence of female directors, in particular, enhances board effectiveness by bringing fresh perspectives that challenge informational biases and contribute to more ethical and collaborative governance practices.

Integrating these insights, it becomes evident that skills—ranging from technical expertise in R&D to inclusive leadership and strategic foresight—are pivotal in navigating the complexities of state ownership and board diversity. The capacity to effectively mobilize resources for innovation, coupled with the ability to leverage diverse perspectives for governance and strategy, emerges as a key determinant of organizational performance. This calls for targeted skill development and management practices that foster innovation, diversity, and strategic alignment across all levels of the organization.

The staff and the skills that they bring to an organization present as the most valuable asset (Wong et al, 2021). The vicissitudes typifying modern industries and the fast pace of development of new technologies render reliance on internal resources – other than talent – a tenuous venture. The employees of the firm are at the heartbeat of its efforts and particularly, in assessing the matter from the innovation perspective of the balanced scorecard, employees present as the sole creators of future values. Ensuring that staff are well catered to and motivated is thus central to the prowess of any business, regardless of its positioning in an industry. Wong et al (2021) in their descriptive study of the importance of staff point to the Covid 19 pandemic as testament to the fact – 42% of operating theaters in the United Kingdom were closed on account of a shortage in staff. This observation is of importance to the current study

as it justifies focus on staff and their contribution to construction firms as an important determinant of firm performance under the BSC.

2.5 Summary of Research Gaps

This segment builds upon the empirical evidence presented in the literature review and seeks to identify and outline the lacunae that the present study intends to fill. Table 2.1 offers a synthesized view of the existing literature, while Table 2.2 delineates the specific research voids pertinent to this study, which in turn shape the problem statement. These identified gaps, upon being addressed by the forthcoming research, are anticipated to enrich the academic discourse and provide actionable insights for industry practitioners. The section contributes to framing the problem statement that underpins this study.

Table 2.1 Summary of notable literature

Author	Study Area/Scope	Methodology Used	Key Findings
Peters & Waterman (2011)	McKinsey's 7s Framework	Theoretical Analysis	Emphasizes coordination in organizational effectiveness.
Yusuf Sukman (2017)	Effectiveness of Tanzania Revenue Authority	Empirical Assessment	Validates McKinsey's model for government agency functioning.
Harper (2011)	Critique of McKinsey's Framework	Theoretical Critique	Questions the structural-functionalist basis of McKinsey's model.
Kaplan (1992)	Balanced Scorecard Development	Theoretical Development	Introduces multidimensional performance assessment.
Johnson et al. (2007)	Government Enterprises Performance	Theoretical Analysis	Highlights the unique focus of government enterprises on service provision.

Ridwan et al. (2013)	Australia Port Authority Performance	Descriptive Study	Links strategic change to improved performance.
Nthini (2013)	Strategic Leadership in Kenyan State Corporations	Quantitative Study	Finds a positive correlation between strategic leadership and performance.
Farrell & Goodman (2013)	Role of Government in Economy	Theoretical Analysis	Discusses the government's role as a systems integrator.
Wanjira & Ngari (2019)	Performance of KenHA	Descriptive Study	Identifies project funding as a key performance factor.
Testa et al. (2011)	Environmental Management Systems	Theoretical Analysis	Positions EMS as a soft factor contrary to McKinsey's classification.
Musacchio et al. (2015)	State Ownership of Firms	Empirical Assessment	Discusses the varied structures of state-owned firms.
Zhao (2010)	Diversification in Chinese Firms	Empirical Assessment	Studies the impact of firm structure on market diversification.
Wong et al. (2021)	Importance of Staff in Organizations	Descriptive Study	Underscores the critical role of staff in organizational success.

Table 2.2 Summary of knowledge gaps
Source: Researcher (2022)

Type of gap	**Gap**	**Source**	**Contribution of study**
Methodological gap	Mismatches in data analysis assessing interrelationship between variables of interest.	(Nthini, 2013)	Matching of data types with appropriate research methodology to address the link between strategy and performance.
Empirical gap	Dearth of findings on the role of policy among state-owned firms	(Nthini, 2013)	Contribution to the empirical discourse on the impact of strategy, and other

			McKinsey elements, on the multifaceted performance of state-owned construction companies.
Conceptual gap	Lack of demarcation of type of state-ownership structure and subsequent evaluation of the implications of the same.	(Musacchio et al., 2015)	Consideration of the structure of government involvement as an independent variable in the study.
Conceptual gap	Difference in diversification outcomes between government run firms in China and Kenya	(Zhao, 2010)	Empirical findings on the implications of structure on innovation through diversification.

2.6 Conceptual framework

The conceptual framework of the study draws for the two theories guiding the study – McKinsey's 7s Framework. The independent variables of the study are McKinsey's hard and soft factors whereas the dependent is the company's performance as assessed through the Balanced Scorecard. Figure 2.1 depicts the relationship between the constructs.

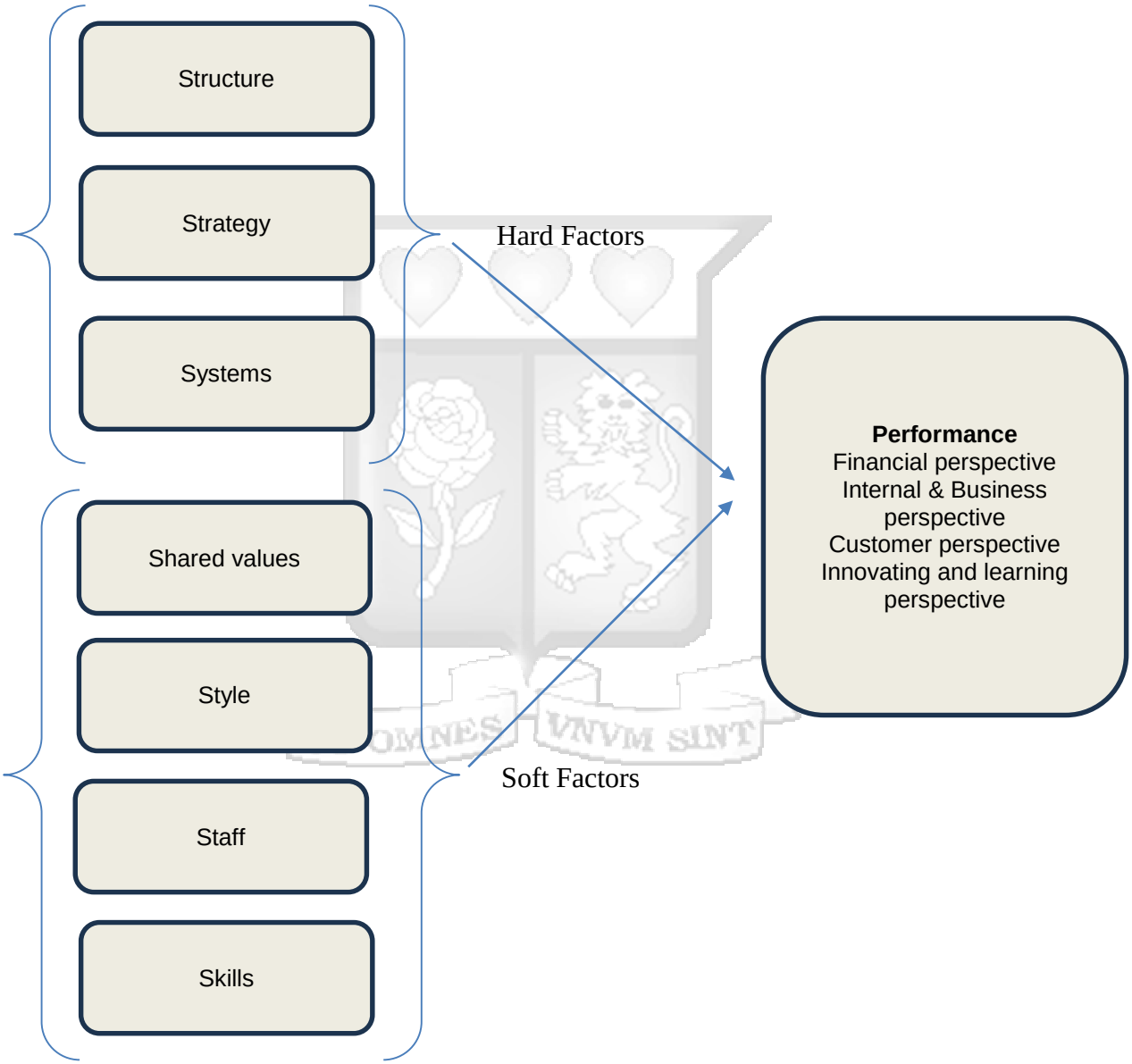

Figure 2.1 Conceptual Framework

Source: Researcher (2022)

2.7 Operationalization of variables

This section focuses on the measurement of the constructs underpinning the current study. Table 2.1 provides a summary of the constructs, measurements, and sourcing.

Table 2.1 Operationalization of variables

Factor	Sub-factors	Measurement	Source
Strategy	- Articulation of the organization's mission, vision, and strategic objectives. Analysis of competitive positioning and market dynamics. Evaluation of strategic initiatives and goals. Measurement of strategic performance indicators (e.g., market share, profitability).	Likert Scale (1-5)	Peters & Waterman (1982)
Structure	- Organizational hierarchy and reporting lines. Division of labor and departmental structures. Decision-making processes and authority levels. Measurement of organizational structure efficiency and effectiveness.	Likert Scale (1-5)	Peters & Waterman (1982)
Systems	- Business processes and workflows. Information systems and technology infrastructure. Performance measurement and management systems. Measurement of process efficiency, technology utilization, and data quality.	Likert Scale (1-5)	Peters & Waterman (1982)
Style	- Leadership styles and behaviors. Communication and interaction patterns. Decision-making and problem-solving approaches.	Likert Scale (1-5)	Peters & Waterman (1982)

	Measurement of leadership effectiveness and employee perception surveys.		
Skills	- Employee competencies and capabilities. Training and development programs. Recruitment and selection processes. Measurement of individual and team skills through assessments and performance reviews.	Likert Scale (1-5)	Peters & Waterman (1982)
Staff	- Workforce demographics (e.g., size, composition, diversity). Employee engagement and satisfaction levels. Workforce planning and talent management processes. Measurement of employee turnover rates and retention strategies.	Likert Scale (1-5)	Peters & Waterman (1982)
Shared Values	- Core beliefs, principles, and cultural norms. Organizational values and ethical standards. Alignment of individual and organizational values. Measurement of cultural alignment through employee surveys and cultural assessments.	Likert Scale (1-5)	Peters & Waterman (1982)

2.8 Chapter summary

Chapter 2 delves into the theoretical and empirical underpinnings relevant to the study. It discusses McKinsey's 7S Framework and the Balanced Scorecard as foundational theories for evaluating organizational performance. The chapter reviews existing literature on the impact of strategic leadership, environmental management accounting, and staff skills on SOE performance. It identifies gaps in the current understanding of how these factors influence efficiency and innovation in Kenya's public construction sector.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

The purpose of this chapter is to describe how the research was conducted. The chapter is therefore demarcated into seven main topics – research philosophy, research design, population and sampling, data collection methods, data analysis approaches, research quality and ethical consideration.

3.2 Research philosophy

Žukauskas et al (2018) details four main types of research philosophy - positivist research philosophy, interpretivist research philosophy, pragmatist research philosophy, and realistic research philosophy. Positivist research is based on the idea that the world can be understood objectively, and the researcher is depicted as an independent observer. Interpretivist research philosophy emphasizes the subjectivity of phenomena and the interdependence between the observer and the observed. Pragmatic philosophy emphasizes practical choice in the selection of research direction with the priority being matching the research problem with the research approach (Žukauskas et al, 2018).

Finally, realistic research philosophy aims to capture objective realities by considering the subjectivity of both phenomena and the researcher (Žukauskas, 2018). The current study adopts a positivist research phenomenon arguing that the variables under study can be objectively understood and that the researcher, by employing the use of empirically substantiated models, remains independent from the observations and findings of the research process. The use of statistical tools is further employed to minimize the subjectivity of the analysis and inferencing process.

3.3 Research design

Saunders et al (2007) posit that there are three main research designs – exploratory, descriptive and causal. Exploratory research design focuses on phenomena that isn't well understood; the approach therefore seeks to lay the groundwork of insights on the phenomena at hand. Descriptive research design focuses on summary information

offering insights on constructs. This information may be presented in way of averages and trends. Finally, causal design allows for the inferencing of association between variables of interest (Saunders et al, 2007). The current study adopts a descriptive-correlational design. This is because the study aims to provide descriptive information on the variables under study while also inferring the interrelationship between the variables as guided by the research objectives.

3.4 Population and sampling

There are multiple entities charged with the role of public development in Kenya. The current study focuse on five organizations - Kenya Electricity Transmission Company Limited (KETRACO), Kenya National Highways Authority (KENHA), Kenya Urban Roads Authority (KURA) and National Water Storage and Harvesting Authority (NWSHA), Kenya Rural Roads Authority (KeRRA) – with the rationale being their high budgetary allocation. KETRACO received KES 1,320 million from external sources and KES 6,816 million from the government (exchequer) for project funding during the fiscal year (KETRACO, 2021). KENHA had the largest budgetary allocation of recent years, with a total of $212 million earmarked for road improvements. This substantial funding reflects the authority's extensive mandate to oversee the development, rehabilitation, and maintenance of national highways in Kenya (The Exchange Africa, 2023). KURA was allocated $77 million, which is designated for the enhancement and maintenance of urban road networks. This allocation underscores the importance of maintaining robust and efficient urban transportation infrastructure to support economic activities in cities (The Exchange Africa, 2023). KeRRA will receive $165 million, a budget aimed at improving the rural road infrastructure. The allocation is vital for rural development, facilitating access to markets, services, and enhancing connectivity in less urbanized regions (The Exchange Africa, 2023). Lastly, NWSHA's financial performance review indicates an increase in the deficit by 36%, from KES 145.37 million to KES 198.02 million, despite revenues growing from KES 514.71 million to KES 703.06 million. Expenditure also rose by 36.51%, from KES 660 million to KES 901.08 million (Auditor General of Kenya, 2022).

The organizations are estimated to have a total of 2199 employees – 690, 557, 250, 202 and 500 respectively (KETRACO, 2022; KeNHA, 2022; KURA, 2022; Parliament of Kenya, 2022). The 2199 employees thus form the population of the study. A sample size is therefore calculated from the same as follows:

$$z\text{^}2 * p(1-p)/\ (1 +\ ((z\text{^}2 * p(1-p)/e\text{^}2\ N))$$

Where z is the z-value, p (0.5), is the proportion of with assessed factor, e (0.05) is the error term and N is the population size.

The computed figure thus result in the following calculation when the figures are substituted into the numerator and denominator equations. The following section details the calculation steps to arrive at the sample size from the population of 2,199 employees and the allocation of respondents proportionally based on the size of each organization.

Calculation of Sample Size

1. Population Size (N): 2,199
2. Proportion (p): 0.5 (assuming 50% proportion for maximum sample size)
3. Margin of Error (e): 0.05
4. Z-value (z): 1.96 (for a 95% confidence level)

The formula to calculate the sample size is:
Sample Size = (z^2 * p(1-p)) / e^2
Since we have a finite population, we use the finite population correction formula:
Corrected Sample Size = (Sample Size) / (1 + ((Sample Size - 1) / N))

Calculation of the initial sample size without population correction:
Initial Sample Size = (1.96^2 * 0.5 * (1-0.5)) / 0.05^2
Initial Sample Size = (3.8416 * 0.25) / 0.0025
Initial Sample Size = 0.9604 / 0.0025
Initial Sample Size = 384.16

Application of the finite population correction:
Corrected Sample Size = 384.16 / (1 + (384.16 / 2199))

Corrected Sample Size = 384.16 / 1.1747

Corrected Sample Size = 327.09

Rounding to the nearest whole number

Corrected Sample Size ≈ 327

Allocation of Respondents per Organization

Given the corrected sample size of 327, we can now allocate the respondents proportionally based on the size of each organization:

KETRACO (690 employees): 103

KeNHA (557 employees): 83

KURA (250 employees): 37

NWSHA (202 employees): 30

KeRRA (500 employees): 74

A random stratified approach will be used to arrive at the respondents for the study. The stratification will be on the basis of proportion per organization. A random number generator will then be used to select the actual respondents from the company's employee lists. Table 3.1 provides an allocation of respondents per organization.

Table 3.1 Respondents per organization

Organization	**Number**
KERRA	74
KETRACO	103
KeNHA	83
KURA	37
NWSHA	30

3.5 Data Collection methods

The design of the study – descriptive correlational – necessitates consideration of data that allows for both accurate and summative description and evaluation of relationships between constructs. Two types of data are described by Saunders et al (2007) – qualitative and quantitative. The first is generally unstructured whereas the second is mostly structured taking on a numerical form. The current study will thus

utilize quantitative data with the data collected through the use of structured questionnaires. Structured questionnaires, as noted by Phellas et al (2011) require low cognitive exertion from the respondent and offer standardized responses that can be analyzed through statistical tools.

All questions populating the questionnaires will derive from the literature elucidated upon in the foregoing chapter. Research agents will be recruited for the purpose of dissemination of the structured questionnaires. These will be charged with the role of ensuring that data is collected from the appropriate persons and in a timely fashion to allow for completion of the study without wastage of time.

3.6 Data Analysis

All data collected through questionnaire will be transcribed onto an electronic spreadsheet. It will then be assessed for accuracy and consistency after which descriptive analysis will be performed through the use appropriate measures of central tendency and graphical representation. To assess the interrelationship between the variables, both regression analysis and Spearman's rank correlation will be employed. Spearman's rank correlation is particularly suitable for this study as it measures the strength and direction of association between two ranked variables, providing insights into the monotonic relationships within the data. Regression analysis was then be performed to assess the interrelationship between the variables. The data collected will be ordinal in nature hence an ordinal logistic analysis approach will be effected. The details of the equation applied are indicated below:

$$\log(P(Y\leq j)/(1-P(Y\leq j))) = \alpha j-(\beta 1x1+\beta 2x2),\ j=1,\ldots,J-1$$

Where:

J - number of levels in the categorical response variable

j - one of the ordered categories the response variable

P - number of explanatory variables

Y – outcome of interest

A – Intercept coefficient

$\beta 1$ – hard Factors coefficient

$\beta 2$ – Soft factor coefficient

$x1$ – first factor

$x2$ – second factor

3.7 Research Quality

Research quality is assessed through two main parameters – validity and reliability. Validity refers to how close data or findings are to the actual data and findings (Thanasegaran, 2009) whereas reliability speaks to how replicable data or findings are (Thanasegaran, 2009). The current study addressed issues of internal and external validity.

3.7.1 Validity

The research will employ at pilot test to ensure that the study questions are understood to measure what they are intended to measure (Saunders, 2007). The questions derive from literature thus limiting the influence of subjective choice of constructs hence improving the validity of the collection instruments. Questions that aren't well understood will be rephrased and reissued, added to the questionnaire only once confirmed to be well understood.

External validity speaks to the generalizability of findings across the population of study (Sanders et al, 2009). The current study employed a statistical method to arrive at the study sample and the data was collected through a random approach employed by selection of respondents from the list of managers in the organization of interest. Furthermore, the data was analyzed through standard statistical approaches to minimize the chance of arriving at unjustifiable inferences from the data.

3.7.2 Reliability

Reliability is an assessment of the replicability of study findings through application of similar study methodology (Saunders et al, 2007). Cronbach's alpha will be computed for each of the scales used for the study. A cut-off value of 0.7 was used to assess the reliability of each scale as this is prescribed as an optimal indicator of the same; all scales were found reliable as they met the threshold with values above the prescribed (Saunders, et al, 2007). Data for computation of the reliability of scales will be sourced from the pilot study and relevant alterations to the content will be made to meet the threshold value.

3.8 Ethical Considerations

To ensure confidentiality, anonymity, informed consent, and ethical clearance, the research tool shall be handed into the ethics board of Strathmore university prior to utilization in data collection. All study respondents will be anonymized to ensure their responses cannot be tracked back to them. Informed consent will be highlighted with respondents allowed to desist from participation even after beginning the process. Data will only be accessible to the researcher, research assistants and supervisors and will only be used for the purpose of the current study. Research assistants will be directed to, as part of the consent seeking procedure, to inform respondents that they can be apprised of findings from the study. To achieve the same, respondents will collect contact information of the willing participants and will similarly provide their details. Interim results will be provided by the researcher upon inquiry with final results disseminated to respondents who opted into the finding reporting list.

3.9 Chapter summary

The methodology chapter outlines the research design, data collection, and analysis techniques employed to investigate the study's objectives. It describes a mixed-methods approach, integrating quantitative and qualitative data to provide a comprehensive understanding of the internal factors affecting SOE performance. This chapter also details the selection of study participants, the development of research instruments, and the ethical considerations adhered to throughout the research process.

CHAPTER FOUR
ANALYSIS AND PRESENTATION OF FINDINGS

4.1 Introduction

The purpose of this chapter is to report on the outcomes presented from analysis of the data in keeping with the study objectives. The chapter thus begins with reporting on the response rate, detailing descriptive findings and subsequent reporting on analysis outcomes for each of the three objectives through descriptive and inferential statistics as applicable.

4.2 Response rate

A total of 264 responses were garnered. In assessing the response rate and distribution of participants in the current study, a total of 264 respondents were garnered from a targeted sample size of 327. This achievement translates to a response rate of approximately 80.7%, which, according to Baruch and Holtom (2008), falls within the acceptable range for organizational research, where securing participation can often present challenges. Baruch and Holtom (2008) suggest that while response rates can vary significantly across studies, a rate of 60% or above is generally deemed satisfactory for research in organizational settings, making the obtained rate of 80.7% notably commendable. This level of participation indicates a robust engagement from the targeted demographic, providing a solid foundation for subsequent data analysis and inference.

4.3 Biodemographic information

The composition and distribution of respondents across various organizations and positional ranks within this study contextualize the nature of the collected data. As indicated in table 4.1, the allocation across the five organizations under study was as follows: KERRA (29.2%), KETRACO (24.6%), KURA (16.3%), KeNHA (26.1%), and NWSHA (3.8%). This distribution showcases a varying degree of participation among the organizations, with KERRA representing the highest fraction of the respondent pool, whereas NWSHA accounts for the smallest share. Such variance in participation rates across organizations may reflect differing levels of accessibility or engagement with the study, underscoring the necessity to interpret the findings within the nuanced context of each organization's unique characteristics and operational

environment. The study however focused on the aggregated relationship of variables across the organizations hence at this macro-level, with the unit of study being the government agency employ, the organization representation was deemed reasonably sufficient and fit for purpose.

Regarding the respondents' positions within their organizations, the majority were frontline employees (75.8%), followed by junior management (23.9%), and minimally represented by top management (0.4%). This distribution indicates that the study's insights are predominantly grounded in the experiences and perceptions of frontline personnel, offering a granular view of operational realities and their interaction with McKinsey's indicators of performance. However, the scant participation from the top management cadre suggests a limitation in capturing the strategic nuances and decision-making processes from a higher organizational echelon. This gap highlights the necessity for a measured interpretation of how strategic orientations and policies may be perceived or implemented across different organizational levels.

Given the composition of the respondent pool and the achieved response rate, the study stands on a sufficiently robust dataset to explore the impact of McKinsey's indicators on the performance of state-owned corporations in Kenya's public construction industry. The robust engagement from a broad spectrum of employees enriches the study's findings with diverse insights, although the limited input from top management points to an area for further exploration in future research endeavors.

Table 4.1 Biodemographic information

Variable\Statistic	Nbr. of observations	Nbr. of missing values	Nbr. of categories	Mode	Mode frequency	Categories	Frequency per category	Rel. frequency per category (%)
Organization	264	0	5	KERRA	77	KERRA	77	29.2
						KETRACO	65	24.6

						KURA	43	16.3
						KeNHA	69	26.1
						NWSHA	10	3.8
Position In Organization	264	0	3	Front line employee	200	Frontline employee	200	75.8
						Junior Management	63	23.9
						Top Management	1	0.4

4.4 Objective one: Current performance metrics of government-owned state corporations operating in Kenya's public construction industry.

Performance was assessed on account of four metrics – cost to completion ratio, general achievement of set objectives, customer-centered performance, performance of future-oriented objectives. The average overall performance was calculated. The Cost-to-Completion Ratio is a crucial indicator of the financial management competencies within organizations. The median value situated at 4.0 on a 5-point scale denotes that, generally, the state corporations manage to keep their project expenses within or close to the projected budgets (figure 4.1). However, the box plot reveals outliers and a standard deviation of 0.826, suggesting that certain projects significantly exceed budgetary expectations. These deviations could be attributed to a range of factors, including initial underestimation, unforeseen circumstances, or scope creep within projects. This variance signifies a potential area for enhancement in budget planning and risk management processes.

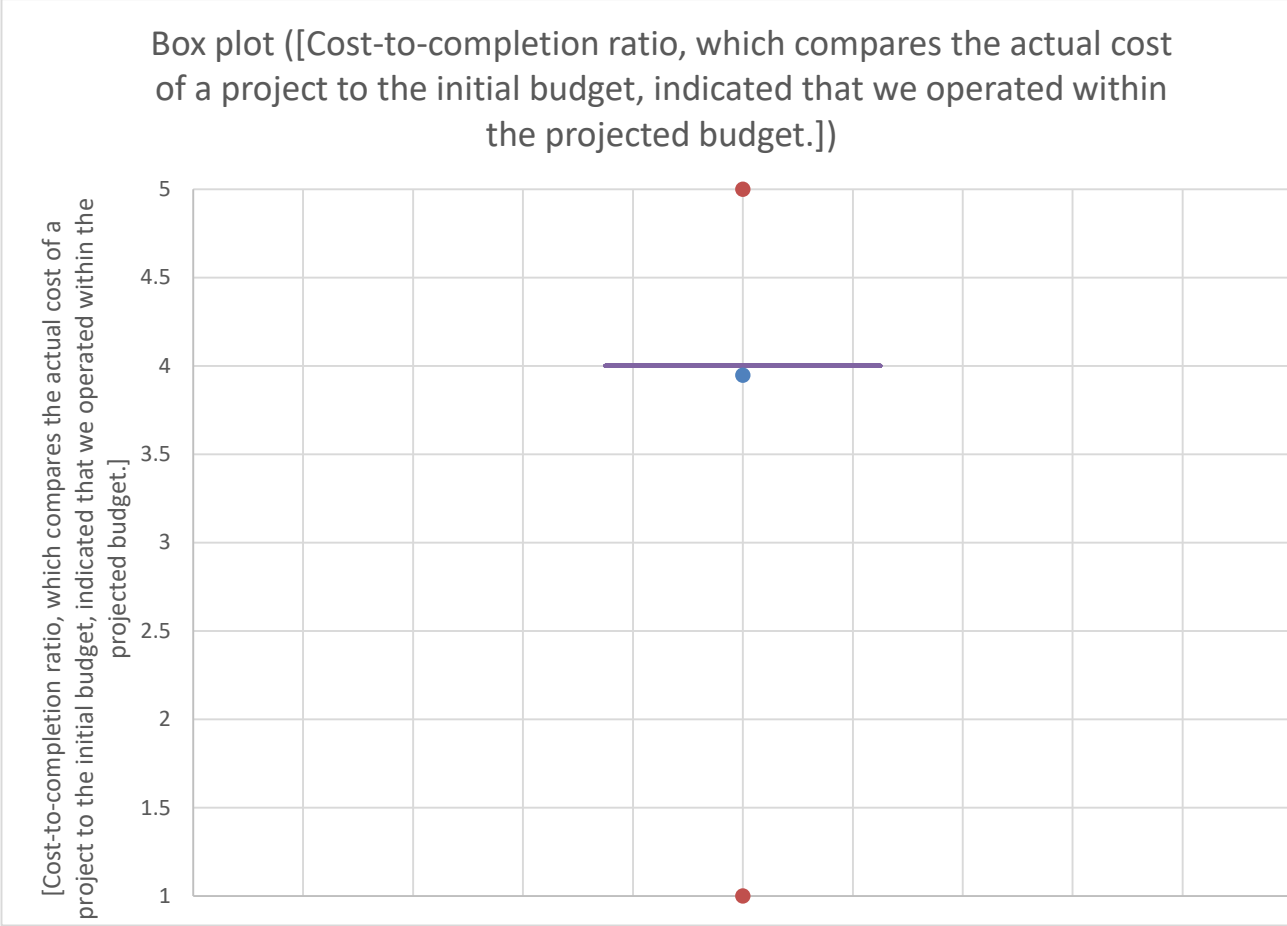

Figure 4.1 Cost-to-completion ratio

The organizations' proficiency in reaching their strategic goals is measured by their General Achievement of Set Objectives. A median of 4.0, coupled with a mean score slightly higher at 4.189, indicates a strong trend toward meeting strategic targets. The lower variance (0.519), as indicated in figure 4.2, compared to the Cost-to-Completion Ratio reflects a narrower spread of data, implying a more consistent achievement of these objectives. According to the corresponding box plot, the data clusters tightly around the median, further reinforcing the organizations' capability to fulfill their planned strategic objectives.

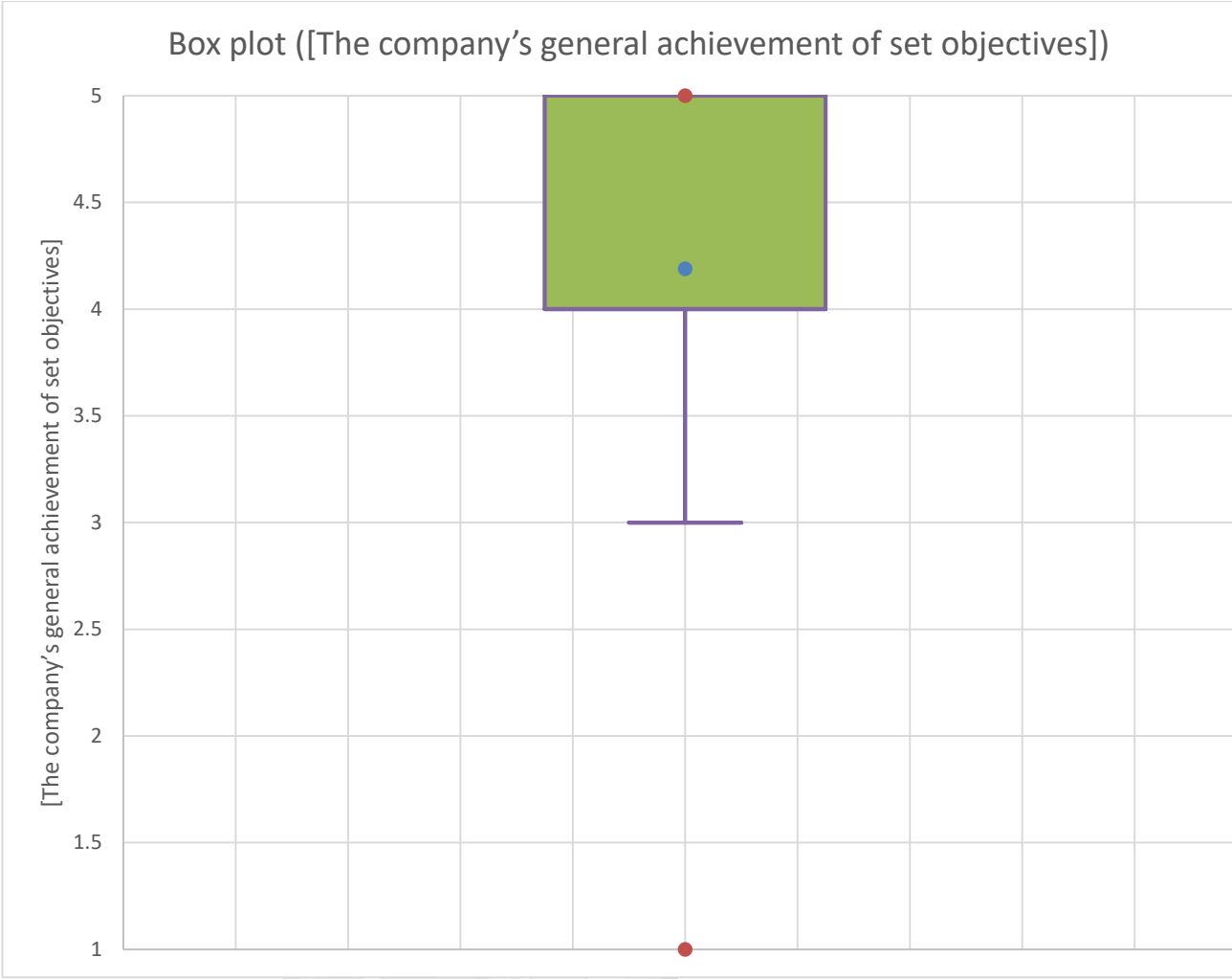

Figure 4.2 General achievement of set objectives

Customer-Centered Performance measures the effectiveness of organizations in delivering services that meet client expectations. With both the median and mean at 4.0 and 4.205 respectively, the organizations demonstrate high levels of customer satisfaction. The box plot, however, exhibits a wider range than the previous indicator, which points to a slightly more variable customer experience. The standard deviation of 0.773 indicates that while overall customer satisfaction is high, there are instances where performance has room for improvement, especially in consistently meeting diverse customer expectations across different projects.

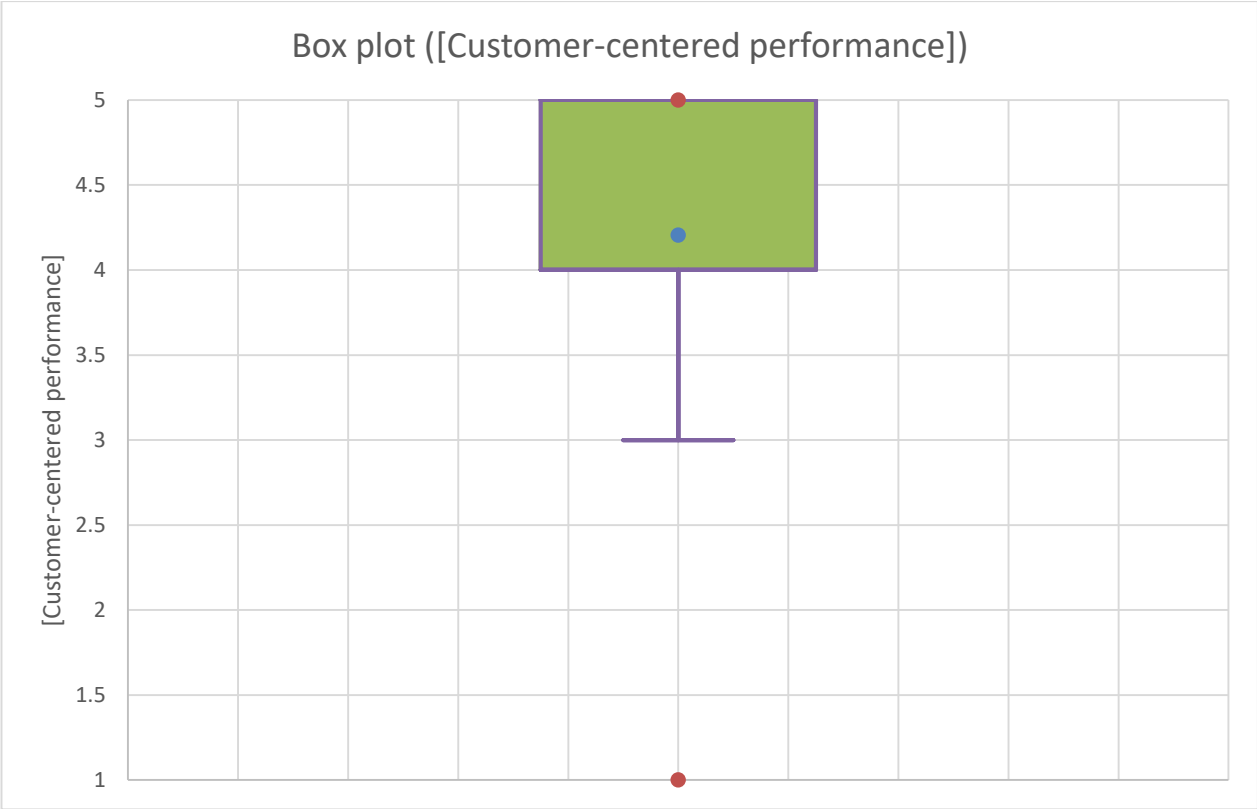

Figure 4.3 Customer-centered performance

The final metric assesses the organizations' foresight and innovation, particularly in initiatives that are expected to bring future value. This indicator has the highest mean (4.314) among all, suggesting a forward-looking approach where the entities are not only focused on present tasks but also on future opportunities and growth. The relatively tight distribution around this high mean, as indicated by the box plot and a variance of 0.536, denotes that these organizations are consistently investing in value-creating initiatives.

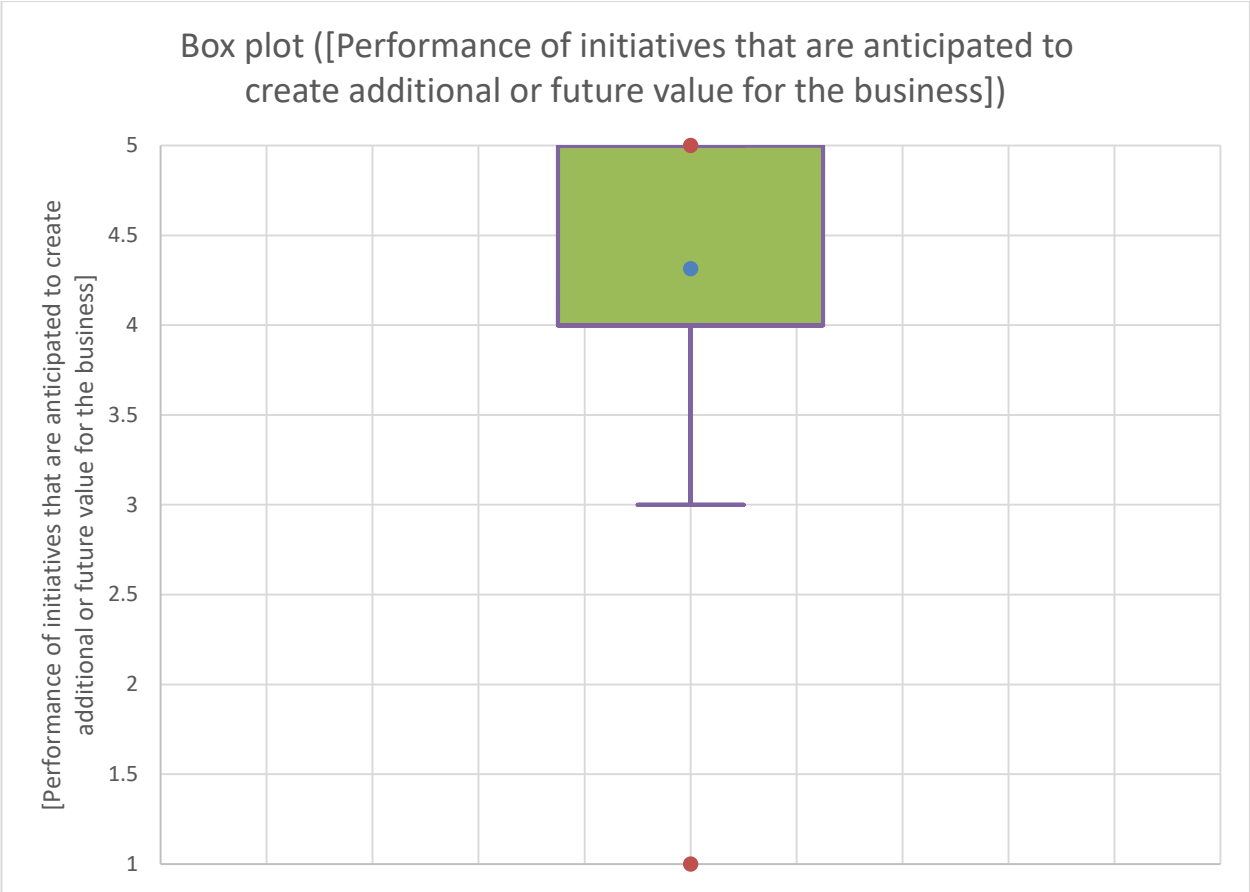

Figure 4.4 Performance of future-oriented initiatives

When considering the overall performance, as indicated in figure 4.5 and table 4.2 the median score is pegged at 4.0 across all indicators, with a mean of 4.195, signaling a positive performance trend across the studied corporations. The variance and standard deviation for the overall performance are the lowest among all the metrics at 0.478 and 0.691, respectively, illustrating that despite the variations in individual metrics, when aggregated, the performance levels demonstrate notable stability and consistency. This suggests that the organizations, while having specific areas of strength and weakness, generally provide a stable and positive performance across diverse operational domains.

Each of these performance metrics provides insight into different facets of the organizations' operations. When analyzed collectively through the lens of a balanced scorecard approach, they reveal that the corporations are effectively balancing the competing demands of financial discipline, strategic objective completion, customer satisfaction, and future-oriented growth. The median score of 4.0, consistent across individual and composite metrics, implies a strong performance culture within these organizations, albeit with room for improvement in managing project costs, as

indicated by the higher variability in the cost-to-completion ratio. These findings provide a composite picture of organizational performance that can inform both strategic improvements and operational refinements within these state-owned corporations in Kenya's public construction sector.

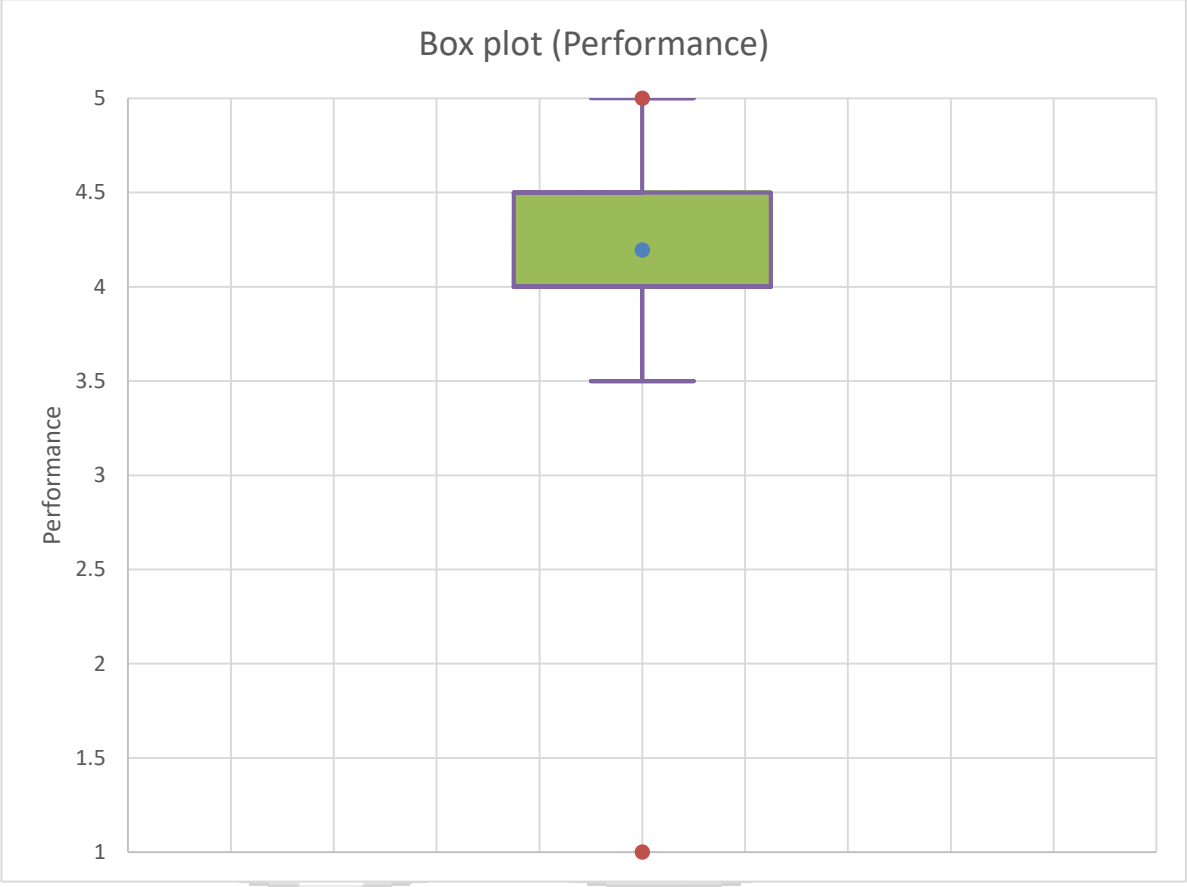

Figure 4.5 Overall performance

Table 4.2 Overall performance

Statistic	[Cost-to-completion ratio, which compares the actual cost of a project to the initial budget, indicated that we operated within the projected budget.]	[The company's general achievement of set objectives]	[Customer-centered performance]	[Performance of initiatives that are anticipated to create additional or future value for the business]	Performance
Nbr. of observations	264	264	264	264	264
Nbr. of missing values	0	0	0	0	0
Median	4.000	4.000	4.000	4.000	4.000
Mean	3.947	4.189	4.205	4.314	4.195
Variance (n-1)	0.682	0.519	0.597	0.536	0.478
Standard deviation (n-1)	0.826	0.721	0.773	0.732	0.691

The correlations table presented in Appendix C provides a comprehensive overview of the relationships between hard factors, soft factors, and performance metrics, as well as detailed correlations with specific aspects of organizational functionality and culture within Kenya's public construction sector state corporations. The analysis reveals significant correlations between hard factors—Strategy, Structure, Systems—and the performance of the state corporations.

The correlation coefficient of .334 ($p < .000$) between hard factors overall and performance suggests that strategic elements play a significant role in shaping organizational outcomes. This is particularly underscored by the strong correlation (.695, $p < .000$) between organizations' strategic planning for competitive advantage and performance metrics, suggesting that a well-suited strategy for the industry context is crucial for optimal functioning. The organizational structure's correlation with performance is denoted by a coefficient of .766 ($p < .000$), indicating that the alignment of departments, teams, and reporting lines significantly impacts the organization's operational efficiency. This suggests that well-organized structural elements are foundational to achieving strategic objectives and enhancing overall performance. The daily activities and processes, reflective of the organizations' systems, have a correlation coefficient of .725 ($p < .000$) with performance. This highlights the critical importance of operational systems in supporting the industry's optimal functioning, suggesting that streamlined and efficient processes contribute significantly to performance outcomes.

The correlations between soft factors—Shared Values, Style, Staff, Skills—and performance underscore the profound impact of organizational culture and human resources on performance metrics. The correlation coefficient of .619 ($p < .000$) between shared values and performance signifies that core values reflected in work ethics play a crucial role in organizational success. This indicates that a strong alignment between an organization's values and its general work practices is essential for optimal performance. Leadership style shows a significant correlation (.758, $p < .000$) with performance, highlighting the impact of leadership on organizational outcomes. This suggests that leadership styles well-suited for the industry's demands are vital for driving performance and achieving strategic goals. The employees' general capabilities (.688, $p < .000$) and the actual skills and competencies (.766, $p < .000$) exhibit strong correlations with performance. These findings emphasize the

critical role of human resources in organizational success, indicating that well-developed staff skills and competencies are integral to ensuring optimal performance in the industry.

4.5 Objective two: Impact of McKinsey's impact of McKinsey's 7S framework hard factors (Strategy, Structure, Systems) on the performance of the identified state corporations

4.5.1 Spearman's rank correlation

As indicated in the analysis approach, two inferential analysis methods were used to assess the relationship between the variables of the study – spearman's correlation analysis and ordinal regression analysis. These two models were employed on account of the ordinal nature of the study as they are fitting as non-parametric assessment alternative to the parametric Pearson's correlation and ordinary least square regression models (Saunders et al., 2012). Findings from the spearman's correlation model as presented in table 4.3.

As indicated in the table 4.3, the correlation coefficient between hard factors and performance is 0.334, which is significant at the 0.01 level ($p < 0.000$). This indicates a moderate positive correlation, suggesting that improvements in hard factors—such as strategy, structure, and systems—are associated with better performance outcomes in the state-owned corporations. Essentially, this implies that when these organizations have well-defined strategies, efficient structures, and robust systems in place, their overall performance tends to improve. This aligns with the first specific research objective, which aimed to investigate the impact of McKinsey's 7S framework hard factors on the performance of the identified state corporations.

The correlation coefficient between soft factors and performance is 0.502, also significant at the 0.01 level ($p < 0.000$). This denotes a strong positive correlation, indicating that the soft factors—such as shared values, style, staff, and skills—play a crucial role in enhancing organizational performance. The strength of this relationship suggests that when organizations cultivate a positive culture, effective leadership styles, motivated and skilled staff, and aligned shared values, their performance significantly benefits. This finding supports the second specific research objective,

which focused on the impact of McKinsey's 7S framework soft factors on the performance of the state corporations.

Interestingly, the analysis also reveals a significant positive correlation between hard factors and soft factors, with a correlation coefficient of 0.283 ($p < 0.000$). This interrelationship suggests that the elements of strategy, structure, and systems are somewhat aligned with and possibly reinforce the elements of shared values, style, staff, and skills. It underscores the interconnected nature of McKinsey's 7S framework, where the hard and soft elements are not isolated but rather work in tandem to influence organizational performance.

The Spearman's rank correlation analysis confirms that both hard and soft factors significantly contribute to the performance of state-owned corporations in Kenya's public construction industry. While hard factors provide the structural and strategic foundation necessary for effective operations, soft factors enhance organizational culture, leadership, and human resources, leading to improved performance outcomes. These findings highlight the importance of a balanced approach in managing both the tangible and intangible elements within organizations to achieve optimal performance.

The study's objectives are therefore well supported by these findings, emphasizing the need for comprehensive strategies that integrate both hard and soft factors to drive performance in state-owned corporations. The moderate to strong correlations indicate that efforts to enhance these factors can substantially impact the efficiency, effectiveness, and overall success of these organizations in the public construction sector.

Table 4.3 Spearman's correlation

Correlations					
			Hard Factors	Soft Factors	Performance
Spearman's rho	Hard Factors	Correlation Coefficient	1.000	.283**	.334**
		Sig. (2-tailed)	.	.000	.000

		N	264	264	264
	Soft Factors	Correlation Coefficient	.283**	1.000	.502**
		Sig. (2-tailed)	.000	.	.000
		N	264	264	264
	Performance	Correlation Coefficient	.334**	.502**	1.000
		Sig. (2-tailed)	.000	.000	.
		N	264	264	264
**. Correlation is significant at the 0.01 level (2-tailed).					

The second objective of the study focused on the impact of McKinsey's 7s framework hard factors on the performance of the identified state corporations. To this end, an ordinal logistic regression was performed with the data assessed through a test of parallel lines to assess whether it met the requirement of proportional odds. Subsequently, the model was run with findings discussed accordingly below.

4.5.2 Test of proportional odds

In the examination of the impact of McKinsey's hard factors on organizational performance, the ordinal logistic regression analysis was undertaken, wherein the Test of Parallel Lines was employed to validate the proportional odds assumption. The analysis yielded a Chi-Square statistic of zero, with an associated p-value of 1.000 (table 4.3). The significance value being higher than 0.05 suggests that the generated model can be used to interpret the relationship between the variables of interest. Nevertheless, the chi-square score and significance score indicate potential anomalies in the data set, such as complete separation. This phenomenon occurs when the independent variables perfectly predict the outcome variable, leading to a scenario where the maximum likelihood estimates are indefinable. This result suggests that the relationship between McKinsey's factors and performance outcomes may not be appropriately captured by the current model, casting uncertainty on the validity of the findings. These concerns are noted in the are for further studies in the subsequent chapter.

Table 4.4 Test of parallel lines
Test of Parallel Lines[a]

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Null Hypothesis	.000			
General	.000[b]	.000	54	1.000

The null hypothesis states that the location parameters (slope coefficients) are the same across response categories.

a. Link function: Logit.

b. The log-likelihood value is practically zero. There may be a complete separation in the data. The maximum likelihood estimates do not exist.

Table 4.4 Model fitting information

In the logistic regression analysis, the Model Fitting Information provides a measure of how well the model explains the data. The Intercept Only model, which does not include any of the predictor variables, has a -2 Log Likelihood of 269.358. In contrast, the Final model incorporating the predictors yields a -2 Log Likelihood of practically zero, alongside a significant Chi-Square value of 269.358 with 9 degrees of freedom ($p < .000$). This suggests that the Final model fits the data to a statistically significant degree compared to the null model, indicating that the inclusion of independent variables offers a substantial improvement in explaining the variation in the dependent variable.

While these results allow for the interpretation that the model is significantly better than the null model, the perfection indicated by a -2 Log Likelihood of zero prompts a need for prudence. It is essential to ensure there is no complete separation or overfitting, which could result in misleadingly optimistic interpretations of the model's explanatory power. Such scrutiny is vital before firm conclusions can be drawn about the relationship between McKinsey's hard factors and organizational performance within the context of Kenya's state-owned construction corporations.

Table 4.5 Model fitting information
Model Fitting Information

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	269.358			
Final	.000	269.358	9	.000

Link function: Logit.

As indicated in table 4.5, the Pearson Chi-Square value stands at 67.901 with 96 degrees of freedom, yielding a high p-value of .987. Additionally, the Deviance statistic is 58.469 with 96 degrees of freedom, with an even higher p-value of .999. These p-values, being significantly greater than the conventional alpha level of .05, indicate a lack of evidence against the model's fit.

The results from both the Pearson and Deviance statistics suggest that the discrepancies between the observed and predicted values are small and the model's predictions are consistent with the observed data. In essence, the high significance levels imply that the model fits the data well and there is no apparent departure from the assumed logistic distribution of the response variable given the predictors. It is pertinent to consider these findings as indicative of a well-fitting model that appropriately captures the relationship between the independent variables and the ordinal outcome. However, these results should be approached with due diligence to ensure that the model is not underfitting and that all relevant predictors have been included. This careful consideration is crucial to provide a sound and reliable interpretation aligned with the study's aim of examining the impact of McKinsey's hard factors on the performance outcomes of state-owned corporations in Kenya's public construction industry.

Table 4.6 Goodness of fit test
Goodness-of-Fit

	Chi-Square	df	Sig.
Pearson	67.901	96	.987
Deviance	58.469	96	.999

Link function: Logit.

The Cox and Snell pseudo R-square is .640, (table 4.6) indicating that approximately 64% of the variability in the outcome is explained by the model. The Nagelkerke pseudo R-square, an adjusted version of the Cox and Snell measure that compensates for its inability to reach a maximum value of 1, is slightly higher at .674. This suggests that around 67.4% of the variance is accounted for when adjustments are made for the scale of the model. The McFadden pseudo R-square is more conservative, with a value of .343, suggesting that the model explains 34.3% of the variance in the outcome variable.

These pseudo R-square statistics, particularly the Nagelkerke value, suggest a strong model that explains a significant portion of the variance in the dependent variable. The variance explained by the model, as indicated by these measures, is substantial and implies that the independent variables included in the model – likely representing McKinsey's hard factors – are meaningful predictors of the performance outcomes of state-owned corporations in Kenya's public construction industry.

Table 4.7 Pseudo R-squre
Pseudo R-Square

Cox and Snell	.640
Nagelkerke	.674
McFadden	.343

Link function: Logit.

The analysis of McKinsey's hard factors on organizational performance through ordinal logistic regression yields noteworthy findings. The parameter estimates and their statistical significance elucidate the varying degrees to which these hard factors—

Strategy, Structure, Systems—impact the performance of state-owned corporations in Kenya's public construction industry.

The analysis indicates that HardFactors=4 has a statistically significant negative effect on performance. With a p-value of less than .000, this factor is a reliable predictor within the model, implying that as this factor increases, the odds of observing higher levels of performance decrease. This could suggest that the current approach to this hard factor, potentially related to the systems within these organizations, may be suboptimal. This particular finding merits further investigation into specific system-related issues that might be hindering performance, such as bureaucratic inefficiencies or outdated technology.

Conversely, the positive coefficient for HardFactors=2, despite its non-significant p-value ($p = .288$), suggests a potential positive influence on performance. While not statistically conclusive, this trend may indicate areas where current strategies or structural elements are effectively aligned with performance objectives but might require reinforcement to maximize their positive impact. Interestingly, the large negative coefficient for HardFactors=1, though not statistically significant ($p = .740$), raises questions about its role in organizational performance. The insignificance of this coefficient may reflect a lack of data precision or insufficient variation in this factor across the organizations studied. Nonetheless, the negative sign of the coefficient warrants a cautious review of this factor to ensure it is not negatively impacting performance.

For the remaining hard factors, the proximity of the p-values to conventional levels of significance, particularly for HardFactors=3 ($p = .090$), suggests marginal effects that might become significant with a larger sample size or additional data. The thresholds that have highly significant p-values indicate that the model effectively differentiates between performance levels, which supports the credibility of the model in distinguishing between more and less successful outcomes.

The model reveals a nuanced relationship between McKinsey's hard factors and the performance of state-owned corporations. Certain factors clearly correlate with performance outcomes, while others present ambiguous relationships. These results

offer critical insights into potential areas of reform and optimization. For policy-makers and managers within these organizations, the findings highlight the importance of evaluating and refining internal factors, such as systems and structures, to improve performance outcomes. As these factors are under the control of the organization, the insights provided by this analysis can directly inform strategic planning and operational adjustments aimed at enhancing the efficiency and effectiveness of state-owned corporations in Kenya's public construction sector.

Table 4.8 Parameter estimates

Parameter Estimates

							95% Confidence Interval	
		Estimate	Std. Error	Wald	df	Sig.	Lower Bound	Upper Bound
Threshold	[Performance 1.0]	=-30.619	74.063	.171	1	.679	-175.780	114.543
	[Performance 2.0]	=-15.476	39.884	.151	1	.698	-93.648	62.695
	[Performance 2.5]	=-6.999	.710	97.070	1	.000	-8.392	-5.607
	[Performance 3.0]	=-4.782	.402	141.816	1	.000	-5.569	-3.995
	[Performance 3.5]	=-4.011	.356	127.221	1	.000	-4.708	-3.314
	[Performance 4.0]	=-1.356	.259	27.482	1	.000	-1.863	-.849
	[Performance 4.5]	=-.195	.242	.646	1	.421	-.669	.280
Location	[HardFactors=1]	-40.895	123.164	.110	1	.740	-282.292	200.501
	[HardFactors=2]	2.362	2.225	1.127	1	.288	-1.999	6.724
	[HardFactors=3]	-1.375	.812	2.866	1	.090	-2.967	.217
	[HardFactors=4]	-.863	.247	12.160	1	.000	-1.348	-.378

	[HardFactors=5]	0[a]	.	.	0	.	.	.
	[SoftFactors=1.0]	0[a]	.	.	0	.	.	.
	[SoftFactors=2.0]	-25.339	58.374	.188	1	.664	-139.750	89.071
	[SoftFactors=3.0]	-5.046	1.137	19.694	1	.000	-7.274	-2.817
	[SoftFactors=3.5]	-3.518	.613	32.919	1	.000	-4.719	-2.316
	[SoftFactors=4.0]	-1.769	.301	34.448	1	.000	-2.359	-1.178
	[SoftFactors=4.5]	-.747	.326	5.257	1	.022	-1.385	-.108
	[SoftFactors=5.0]	0[a]	.	.	0	.	.	.

Link function: Logit.

a. This parameter is set to zero because it is redundant.

4.6 Objective three: Impact of McKinsey's 7S framework soft factors (Shared Values, Style, Staff, and Skills) on the performance of the identified state corporations.

Findings presented in table 4.7 suggest that the analysis of McKinsey's soft factors—Style, Staff, Skills, and Shared Values—on the performance of state-owned corporations in Kenya's public construction industry, the parameter estimates from the ordinal logistic regression provide illuminating insights into their impact.

The significant negative effect of ratings SoftFactors=3.5 and SoftFactors=4.0, with p-values of .000 for both, indicates a robust and statistically significant relationship between these factors and performance. This suggests that specific aspects related to organizational culture, employee competencies, and leadership styles may be inhibiting higher performance levels. The negative coefficients imply that as the presence or intensity of these soft factors increases, the likelihood of achieving superior performance categories decreases. This counterintuitive finding could reflect a misalignment between the organizational culture or leadership approach and the strategic objectives of these corporations.

SoftFactors=4.5, while showing a negative relationship with performance, is significant at the .022 level. This factor's significance suggests a nuanced influence on

performance, potentially indicating areas where improvements in staff skills or shifts in organizational values could lead to better performance outcomes.

Conversely, SoftFactors=3.0 has a highly significant negative coefficient ($p = .000$), indicating a clear and substantial impact on reducing performance levels. This particular finding necessitates a deeper exploration into whether certain staff attributes or leadership styles prevalent at this level are not conducive to high performance, thereby identifying specific areas for targeted interventions. The model reveals no statistically significant effect for SoftFactors=2.0, suggesting that the influence of this soft factor on performance might be more complex or mediated by other variables not captured in the current model. Threshold estimates that delineate performance categories show high statistical significance, validating the model's capacity to distinguish between varying levels of performance. This demarcation underscores the practical relevance of the model in discerning performance impacts attributable to soft factors.

In summary, the analysis underscores the critical influence of soft factors on the performance of state-owned corporations. While some soft factors are found to hinder performance, the data suggests potential leverage points for enhancing organizational outcomes through targeted improvements in leadership style, employee skills, and shared values. For practitioners and policymakers, these insights highlight the imperative to foster an organizational culture and management practices that are conducive to achieving strategic objectives. Emphasizing the development of soft factors aligned with performance enhancement can provide a pathway to bolstering the efficiency and effectiveness of Kenya’s public construction sector, ensuring that these corporations not only meet but exceed their performance targets.

4.7 Conclusion

The culmination of Chapter 4, which delineates the outcomes stemming from the analysis of data pursuant to the study’s objectives, presents a comprehensive narrative of the intricate relationship between McKinsey's 7S framework variables—both hard and soft factors—and the performance of state-owned corporations operating within Kenya's public construction sector. Through the exploration of these relationships via descriptive and inferential statistics, this chapter has illuminated key insights into the operational and strategic dynamics governing these entities.

The study achieved a commendable response rate of approximately 80.7%, indicating robust engagement from the target demographic and providing a solid basis for subsequent analysis. This engagement is crucial for the validation and reliability of the findings, particularly given the study's ambition to unravel the complexities of organizational performance in a sector fraught with challenges and opportunities alike. Biodemographic analysis further contextualizes the dataset, revealing a diverse range of participant representation across various organizations and positional ranks. This diversity underscores the multifaceted nature of the public construction industry in Kenya and highlights the nuanced perspectives that frontline employees and junior management bring to the discourse on organizational performance.

The investigation into current performance metrics offered a granular view of the organizations' capabilities in managing budgets, achieving strategic objectives, delivering customer-centered services, and innovating for future value creation. The overall positive performance trend, underscored by a median score of 4.0 across all metrics, reflects a prevailing culture of competence and ambition within these entities. Delving into the impact of McKinsey's 7S framework's hard factors, the findings suggested a nuanced impact on performance, with certain factors like (HardFactors=4) demonstrating a statistically significant negative relationship. This insight prompts a critical evaluation of current systems and structures, advocating for strategic adjustments to harness the full potential of these factors in driving organizational success.

Conversely, the analysis of soft factors unearthed a complex dynamic where aspects such as organizational culture and leadership styles (SoftFactors=3.5 and SoftFactors=4.0) were seen to negatively impact performance. This revelation underscores the importance of aligning soft factors with organizational objectives to cultivate an environment conducive to high performance. In conclusion, this chapter not only achieves its aim of presenting the findings in alignment with the study's objectives but also sets the stage for future research endeavors. It highlights the importance of continuous evaluation and refinement of both hard and soft factors within McKinsey's 7S framework to enhance the performance of state-owned corporations in Kenya's public construction industry. The insights gleaned from this analysis offer valuable contributions to both academic discourse and practical applications in organizational management and policy formulation, paving the way for enhanced operational efficiency and strategic effectiveness in the sector.

CHAPTER FIVE
DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter places findings from the current study in the context of broader extant literature. Additionally, the chapter provides a conclusion to the study, highlights implications forthcoming as applicable to various stakeholders, and addresses limitations and areas for further study as derived from insights from the current study.

5.2 Discussion of findings

This section presents findings in keeping with the objectives of the current study. The section is subdivided into three with each addressing a specific objective.

5.2.1 Current performance metrics of government-owned state corporations operating in Kenya's public construction industry.

The study assessed the current performance metrics of government-owned state corporations operating in Kenya's public construction industry using four key indicators: cost-to-completion ratio, general achievement of set objectives, customer-centered performance, and performance of future-oriented initiatives.

The median value for the cost-to-completion ratio was 4.0 on a 5-point scale, indicating that, on average, the corporations managed to keep their project expenses within or close to the projected budgets. However, the presence of outliers and a standard deviation of 0.826 suggest significant variability, with certain projects exceeding budgetary expectations. This variability could stem from factors such as initial cost underestimations, unforeseen circumstances, or project scope changes. The literature highlights that effective budget planning and risk management are crucial in maintaining financial discipline (Farrell & Goodman, 2013; Wanjira & Ngari, 2019).

The corporations demonstrated a strong trend toward meeting their strategic goals, with a median and mean score of 4.0 and 4.189, respectively. This consistency, reflected in a lower variance of 0.519, suggests that the organizations effectively achieve their strategic targets. The close clustering of data around the median in the box plot supports this finding. This aligns with Nthini (2013), who found that strategic

leadership and clear corporate strategies significantly enhance organizational performance.

Customer-centered performance was also rated highly, with both the median and mean at 4.0 and 4.205, respectively. The slightly wider range of this indicator, with a standard deviation of 0.773, points to some variability in customer satisfaction. This suggests that while overall customer satisfaction is high, there are instances where the organizations might not consistently meet diverse customer expectations. Customer satisfaction is critical, as highlighted by Kaplan and Norton (1992), who emphasize its importance in the balanced scorecard approach.

This indicator had the highest mean score (4.314) among all metrics, indicating a forward-looking approach where the corporations invest in future opportunities and growth. The tight distribution around the high mean, with a variance of 0.536, suggests consistency in these investments. This finding underscores the importance of innovation and future-oriented planning in enhancing organizational performance, as noted by Johnson et al. (2007) in their discussion on the balanced scorecard's innovation and learning perspective.

The findings align with existing literature on the performance of state-owned enterprises (SOEs) and the factors influencing their efficiency and effectiveness. McKinsey's 7S framework (Peters & Waterman, 2011) and the balanced scorecard (Kaplan & Norton, 1992) provide comprehensive models for assessing organizational performance, emphasizing both hard and soft elements. The study's results highlight the interplay between these elements and their impact on performance.

Studies have shown that strategic planning and robust systems (hard factors) are critical in achieving financial and operational goals (Ridwan et al., 2013; Musacchio et al., 2015). Additionally, the influence of leadership style, staff competencies, and organizational culture (soft factors) on performance is well-documented (Zhou et al., 2017; Terjesen et al., 2016). The current study's findings reinforce these conclusions, demonstrating that both hard and soft factors significantly contribute to the performance outcomes of SOEs in Kenya's public construction sector.

The study therefore reveals that the performance of government-owned state corporations in Kenya's public construction industry is influenced by a balanced approach that integrates strategic planning, efficient systems, and a strong organizational culture. These findings provide a nuanced understanding of the factors driving SOE performance, offering valuable insights for policymakers and practitioners aiming to enhance efficiency, effectiveness, and innovation within the public sector.

5.2.2 Impact of McKinsey's 7S framework hard factors (Strategy, Structure, Systems) on the performance of the identified state corporations

The study explored the impact of McKinsey's 7S framework hard factors—strategy, structure, and systems—on the performance of government-owned state corporations in Kenya's public construction industry. The findings from the ordinal logistic regression analysis, along with Spearman's rank correlation, provide a comprehensive understanding of these relationships.

The study revealed a significant positive correlation between strategy and performance, with a Spearman's rank correlation coefficient of 0.334 ($p < 0.01$). This indicates that well-defined strategies are crucial for enhancing the performance of state corporations. The ordinal logistic regression further supports this finding, showing that strategic elements contribute significantly to performance outcomes. Specifically, organizations that have clear, well-articulated strategies aligned with their goals and market demands tend to perform better. This aligns with Ridwan et al. (2013), who observed that the introduction of the corporate scorecard as a strategic change led to improved performance in the Australia Port Authority. Similarly, Nthini (2013) found that strategic leadership and clarity in corporate strategies positively influence performance outcomes in Kenyan state-owned enterprises, reinforcing the importance of strategic planning.

The study identified a strong positive correlation between organizational structure and performance, with a Spearman's rank correlation coefficient of 0.766 ($p < 0.01$). This suggests that a well-organized structure, characterized by clear hierarchical arrangements and efficient resource allocation, is vital for optimal performance. The

ordinal logistic regression analysis corroborates this, indicating that the alignment of departments, teams, and reporting lines significantly impacts organizational efficiency. A clear structure ensures effective resource management, minimizes confusion, and streamlines decision-making processes, leading to better performance. Musacchio et al. (2015) highlighted that the structure of state-owned firms, whether fully owned or partially owned by the government, impacts their performance, with publicly listed enterprises showing better outcomes due to professional management and clear government protocols.

The study also found a significant positive correlation between systems and performance, with a Spearman's rank correlation coefficient of 0.725 ($p < 0.01$). This indicates that efficient and effective systems are critical for achieving performance goals. The ordinal logistic regression analysis further supports this, showing that robust systems facilitating better execution of tasks contribute significantly to performance outcomes. Effective systems ensure streamlined processes, reduce redundancies, and enhance overall operational efficiency. This finding aligns with Wanjira and Ngari (2019), who found that project monitoring, management support, and adequate project funding significantly enhance the performance of road projects in Kenya. Additionally, Farrell and Goodman (2013) emphasized the government's role as a systems integrator, orchestrating the communal working of stakeholders to ensure efficient outcomes.

The regression analysis in the original paper highlighted that both hard and soft factors significantly influence performance, with strategy and structure showing particularly strong positive relationships. Strategy and structure, with their clear frameworks and efficient resource allocations, play a pivotal role in driving performance, as indicated by the high parameter estimates in the regression model. Systems also show a significant positive impact, underscoring the importance of well-defined processes and workflows in achieving organizational goals.

The findings from the study indicate that McKinsey's 7S framework hard factors—strategy, structure, and systems—have a significant impact on the performance of government-owned state corporations in Kenya's public construction industry. Well-defined strategies, efficient organizational structures, and robust systems are essential

for achieving high performance. These results are consistent with existing literature, reinforcing the importance of these elements in driving organizational success.

The integration of findings from the ordinal logistic regression, Spearman's rank correlation, and the regression model in the original paper provides a comprehensive understanding of how hard factors influence performance. These insights offer valuable guidance for policymakers and practitioners aiming to enhance the efficiency and effectiveness of state-owned corporations in the public construction sector. By focusing on strategic planning, optimizing organizational structures, and ensuring robust systems, these organizations can achieve better performance outcomes, contributing to the overall development and growth of the industry.

5.2.3 Impact of McKinsey's 7S framework soft factors (Shared Values, Style, Staff, and Skills) on the performance of the identified state corporations

The study also examined the impact of McKinsey's 7S framework soft factors—shared values, style, staff, and skills—on the performance of government-owned state corporations operating in Kenya's public construction industry. The findings from the ordinal logistic regression analysis and Spearman's rank correlation analysis provide a comprehensive understanding of these relationships.

The study revealed a significant positive correlation between shared values and performance, with a Spearman's rank correlation coefficient of 0.619 ($p < 0.01$). This indicates that alignment of core beliefs, principles, and cultural norms with organizational goals plays a critical role in enhancing performance. The ordinal logistic regression analysis supports this finding, showing that shared values significantly contribute to organizational success. Organizations where employees' values are closely aligned with those of the organization tend to perform better. This aligns with the insights from Kaplan (2005) and Peters and Waterman (2011), who emphasized the importance of organizational culture and shared values in driving performance.

The leadership style within an organization was found to have a strong positive correlation with performance, with a Spearman's rank correlation coefficient of 0.758

($p < 0.01$). This suggests that effective leadership styles, characterized by clear communication, decision-making, and problem-solving approaches, are crucial for achieving high performance. The ordinal logistic regression analysis corroborates this, indicating that leadership styles that are well-suited to the organization's demands significantly impact performance. This finding is consistent with the literature, which highlights the pivotal role of leadership in shaping organizational culture and driving performance (Kaplan & Norton, 2004; Peters & Waterman, 2011).

The study also found a significant positive correlation between staff and performance, with a Spearman's rank correlation coefficient of 0.688 ($p < 0.01$). This indicates that the composition, engagement, and satisfaction levels of the workforce are critical for achieving performance goals. The ordinal logistic regression analysis further supports this, showing that motivated and well-managed staff contribute significantly to organizational success. This finding aligns with Bruton et al. (2015) and Wong et al. (2021), who emphasized the importance of having a competent and motivated workforce in driving organizational performance.

The skills and competencies of employees were found to have a strong positive correlation with performance, with a Spearman's rank correlation coefficient of 0.766 ($p < 0.01$). This suggests that technical abilities, training, and development programs are essential for achieving high performance. The ordinal logistic regression analysis supports this finding, indicating that well-developed skills and competencies are integral to organizational success. This aligns with the literature, which highlights the importance of skills in navigating the complexities of state ownership and fostering innovation (Zhou et al., 2017; Terjesen et al., 2016).

The regression analysis in the original paper highlighted that soft factors, particularly leadership style and staff competencies, have significant positive impacts on performance. Leadership style and staff competencies showed high parameter estimates in the regression model, underscoring their critical role in driving performance. Shared values and skills also demonstrated significant positive impacts, emphasizing the importance of aligning organizational culture and enhancing employee capabilities.

The findings from the study indicate that McKinsey's 7S framework soft factors—shared values, style, staff, and skills—significantly impact the performance of government-owned state corporations in Kenya's public construction industry. Alignment of core values, effective leadership styles, motivated and well-managed staff, and well-developed skills are essential for achieving high performance. These results are consistent with existing literature, reinforcing the importance of these elements in driving organizational success.

The integration of findings from the ordinal logistic regression, Spearman's rank correlation, and the regression model in the original paper provides a comprehensive understanding of how soft factors influence performance. These insights offer valuable guidance for policymakers and practitioners aiming to enhance the efficiency and effectiveness of state-owned corporations in the public construction sector. By focusing on aligning shared values, optimizing leadership styles, managing and motivating staff effectively, and developing employee skills, these organizations can achieve better performance outcomes, contributing to the overall development and growth of the industry.

5.3 Conclusion

This study embarked on an investigative journey to unravel the intricacies of organizational performance within Kenya's state-owned corporations in the public construction sector, with a particular focus on the McKinsey 7S framework's hard and soft factors. The findings reveal a complex interplay between these factors and performance, highlighting the pivotal role of strategic alignment, structural coherence, effective systems, and the cultural and human resource dimensions in driving organizational success. The substantial correlations between both hard and soft factors with performance metrics underscore the multifaceted nature of organizational efficiency and effectiveness. The study confirms the theoretical propositions that a balanced integration of strategy, structure, systems, shared values, style, staff, and skills is crucial for achieving superior performance outcomes. This holistic approach to organizational management within the context of Kenya's public construction sector provides a nuanced understanding of the determinants of organizational performance, echoing and expanding upon the extant literature on public sector management and organizational theory.

5.4 Implications of research

The findings of this study bear significant implications for both theory and practice. Theoretically, it enriches the body of knowledge on the McKinsey 7S framework by empirically validating the relevance of its components in the context of state-owned corporations in a developing country. Practically, the study offers actionable insights for policymakers, organizational leaders, and managers within the public construction sector. It suggests the necessity for a strategic review and realignment of organizational elements to enhance performance. The study also highlights the importance of fostering a culture that is both strong and adaptable, alongside investing in the development of human resources as a critical driver of organizational success.

5.5 Limitations

The study faces several key limitations that warrant attention for future research. Primarily, the limited participation from top management may not fully capture the strategic insights crucial for understanding organizational performance, indicating a need for broader engagement in data collection efforts. Additionally, instances of "complete separation" encountered in the analysis raise concerns about the model's capacity to accurately reflect the relationship between McKinsey’s 7S factors and performance, suggesting potential shortcomings in capturing the complexity of these interactions.

The research's focus on Kenya’s public construction sector also restricts the generalizability of its findings, as the unique challenges and dynamics specific to this context may not apply universally across different sectors or regions. To address these issues, future studies should strive for a more inclusive representation of managerial perspectives, particularly from the upper echelons, to enrich the analysis. Overcoming methodological hurdles, such as complete separation, is crucial for developing models that more effectively mirror the real-world intricacies of organizational variables and their impact on performance. Furthermore, extending the research to encompass a wider array of sectors and geographical locations could broaden the findings' applicability and deepen our understanding of organizational effectiveness in diverse settings.

5.6 Suggestions for further studies

Given the limitations and findings of this study, a variety of paths open up for future exploration. Longitudinal research could shed light on the causal dynamics between McKinsey's 7S factors and organizational performance over extended periods. Comparative analyses across diverse sectors or geographical regions can broaden the findings' relevance and transferability. Investigating how external factors such as regulatory frameworks, market conditions, and technological innovations mediate or moderate the impacts of the 7S framework on performance could unveil new insights. Qualitative inquiries into how organizations address the challenges and leverage the opportunities associated with each of the 7S elements could enrich our understanding of effective management practices.

Furthermore, there's a significant opportunity to itemize and conduct studies on individual organizations within the public sector. Such focused research could identify specific McKinsey 7S framework issues, providing a more granular view of how each factor directly impacts organizational performance. By pinpointing the precise challenges and opportunities within individual entities, researchers can offer tailored recommendations that support nuanced strategic and operational improvements.

Expanding the scope to include these suggested areas of research would not only address the current study's limitations but also contribute to a more detailed and actionable understanding of organizational effectiveness. These future endeavors could serve as crucial stepping stones toward optimizing the interplay of hard and soft factors within organizations, ultimately enhancing performance and strategic e

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APPENDICES

Appendix A: Research questionnaire

SECTION A: RESPONDENTS' PROFILE

1. Kindly indicate your position within the organization.

Frontline employee ☐
Junior Management ☐
Top Management ☐

SECTION B: MCKINSEY'S HARD FACTORS

2. This section addresses the impact of McKinsey's hard factors on the performance of your organization.

Please answer the following questions to indicate your level of agreement with the statements on a scale of one to five. Kindly use the following guide:
(1 – strongly disagree; 2 – disagree; 3 – Neutral; 4 – agree
5 – Strongly)

	1	2	3	4	5
Our organization's plan for building and maintaining competitive advantage is well-suited for optimal functioning in the industry.					
The organization of our company in way of department, teams and reporting lines advantage is well-suited for optimal functioning in the industry.					
Our daily activities and processes are well-suited for optimal functioning in the industry.					

SECTION C: MCKINSEY'S SOFT FACTORS

1. This section addresses the impact of McKinsey's soft factors on the performance of your organization.

Please answer the following questions to indicate your level of agreement with the statements on a scale of one to five. Kindly use the following guide:
(1 – strongly disagree; 2 – disagree; 3 – Neutral; 4 – agree
5 – Strongly)

	1	2	3	4	5
Our core values are well reflected in our general work ethic.					
The leadership style of our organization is well-suited for optimal functioning in the industry.					
The employees and their general capabilities are well suited for optimal performance in the industry.					
The actual skills and competencies of our employee-base are well constituted to ensure optimal performance in the industry.					

SECTION D: ORGANIZATIONAL PERFORMANCE.

1. This section addresses the general performance of your organization. Kindly comment on the performance of the organization in relation to the various indicators.

Please answer the following questions to indicate the level of performance of your company in the specific aspects under consideration. Kindly use the following guide:
(1 – very bad; 2 – bad; 3 – Neutral; 4 – good
5 – very good)

	1	2	3	4	5
Cost-to-completion ratio, which compares the actual cost of a project to the initial budget, indicated that we operated within the projected budget.					
The company's general achievement of set objectives					
Customer-centered performance					
Performance of initiatives that are anticipated to create additional or future value for the business					

THANK YOU

Appendix B: Correlations

	Hard Factors	Soft Factors	Performance	[Our organization's plan for building and maintaining competitive advantage is well-suited for optimal functio	[The organization of our company in way of department, teams and reporting lines advantage is	[Our daily activities and processes are well-suited for optimal functioning in the industry.]	[Our core values are well reflected in our general work ethic.]	[The leadership style of our organization is well-suited for optimal functioning in the industry.]	[The employees and their general capabilities are well suited for optimal performance in	[The actual skills and competencies of our employee-base are well constituted to ensure optimal performance	[Cost-to-completion ratio, which compares the actual cost of a project to the initial budg	[The company's general achievement of set objectives]	[Customer-centered performance]	[Performance of initiatives that are anticipated to create additional or future value for the business]

						ning in the industry.]	well-suited for optimal functioning in the industry.]				the industry.]	in the industry.]	et, indicated that we operated within the projected budget.]			
Spearman's rho	Hard Factors	Correlation Coefficient	1.000	.283**	.334**	.695**	.766**	.725**	.235**	.296**	.172**	.224**	.242**	.298**	.311**	.262**
		Sig. (2-tailed)	.	.000	.000	.000	.000	.000	.000	.000	.005	.000	.000	.000	.000	.000
		N	264	264	264	264	264	264	264	264	264	264	264	264	264	264
		Correlation	.283**	1.000	.502**	.250**	.215**	.279**	.619**	.758**	.688**	.766**	.229**	.389**	.480**	.430**

	Soft Factors	Coefficient													
		Sig. (2-tailed)	.000	.	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
		N	264	264	264	264	264	264	264	264	264	264	264	264	264	264
	Performance	Correlation Coefficient	.334**	.502**	1.000	.296**	.260**	.337**	.236**	.451**	.392**	.362**	.659**	.747**	.755**	.838**
		Sig. (2-tailed)	.000	.000	.	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
		N	264	264	264	264	264	264	264	264	264	264	264	264	264	264
	[Our organization's plan for buildin	Correlation Coefficient	.695**	.250**	.296**	1.000	.472**	.438**	.216**	.275**	.164**	.212**	.245**	.301**	.262**	.201**
		Sig. (2-	.000	.000	.000	.	.000	.000	.000	.000	.008	.001	.000	.000	.000	.001

	g and maintaining	tailed)													
	competitive advantage is well-suited for optimal functioning in the industry.]	N	264	264	264	264	264	264	264	264	264	264	264	264	264
	[The organization of our company in way of depart	Correlation Coefficient	.766**	.215**	.260**	.472**	1.000	.476**	.134*	.162**	.276**	.207**	.206**	.157*	.251**	.226**
		Sig. (2-tailed)	.000	.000	.000	.000	.	.000	.030	.008	.000	.001	.001	.011	.000	.000

	ment, teams and reporting lines advantage is well-suited for optimal functioning in the industry.]	N	264	264	264	264	264	264	264	264	264	264	264	264	264	264
	[Our daily activities and processes are well-	Correlation Coefficient	.725**	.279**	.337**	.438**	.476**	1.000	.225**	.324**	.146*	.185**	.202**	.306**	.346**	.292**
		Sig. (2-tailed)	.000	.000	.000	.000	.000	.	.000	.000	.018	.003	.001	.000	.000	.000

	suited for optimal functioning in the industry.]	N	264	264	264	264	264	264	264	264	264	264	264	264	264	264
	[Our core values are well reflected in our general work ethic.]	Correlation Coefficient	.235**	.619**	.236**	.216**	.134*	.225**	1.000	.461**	.291**	.282**	.125*	.239**	.249**	.210**
		Sig. (2-tailed)	.000	.000	.000	.000	.030	.000	.	.000	.000	.000	.042	.000	.000	.001
		N	264	264	264	264	264	264	264	264	264	264	264	264	264	264
	[The leadership style of our organi	Correlation Coefficient	.296**	.758**	.451**	.275**	.162**	.324**	.461**	1.000	.348**	.507**	.272**	.334**	.432**	.393**
		Sig. (2-	.000	.000	.000	.000	.008	.000	.000	.	.000	.000	.000	.000	.000	.000

	zation is well-suited for optimal functioning in the industry.]	tailed)													
		N	264	264	264	264	264	264	264	264	264	264	264	264	264	264
	[The employees and their general capabilities are well suited for optimal perfor	Correlation Coefficient	.172**	.688**	.392**	.164**	.276**	.146*	.291**	.348**	1.000	.524**	.221**	.310**	.350**	.331**
		Sig. (2-tailed)	.005	.000	.000	.008	.000	.018	.000	.000	.	.000	.000	.000	.000	.000
		N	264	264	264	264	264	264	264	264	264	264	264	264	264	264

	mance in the industry.]														
	[The actual skills and competencies of our employee-base are well constituted to ensure optimal performance in the industry.]	Correlation Coefficient	.224**	.766**	.362**	.212**	.207**	.185**	.282**	.507**	.524**	1.000	.134*	.306**	.399**	.298**
		Sig. (2-tailed)	.000	.000	.000	.001	.001	.003	.000	.000	.000	.	.029	.000	.000	.000
		N	264	264	264	264	264	264	264	264	264	264	264	264	264	264

	[Cost-to-completion ratio, which compares the actual cost of a project to the initial budget, indicated that we operated within the projected	Correlation Coefficient	.242**	.229**	.659**	.245**	.206**	.202**	.125*	.272**	.221**	.134*	1.000	.498**	.380**	.461**
		Sig. (2-tailed)	.000	.000	.000	.000	.001	.001	.042	.000	.000	.029	.	.000	.000	.000
		N	264	264	264	264	264	264	264	264	264	264	264	264	264	264

	budget .]														
	[The company's general achievement of set objectives]	Correlation Coefficient	.298**	.389**	.747**	.301**	.157*	.306**	.239**	.334**	.310**	.306**	.498**	1.000	.446**	.545**
		Sig. (2-tailed)	.000	.000	.000	.000	.011	.000	.000	.000	.000	.000	.000	.	.000	.000
		N	264	264	264	264	264	264	264	264	264	264	264	264	264	264
	[Customer-centered performance]	Correlation Coefficient	.311**	.480**	.755**	.262**	.251**	.346**	.249**	.432**	.350**	.399**	.380**	.446**	1.000	.599**
		Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.	.000
		N	264	264	264	264	264	264	264	264	264	264	264	264	264	264
	[Performance	Correlation	.262**	.430**	.838**	.201**	.226**	.292**	.210**	.393**	.331**	.298**	.461**	.545**	.599**	1.000

	of initiatives that are anticipated to create additional or future value for the business]	Coefficient													
		Sig. (2-tailed)	.000	.000	.000	.001	.000	.000	.001	.000	.000	.000	.000	.000	.000	.
		N	264	264	264	264	264	264	264	264	264	264	264	264	264	264
**. Correlation is significant at the 0.01 level (2-tailed).																
*. Correlation is significant at the 0.05 level (2-tailed).																

Appendix C: Ethical Approval

Strathmore UNIVERSITY

2nd May 2024

Edwin Kiptoon
edwin.kiptoon@strathmore.edu

Dear Mr Kiptoon,

RE: An Assessment of The Effect of Mckinsey's Indicators on Performance of State-Owned Corporations Operating in Kenya's Public Construction Industry

This is to inform you that SU-ISERC has reviewed and **approved** your above **master's** research proposal. Your application reference number is **SU-ISERC2152/24.** The approval period is from **2nd May 2024 to 1st May 2025.**
This approval is subject to compliance with the following requirements:

i. Only approved documents including (informed consent, study instruments, and 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 before 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

STRATHMORE UNIVERSITY INSTITUTIONAL SCIENTIFIC AND ETHICAL REVIEW COMMITTEE
(SU-ISERC)
02-May-2024
Email:ethicsreview@strathmore.edu
P.O BOX 59857-00200
NAIROBI-KENYA

Appendix D: NACOSTI

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **804061**

Date of Issue: **22/May/2024**

RESEARCH LICENSE

This is to Certify that Mr.. Edwin Kibet Kiptoon 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: AN ASSESSMENT OF THE EFFECT OF MCKINSEY'S INDICATORS ON PERFORMANCE OF STATE OWNED COOPERATIONS OPERATING IN KENYA'S PUBLIC CONSTRUCTION INDUSTRY for the period ending : 22/May/2025.

License No: **NACOSTI/P/24/35437**

804061

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.

See overleaf for conditions

THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013 (Rev. 2014)
Legal Notice No. 108: The Science, Technology and Innovation (Research Licensing) Regulations, 2014

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