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**The Joint Effect of Strategic Leadership, Strategy Implementation, Macro Environment  
and Performance of Companies Listed on the Nairobi Securities Exchange**

Brown Kipruto Kitur, Prof Zachary Bolo Awino, Dr. Mohamed Omar and Prof. James Njihia



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Brown Kipruto Kitur<sup>1</sup>

PhD Candidate, Department of Business Administration,  
Faculty of Business, University of Nairobi, Kenya



Prof. Zachary Bolo Awino<sup>2</sup>

Professor of Strategy and Global Business Management,  
Department of Business Administration, Faculty of  
Business and Management Sciences, University of  
Nairobi, Kenya



Dr. Mohamed Omar<sup>3</sup>

Lecturer, Department of Business Administration, Faculty  
of Business and Management Sciences, University of  
Nairobi, Kenya



Prof. James Njihia<sup>4</sup>

Professor of Information Systems and Project Planning,  
Department of Management Sciences and Project  
Planning, University of Nairobi, Kenya

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**Abstract**

**Purpose:** This research examined the joint effect of strategic leadership, strategy implementation and macro-environmental factors on the performance of companies listed on the Nairobi Securities Exchange (NSE). The investigation was guided by four distinct objectives, each stemming from this central research purpose.

**Methodology:** The study's primary theoretical framework was Upper Echelons Theory, with supplementary conceptual support provided by Environment Dependency Theory, Institutional Theory, and Expectancy Theory. A positivist philosophical approach informed the design, which utilized a cross-sectional survey methodology. Primary data was collected using structured questionnaires. The research population consisted of all 63 NSE-listed companies as of December 2021. Data analysis incorporated both descriptive and inferential statistical methods.

**Findings:** The results demonstrated that strategic leadership has a significant positive impact on organisational performance outcomes. Strategy implementation emerged as a significant mediator in the strategic leadership-performance relationship. Similarly, the macro environment exhibited substantial moderating effects on this association. These findings indicate that strategic leadership achieves superior organisational results when properly synchronized with internal execution processes and environmental responsiveness. Strategy implementation functions as an essential integrative framework, ensuring harmony between internal organisational capabilities and external environmental requirements. The research provides partial validation of previous empirical investigations and advances theoretical, practical, and policy knowledge domains. Furthermore, Upper Echelons Theory receives reinforcement through these findings.

**Unique Contribution to Theory, Practice and Policy:**

The research offers practical insights for managers and policymakers regarding the importance of continuous strategic assessment in dynamic operational contexts. Organisations should implement regular strategic reviews to maintain alignment between evolving macro-environmental circumstances and shifting organisational objectives. This systematic approach is crucial for ensuring sustained competitive advantage through adaptive leadership practices that are responsive to both internal capabilities and external market dynamics.

**Keywords:** *Strategic Leadership, Strategy Implementation, Macro Environment, Firm Performance, Nairobi Securities Exchange*

**JEL Codes:** *M12, M19, E00, G30, G10*

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## INTRODUCTION

In the current fast-paced business environment, organisations encounter significant hurdles in sustaining a competitive edge and ensuring long-term performance. These issues can be linked to the interaction of strategic leadership, strategy implementation, and the macro environment, which has become increasingly critical for organisational success, particularly for companies operating in emerging markets such as Kenya (Mutiso & Kilika, 2022).

There is a broad consensus that strategic leadership is a critical factor influencing organisational performance. However, scholarly definitions diverge, highlighting different facets of this crucial capability. Some researchers emphasize an executive's capacity to foresee future trends, articulate a clear vision, remain adaptable, and inspire the strategic transformations necessary for success (Hitt et al., 2021). According to this view, weak strategic leadership directly impairs a firm's ability to gain and sustain a competitive advantage (Cortes & Herrmann, 2021). Others focus on the leader's role in cultivating specific organizational skills, such as adaptive and absorptive capacities, which are essential for identifying and capitalizing on business opportunities through managerial insight (Wong et al., 2022). A more granular view breaks down strategic leadership into six key elements: determining the firm's vision, leveraging core competencies, developing human assets, aligning organizational culture, emphasizing business ethics, and maintaining balanced control systems (Anwar & Balcioglu, 2016).

While a strong vision is vital, its value is only realized through effective execution. Strategy implementation is the process of translating a strategic plan into concrete action (Fuertes et al., 2020; Tabesh et al., 2019). This is often described as a set of intentional activities and decisions aimed at positioning the organization favorably (Pedrini & Ferri, 2019). Many scholars argue that the ability to execute a strategy is more crucial to an organization's success than the quality of the strategy itself. Successful execution relies on manipulating five key managerial 'levers': organisational structure, goals, leadership, incentives, and communication (Vigfússon et al., 2021). Leadership is central to guiding strategic action, communication is essential for assigning and clarifying responsibility, and incentives are critical tools for motivating the acceptance of change (de Oliveira et al., 2019).

Organizations do not operate in a vacuum; their success is also shaped by external forces. The macro environment comprises the aggregate external factors that influence an organization's capacity to implement its strategies and from which it gains legitimacy (Gini & Agala, 2023; Anwar & Shaikh, 2019). These factors, which operate outside the firm's direct control, significantly affect its overall performance (Otache & Mahmood, 2015). The literature suggests analyzing the business ecosystem through several key dimensions that impact firms differently, including dynamism (the unpredictability of changes), munificence (the availability of opportunities and resources), and complexity (the diversity of information a firm must process to thrive). Previous studies confirm that this external ecosystem has a significant impact on firm performance (Gitahi, 2016; Tien et al., 2021).

Firms listed on the Nairobi Securities Exchange (NSE) offer a suitable context for exploring these intricate connections. As key players in the Kenyan economy, many of these companies have net assets exceeding Kshs. 100 million, highlighting their economic significance (NSE, 2020). They represent diverse industries and are subject to rigorous regulatory obligations, making them an ideal setting for studying how strategic leadership and macro-environmental



factors jointly influence organizational performance (Misati et al., 2019). This implies that for NSE-listed enterprises, the synergy between strategic leadership, effective strategy execution, and an acute awareness of the external environment generates a powerful and unified influence on performance outcomes. Therefore, this study seeks to bridge an identified gap in the literature by providing a holistic and contextually relevant assessment of these interdependencies. The investigation is guided by the central purpose of examining the joint effect of strategic leadership, strategy implementation, and the macro-environment on organisational performance.

### **Statement of the Problem**

Despite the increasing recognition of strategic leadership as a crucial factor influencing organisational performance, significant gaps persist in understanding how strategic leadership, strategy implementation, and the macro environment collectively interact to shape performance trajectories within complex business environments, particularly among companies listed on the Nairobi Securities Exchange (NSE). The direct link between strategic leadership and organisational performance has been the subject of conflicting empirical findings, suggesting a more nuanced relationship influenced by contextual factors not adequately explored in prior research. Scholars like Oracha et al. (2021) and Jaleha and Machuki (2018) contend that strategic leadership has minimal impact on company outcomes, while Quigley and Graffin (2017) and Agu et al. (2024) have found a strong positive relationship.

Many organisations, despite having well-formulated strategies, struggle with effective execution, leading to a significant gap between strategic intent and realised performance. While strategy implementation has been identified as a critical link between strategic planning and organisational outcomes, there remains limited focus on how it mediates the relationship between strategic leadership and performance, especially in emerging economies. This inflexibility can lead to limited capacity for adaptive management in volatile environments. Moreover, macro-environmental factors—including political, legal, economic, technological, social, and environmental influences—significantly affect the formulation and execution of strategies. However, comprehensive research investigating how the interplay between strategic leadership and the wider macro environment affects organisational performance is still lacking.

The context of companies listed on the NSE offers a unique opportunity to address these gaps. Emerging markets like Kenya present particular challenges and opportunities that can significantly affect the effectiveness of strategic leadership and the successful implementation of strategies. Yet, there is a dearth of empirical research examining these relationships within the specific context of the NSE, which represents a significant portion of East Africa's economic activity. This gap is particularly significant as NSE-listed companies vary in performance, with some excelling while others perform poorly, and this variability is often attributed to the very concepts of strategic leadership, strategy implementation, and macro-environmental dynamics. Without a nuanced understanding of their joint effect, firms may employ similar strategies but experience different performance levels due to how these strategies are implemented and how firms respond to macro-environmental dynamics.

Recognizing these unresolved issues in the literature, particularly the need to understand the intricate joint effect of strategic leadership, the macro environment, and strategy implementation on firm performance, this study seeks to provide a complete and context-related analysis within the specific setting of Kenyan NSE-listed companies. Addressing this

gap through empirical research will advance both theoretical knowledge and practical guidance for strategic management in emerging markets, offering valuable insights for managerial decision-making and policy development to ensure sustained competitive advantage through adaptive leadership practices responsive to both internal capabilities and external market dynamics

### **General Objective**

This study focused on examining the the joint effect of strategic leadership, strategy implementation, macro environment and performance of companies listed on the Nairobi Securities Exchange.

### **Research Hypothesis**

H01: The joint effect of strategic leadership, strategy implementation, and the macro environment on the Organisational performance of companies listed on NSE is not statistically significant compared to their independent effects.

## **LITERATURE REVIEW**

This section comprises the theoretical foundation of the study as well as the empirical literature review. Upper Echelons Theory, Environment Dependency Theory, Expectancy Theory, and Institutional Theory are the four pivotal theoretical framework underpinning the study. Empirical studies on strategic leadership, strategy implementation, the macro environment and firm performance were equally reviewed in this section.

### **Theoretical Review**

#### **Upper Echelons Theory**

According to Hambrick and Mason's (1984) Upper Echelons Theory, the traits and backgrounds of senior leaders have a big influence on the results of their organizations. The hypothesis states that organisational performance and strategic choices can be predicted based on the background traits of managers. As stated by Mason and Hambrick (1984, p. 193), "Efficacy and strategy outcomes are seen as reflections of the beliefs and values of influential individuals within the organization".

This viewpoint highlights how executives' personalities, values, and life experiences greatly impact how they understand strategic issues. The Upper Echelons Theory demonstrates exceptional pertinence to this investigation across multiple dimensions. Initially, it harmonizes with the study's concentration on strategic leadership, furnishing a conceptual structure for comprehending how executive characteristics shape organisational strategies and effectiveness (Carpenter et al., 2004). The theoretical framework delivers insights regarding how strategic leaders decode and react to their operational environment, proving essential for grasping the interconnections among leadership, macro-environmental conditions, and strategy execution (Wang et al., 2016).

Additionally, the theory constructs a theoretical bridge linking leadership attributes to organisational effectiveness, positioning itself as fundamental to this study's investigative aims (Heyden et al., 2018). Within the context of NSE-listed enterprises, the theory illuminates how Kenyan business executives' distinctive backgrounds and professional experiences potentially shape their strategic choices and subsequently impact organisational effectiveness (Mutuku et al., 2019).

The Upper Echelons Theory simultaneously suggests that supplementary elements might affect the connection between strategic leadership and organisational success. This perspective resonates with the present study's focus on macro-environmental factors and strategy execution as probable mediating or moderating elements (Bromiley & Rau, 2016). This theoretical component offers a conceptual blueprint for investigating the sophisticated interactions among the primary research constructs.

Through implementing this theory within the Kenyan business landscape, this research generated significant insights regarding how executive characteristics in NSE-listed corporations affect strategic choices, execution mechanisms, and ultimately, organisational effectiveness within a fluid macro-environmental setting. The theory's spotlight on leadership's function in molding organisational results established it as an indispensable cornerstone for comprehending the relationships under investigation in this research.

### **Environment Dependency Theory**

To offer a basic viewpoint on how organizations engage with their external environment, Pfeffer and Salancik (1978) developed Environment Dependency Theory, also referred to as Resource Dependency Theory. This theory posits that organisations are not self-sufficient entities but depend on resources from their environment for survival and success. As a result, organisations must manage their relationships with external stakeholders and adapt to environmental changes to secure necessary resources and maintain their competitive position. The core premise of Environment Dependency Theory is that organisational behaviour is influenced by external factors and the need to manage dependencies on critical resources.

Pfeffer and Salancik (1978, p. 2) argue that in order to comprehend an organization's behavior, one must comprehend its ecology, or the context in which that behavior occurs. This focus on the interaction between organisations and their external environment offers a valuable framework for analysing how firms are influenced by and respond to macro-environmental conditions. The theory underpins this study in several key ways. Firstly, it offers a conceptual foundation for understanding how the macro environment shapes organisational strategies and performance.

In the case of NSE-listed firms, it helps explain how these organisations operate within and adapt to Kenya's unique economic, political, and social landscape (Ongeti & Machuki, 2018). Secondly, the theory affirms the significance of strategic leadership in managing external dependencies. It proposes that effective leaders must be skilled at scanning the environment, recognising critical resources, and formulating strategies to acquire and maintain them. (Hillman et al., 2009). This aligns with the study's goal of examining the connection between organisational performance and strategic leadership. Environment Dependency Theory also sheds light on how outside factors may affect how a strategy is implemented. It suggests that success of strategic initiatives may depend on how well they align with environmental demands and constraints (Drees & Heugens, 2013), thus making it valuable for understanding the study's premise.

Finally, the theory's spotlight on adaptability and agility when confronting environmental transformations proves exceptionally applicable within the fluid business terrain of developing economies such as Kenya. It delivers a conceptual blueprint for comprehending how NSE-listed enterprises might require perpetual recalibration of their strategies and operational approaches when encountering macro- environmental fluctuations (Machuki & Aosa, 2011).

Integrating Environment Dependency Theory into this investigation will enhance the researcher's comprehension of how macro-environmental conditions influence the interconnections among organisational effectiveness, strategic leadership, and strategy execution within NSE- listed corporations. This theoretical lens emphasized the critical necessity of confronting external challenges in organisational effectiveness and strategic governance.

### **Expectancy Theory**

Established by Victor Vroom in 1964, Expectancy Theory emerges as a cognitive motivational construct that deciphers how individuals assess behavioral alternatives through anticipated results. The framework suggests that people demonstrate greater willingness to invest effort when convinced that such dedication will generate favorable organisational results, eventually producing rewards harmonizing with their individual aspirations.

Vroom (1964, p. 17) characterizes expectancy as "a momentary belief concerning the likelihood that a particular outcome will follow a particular act," highlighting the transient yet impactful character of perceived outcome-effort connections. The framework operates through three fundamental components: expectancy, instrumentality, and valence. Expectancy embodies the conviction that enhanced effort generates superior performance results; instrumentality represents the perceived link between performance achievement and reward acquisition; while valence signifies the worth attributed to those rewards.

Within this investigation's scope, Expectancy Theory functions as a relevant framework for comprehending the motivational dynamics through which strategic leadership impacts organisational effectiveness. Among NSE-listed corporations, the theory establishes groundwork for assessing how senior leadership mobilizes teams toward strategic objective achievement by establishing performance-reward connections (Kibet, T. L. 2019, & Mwangi, Z. G., Kilika, J. M., & Maingi, J. N. 2019)). Moreover, the framework delivers an analytical lens for examining the connection between strategy execution and organisational effectiveness.

Successful strategy implementation depends not merely on strategic planning excellence but equally on leadership's capacity to articulate a compelling narrative connecting individual contributions to organisational achievements and meaningful rewards (Lunenburg, 2011). This element proves essential in demonstrating how strategic leaders mold execution mechanisms to propel organisational success. Expectancy Theory additionally provides interpretive worth when analyzing macro- environmental dynamics' impact on the strategic leadership-firm performance relationship.

Within unstable business climates like Kenya's, the theory indicates that leaders must consistently readjust motivational frameworks to preserve coherent connections between effort, performance, and rewards, guaranteeing continuous employee commitment despite external volatility (Mugambi & Okech, 2018). The theory's focus on cognitive anticipations and individual motivation harmonizes effectively with the Upper Echelons viewpoint, delivering a supplementary interpretation of leadership conduct and organisational results.

Integrating Expectancy Theory into this investigation enables enhanced comprehension of the motivational mechanisms underlying the interaction among strategic leadership, strategy execution, and organisational effectiveness. This theoretical perspective clarifies how executives within NSE-listed enterprises can develop motivational architectures that sustain performance drive even when confronting unpredictable macro-environmental challenges.

## **Institutional Theory**

Institutional Theory, originating from sociology and organisational studies, offers a vital lens for examining how organisations are shaped by their social and cultural environments. Meyer and Rowan (1977) and DiMaggio and Powell (1983) developed the theory, which argues that organizations are impacted by institutional pressures, including established norms, rules, and widely held assumptions, in addition to technical and economic factors.

At its core, Institutional Theory argues that organisations seek legitimacy within their institutional environment, often leading to homogeneity in organisational structures and practices within a given field. Powell and DiMaggio (1983, p. 148) refer to this phenomenon as "institutional isomorphism," stating that organizations compete not only for customers and resources, but also for institutional legitimacy and political power, for social and economic fitness. The Institutional Theory supports this study in multifaceted ways. Firstly, it is a lens to examine how NSE-listed companies respond to the institutional pressures in their environment.

These pressures may stem from regulatory bodies, industry norms, or societal expectations, which can significantly influence strategic decisions and organisational performance (Machuki & Oketch, 2012). Secondly, the theory implies that effective leaders must not only make sound economic decisions but also skilfully navigate the intricate institutional landscape in order to maintain legitimacy and secure essential resources (Garud et al., 2007). This viewpoint is especially pertinent to the Kenyan context, where institutional elements—such as government regulations, cultural expectations, and informal business practices—can greatly influence organisational success.

Furthermore, the theory offers a useful framework for examining the importance of the macro environment in shaping organisational strategies and overall performance. It suggests that the effectiveness of strategy implementation may depend on how well it aligns with institutional expectations and norms (Kostova & Roth, 2002). This insight is crucial for interpreting how NSE-listed companies adapt their strategies to fit the unique institutional context of Kenya and the broader East African region.

Institutional Theory also complements the other theories discussed in this study by highlighting organisational behaviour's social and cultural dimensions. Whereas Upper Echelons Theory highlights the influence of senior executives' characteristics, and Environment Dependency Theory concentrates on the acquisition of critical resources, Institutional Theory underscores the importance of wider social structures and cultural norms in shaping organisational decision-making and performance (Scott, 2008).

By incorporating Institutional Theory into this study, we gained a more nuanced understanding of how NSE-listed companies navigate their institutional environment and how this navigation impacts the relations among organisational performance, strategy implementation and strategic leadership. This theoretical perspective emphasized the importance of viewing economic factors, social and cultural influences in strategic management and organisational performance within the Kenyan context.



## Empirical Review

### Strategic Leadership, Strategy Implementation, Macro Environment and Organisational Performance

The intricate interplay between strategic leadership, the mechanisms of strategy implementation, and the moderating influence of the macro-environment has been empirically shown to be a decisive factor in shaping organisational performance. A study by Gupta et al. (2020), focusing on 218 firms in India, identified a robust mediating effect of strategy implementation on the link between strategic leadership and firm performance. This mediating effect was shown to intensify under conditions of heightened environmental dynamism, reinforcing the notion that contextually adaptive implementation is crucial for translating strategic vision into measurable outcomes. This perspective is broadened by a meta-review from Chen et al. (2022), which analysed 143 studies and affirmed that the influence of leadership on performance is not merely a function of top-level decision-making but is fundamentally shaped by the effectiveness of strategy execution. Their findings noted that in highly dynamic and complex settings, strategy implementation becomes a more dominant mediator, enhancing leadership's effect on organisational outcomes.

Similarly, Elbanna et al. (2020), analysing firms in the United Arab Emirates, confirmed that the success of strategic planning and execution is highly contingent upon the stability or volatility of the external environment, with greater uncertainty requiring more agile and responsive execution mechanisms. However, these studies, while insightful, are predominantly anchored in socio-economic contexts that diverge significantly from those in many African economies. Their focus on developed or rapidly industrialising Asian and Middle Eastern economies often overlooks the unique institutional fluidity, political unpredictability, and market volatility characteristic of sub-Saharan Africa. Furthermore, their operationalisation of environmental factors frequently omits critical macro-contextual dimensions that are highly relevant in this setting (Teece, 2018; Scott, 2008).

Collectively, these findings point to an unresolved theoretical and empirical void: the absence of integrative models that consider the simultaneous interplay of strategic leadership, strategy implementation, and macro-environmental conditions in shaping organisational success within a diverse, cross-sectoral African context. Although individual studies have provided piecemeal insights, few have attempted to explore these relationships holistically, particularly within the context of Nairobi Securities Exchange (NSE) listed companies, where organisations contend with both institutional constraints and sector-specific pressures. The literature remains fragmented, with a notable debate on the direct applicability of Western-centric frameworks, such as the Upper Echelons Theory, in emerging markets where governance structures and leadership norms may differ. Moreover, the empirical literature often prioritises structural and procedural aspects of implementation, leaving the motivational mechanisms underexplored, thereby creating a gap in justifying frameworks like Expectancy Theory at the firm level.

Shifting the focus to the African context, regional studies provide a more nuanced, albeit sector-specific, perspective. For instance, Mwangi et al. (2021) explored these relationships in Kenya's manufacturing sector and, in contrast to Gupta et al. (2020), observed that environmental turbulence actually *diminished* the strength of the association between strategic leadership and both strategy implementation and performance. While providing critical, regionally specific insights, its industry-specific focus restricts the generalisability of its

findings to other sectors represented on the NSE, such as finance, agriculture, and technology, which operate under diverse market conditions. Similarly, in their analysis of South African organisations, Naidoo and Wu (2023) found that when strategic implementation was aligned with prevailing environmental conditions, the resultant performance outcomes were significantly enhanced. This study, while valuable for its African context, still lacked a disaggregated view of macro-environmental components and their independent or combined moderating effects on the leadership-performance dynamic.

The intricate relationship between leadership and performance has thus not been sufficiently examined within East African capital markets, particularly regarding how macro-level conditions moderate and internal execution capabilities mediate this connection (Machuki & Aosa, 2011; Mutuku et al., 2019). Most accessible studies either compartmentalise these elements or are grounded in socio-economic environments that differ significantly from the Kenyan context. This study, therefore, seeks to bridge this critical gap by investigating how strategic leadership shapes organisational performance outcomes through the mediating role of strategy implementation, while also incorporating the macro-environment as a moderating factor. By drawing data from NSE-listed firms operating across a spectrum of industries, this research provides a generalisable and contextually relevant assessment of these interdependencies. This approach contributes to both academic scholarship and practical decision-making by offering a comprehensive framework that captures the layered and contextual nature of leadership effectiveness in emerging markets. It underscores the necessity of viewing strategic leadership not as an isolated variable, but as one embedded within a larger matrix of environmental stimuli and operational constraints—each shaping the pathway to organisational performance in Kenya's dynamic business ecosystem..

From the above analysis, several research gaps emerge that warrant future investigation. Primarily, there is a significant contextual void, as the majority of empirical studies are anchored in developed or rapidly industrializing economies, overlooking the unique institutional fluidity and market volatility characteristic of sub-Saharan Africa. Consequently, the literature lacks integrative models that holistically examine the simultaneous interplay of strategic leadership, strategy implementation, and macro-environmental factors within a diverse, cross-sectoral African context, with most studies either compartmentalizing these variables or focusing on single industries, which limits generalizability. Furthermore, a theoretical gap exists concerning the direct applicability of Western-centric frameworks like the Upper Echelons Theory in emerging markets, alongside an under exploration of the motivational mechanisms that could justify frameworks like Expectancy Theory at the firm level. Future research could also address the need for a more disaggregated view of macro-environmental components to understand their independent effects. Methodologically, a move towards longitudinal or mixed-methods designs would be beneficial to establish causality, a limitation in cross-sectional studies, and to provide a more comprehensive understanding of these complex dynamics over time

## **METHODOLOGY**

The investigation was inclined to the positivist philosophical paradigm. The philosophical foundations of knowledge on which conventions and dispositions of an investigation are commonly based are positivism and phenomenology, which are the two extremes with a wide continuum in between. According to Saunders et al. (2007), phenomenology is considered a subjective paradigm, while positivism is viewed as an objective orientation. The positivism

paradigm is premised on the objective reality assumption, meaning that reality is a single tangible construct that can be observed external to human thought and construct (Mwita, 2022). Under this paradigm, the foundations of social occurrences are pursued with little concern for respondents' subjective conditions. It is based on the premise that universal scientific statements can only be regarded as true if they withstand empirical verification (Saunders et al., 2007). This investigation utilized a descriptive cross-sectional design. Mugenda (2010) suggests that cross-sectional studies are suitable when the objective is to assess whether notable relationships exist among research variables at a specific point in time. It serves as a framework for delineating the links among the study's variables and as a template for each methodological approach, from hypothesis formulation to data analysis (Kerlinger, 2007). Cooper and Schindler (2011) assert that a cross-sectional method entails data gathered at a certain moment in time. This indicates that the data gathered reflects the circumstances of the study subjects in relation to the study variables at that specific time. The population of this investigation was all 63 listed firms on NSE at the end of 2021. The NSE-listed companies characterize key sectors of the Kenya economy, hence the focus of the investigation. This investigation employed the use of primary data was gathered straight from the original sources using a semi-structured questionnaire.

The study targeted top management team (TMT) that included Chief Executive Officers and departmental heads in human resources, marketing, operations, and finance filled the questionnaire.

The study utilized Kaiser-Meyer-Olkin (KMO) together with Bartlett's Test of Sphericity in establishing validity of the results. Consistent with Yin (2014), datasets yielding KMO values above 0.5 and statistically significant Bartlett's results ( $p < 0.05$ ) were considered suitable for factor analysis. These procedures collectively ensured that the instrument demonstrated both theoretical and empirical validity, reinforcing the credibility of the study's measurement framework. The Construct and criterion validity assessments confirmed that the instrument accurately measures the intended constructs and correlates well with relevant external criteria. To substantiate the robustness of the instrument beyond subjective judgment, a pilot test was conducted involving five firms randomly selected from the population of entities listed on the Nairobi Securities Exchange (NSE). The pilot phase was instrumental in testing the clarity, structure, and contextual appropriateness of the questionnaire items, allowing for empirical refinement prior to full deployment. Firms that participated in this pilot study were omitted in the main investigation.

Strategic leadership was operationalized through key indicators including the establishment of the organization's vision, effective exploitation and development of human capital, cultivation of core competencies, fostering of organizational culture, and adherence to business ethics and control mechanisms as put forth by Ireland and Hitt (1999). Strategy implementation was measured using indicators such as resource allocation, organizational structure, communication effectiveness, as well as training and development initiatives as used by Noble (1999). The macro-environment was characterized by three primary dimensions: dynamism, munificence, and complexity as used by Venkatraman and Prescott (1986); Machuki and Aosa (2011).. And finally, organisational performance was assessed through multiple dimensions including profitability, business process efficiency, organizational learning and growth, and customer satisfaction as used by Parnell et al.(1993); Thomas et.al. (1996).

## **Data Analysis**

This section presents the study's findings, including an analysis of the response rate and the results from testing the combined effect of strategic leadership, strategy implementation, and the macro environment on the organisational performance of firms listed on the Nairobi Securities Exchange.

### **Response Rate**

The target population of the study were all the 63 listed companies at the Nairobi Securities Exchange. Fifty-eight questionnaires were distributed to the members of TMT and this because five firms had taken part in the pilot study and did not form part of main investigation. 51 questionnaires which were dully filled out and returned, representing, 87.93 per cent response rate. According to Saunders, Lewis, and Thornhill (2016), an 80 percent response rate is typical and suggests a successful data collection procedure. Compared to these standards, the 87.93% response rate in this study demonstrates exceptional participant engagement and robust data quality.

### **Test of Hypothesis**

To determine the joint effect of strategic leadership, strategy implementation, and the macro environment on the organizational performance of firms listed on the Nairobi Securities Exchange, the study tested the hypothesis using multiple regression analysis. The hypothesis stated that the combined influence of strategic leadership, strategy implementation, and the macro environment on organisational performance of NSE-listed companies is not statistically different from their individual effects. The independent variables were; strategic leadership. Strategy implementation and macro environment, while the organizational performance was the dependent variable. The joint effect was determined by regressing predictor variables on organisational performance.

Table 1 shows the regression results of the joint effect of strategic leadership. Strategy implementation and macro environment and organisational performance.



**Table 1: Joint Effect of Strategic Leadership, Strategy Implementation, Macro Environment on Organisational Performance**

		Adjusted R				
Model	R	R Square	Square	Std. Error of the Estimate		
1	.853a	0.727	0.713	0.3009		
ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.300	3	4.433	49.944	.000b
	Residual	4.982	48	0.091		
	Total	18.281	51			
Coefficients						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.658	0.115		23.157	0.000
	Strategic Leadership Strategy Implementation	0.158	0.054	0.317	2.946	0.005
	Macro environment	0.112	0.060	0.232	2.856	0.020
		0.176	0.055	0.387	3.172	0.002

a. Predictors: (Constant), Strategic Leadership

b. Predictors: (Constant), Strategy Implementation, Macro Environment

c. Dependent Variable: Organisational Performance

Source: Field Data (2022)

From Table 1, the regression results show that the joint influence on organisational performance was significant where  $R^2 = 0.727$ ,  $F=49.944$ ,  $P < 0.05$  showing that the combined effect of strategic leadership, strategy implementation, and the macro environment explains 72.7% of the variance in organisational performance. The model was appropriate and significant since F ratio was 49.944 and statistically significant at  $P < 0.05$ . The model was fit for analysis from the  $R^2 = 0.727$  and F ratio of 49.944.

The hypothesis regression model is as follows:

Initial model:  $Y = \alpha_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$

Resulting model:  $Y = 2.658 + 0.158 X_1 + 0.112 X_2 + 0.176 X_3$

Where Y= Organisational Performance

$X_1$ = Strategic Leadership

$X_2$ = Strategy implementation

$X_3$ =Macro Environment

$\varepsilon$ = Error/disturbance,

$\beta_1, \beta_2, \beta_3$ =Beta Coefficients of Strategic Leadership, Strategy Implementation and Macro

Environment respectively

From the model, an observation could be made that firms listed at the Nairobi Securities exchange could be disadvantaged in case strategic leadership, strategy implementation, and the macro environment are absent. However an increase in the adoption of strategic leadership and strategy implementation while employing macro environment in their daily processes will achieve greater organisational performance. This comes from the positivity of coefficients of 0.158 for strategic leadership, 0.112 for strategy implementation and 0.176 for macro environment.

Moreover, it is evident from the model findings that superior organisational outcomes for firms operating in dynamic and complex environments, such as those listed on the NSE, is influenced by the combined effect of strategic leadership, effective strategy implementation, and responsiveness to macro environmental conditions whose beta coefficients were all positive. Strategic leadership, strategy implementation and macro environment were found to jointly, positively and significantly influence organisational performance of NSE listed companies; ( $R=0.853$ ,  $R^2 = 0.727$ ,  $P=0.00$ ). This study is agreement with the arguments by Porter (1980), who emphasised the competitive advantage that arises when internal strategic positioning is in harmony with external market forces.

## **CONCLUSION, IMPLICATIONS AND RECOMMENDATION**

### **Conclusion**

The findings reject the null hypothesis, demonstrating that the joint effect of strategic leadership, strategy implementation, and the macro-environment on organizational performance is statistically significant and substantively exceeds their individual effects. The results show that these three variables collectively explain 72.7% of the variance in the performance of companies listed on the Nairobi Securities Exchange (NSE). This research contributes to the strategic management literature by empirically evidencing the necessity of an integrated framework that synthesizes leadership vision, effective execution, and external environmental awareness to drive superior performance and sustain competitive advantage.

Specifically, the findings bolster several key theories within the context of an emerging African market. The results support Upper Echelons Theory by showing that the characteristics, experiences, and cognitive frameworks of the top management team (TMT) have profound implications for how they interpret macro-environmental conditions and shape firm outcomes. The study also reinforces Institutional Theory and Environmental Dependency Theory by demonstrating how the macro-environment—characterised by its dynamism, munificence, and complexity—shapes strategic actions, influences organizational functioning, and necessitates adaptive responses. Finally, the results endorse Expectancy Theory, suggesting that variations in strategy implementation success stem from the motivational frameworks established by leaders who connect effort, performance, and rewards.

### **Implications for Management Practice**

The findings offer several specific, actionable recommendations for managers and top executives of firms listed on the NSE. To move beyond high-level strategic planning, organizations should:

1. Establish Formal Environmental Scanning Mechanisms: Given the significant moderating effect of the macro-environment, leadership teams must institutionalize processes for

continuous monitoring. This involves moving beyond ad-hoc analysis to implement periodic and systematic environmental scanning. Actionable steps include creating dedicated market intelligence units or cross-functional teams tasked with regularly assessing macro-environmental dimensions of dynamism, munificence, and complexity to proactively identify shifts in the business ecosystem and ensure strategic agility.

2. Invest in Targeted Leadership Development Programs: Since strategic leadership is a primary driver of performance, organizations should design development programs that cultivate the specific competencies measured in this study. These programs should focus on enhancing leaders' abilities to: Determine and articulate a compelling organizational vision, Develop human capital and cultivate core competencies within the organization, Foster an adaptive organizational culture that aligns with strategic goals, and Champion business ethics and implement balanced control systems to ensure sustainable performance.

3. Strengthen the Link Between Strategy and Execution: The study confirms that strategy implementation is a critical mediator between leadership and performance. Managers must therefore ensure a seamless connection between strategic intent and operational reality. Actionable steps include: Aligning incentive structures to motivate employees and teams, which is consistent with the principles of Expectancy Theory, Improving communication channels to ensure strategic objectives are clearly understood and responsibilities are assigned throughout the organization, and Ensuring resource allocation, organizational structure, and training initiatives are explicitly designed to support strategic priorities.

### **Implications for Policy and Regulation**

The study's findings have direct implications for corporate governance policy, particularly for regulatory bodies such as the Capital Markets Authority (CMA) and the Nairobi Securities Exchange (NSE).

1. Refine Corporate Governance Codes: The significant impact of strategic leadership on firm performance provides an empirical basis for strengthening governance codes related to the appointment and evaluation of senior management. The findings support Upper Echelons Theory, which posits that TMT characteristics shape performance. Therefore, the CMA and NSE could refine governance guidelines to encourage boards to prioritize not just technical qualifications but also demonstrated strategic leadership competencies—such as adaptability and vision—during CEO and TMT selection. This would help ensure that firms listed on the NSE are led by individuals capable of navigating Kenya's dynamic macro-environmental context.

2. Mandate Enhanced Disclosure on Strategic Management: The results highlight the importance of aligning internal strategy with external conditions. Regulators could consider enhancing disclosure requirements in annual reports. For instance, governance codes could require listed firms to explicitly report on their processes for macro-environmental scanning and how their strategic planning addresses identified risks and opportunities. This would increase transparency for investors and hold leadership accountable for environmental responsiveness, a key factor in long-term performance and a core tenet of effective governance.

### **Limitations of the Study and Recommendations for Future Research**

While this study offers significant insights into the joint effect of strategic leadership, strategy implementation, and the macro-environment on performance, several limitations should be

considered when interpreting the findings. These limitations also provide avenues for future research.

### **Methodological and Analytical Limitations**

1. Cross-Sectional Design: The study employed a cross-sectional design, gathering data at a single point in time. This approach is effective for identifying associations between variables but restricts the ability to establish causal relationships. For example, while the study found a mediating role for strategy implementation, it cannot definitively conclude that strategic leadership *causes* changes in implementation that in turn *cause* changes in performance over time.

2. Data Collection and Potential Biases: The reliance on structured questionnaires administered to the Top Management Team (TMT) introduces potential biases. This includes:

- Respondent Bias: Senior executives might be prone to social desirability bias, presenting their leadership and implementation efforts in a more favourable light than reality.

- Missing Perspectives: The exclusive focus on the TMT overlooks the valuable perspectives of other key groups. Mid-level managers, who are often responsible for the operational aspects of strategy implementation, and external stakeholders (such as investors, customers, and suppliers) could offer different and crucial insights into both the execution process and firm performance.

### **Temporal and Contextual Limitations**

1. Temporal Specificity: The data was collected from firms listed on the NSE as of December 2021, with field data from 2022. This period reflects a specific economic context, potentially influenced by the recovery phase of the COVID-19 pandemic and other unique global or national events. Consequently, the findings may not be generalizable to periods pre- or post-major crises or during different economic cycles, which could alter the dynamics between the study's variables.

2. Narrow Conceptual Scope: The study's framework was intentionally focused on strategic leadership, strategy implementation, the macro-environment, and performance. While this provided clarity, it naturally excluded other variables like organizational culture, technological innovation, or competitive intensity, which could also play significant roles in shaping performance outcomes.

### **Recommendations for Future Research**

Based on the identified limitations, future research could extend this study's contributions in several key directions:

1. Adopt a Longitudinal Design: To overcome the constraints of the cross-sectional approach, future studies should employ a longitudinal research design. This would enable researchers to track the variables over multiple years, providing a more robust basis for making causal inferences and understanding how the relationships between leadership, implementation, and performance evolve over time in response to environmental shifts.

2. Utilize Mixed-Methods Approaches: To deepen the analysis and mitigate the biases of a single data collection method, future research should incorporate a mixed-methods approach. Combining quantitative surveys with qualitative methods such as in-depth interviews with top and mid-level managers or case studies of specific firms would yield richer, more nuanced



data. This would help capture the complexities of strategy implementation and provide context that quantitative data alone cannot.

3. Broaden the Research Scope: Future investigations should consider a broader comparative analysis. Expanding the study to include firms from other East African capital markets (such as in Uganda, Tanzania, or Rwanda) would test the generalizability of the findings across different institutional and macro-environmental contexts. This would contribute significantly to a more comprehensive understanding of strategic management in emerging economies.

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## REFERENCES

- Anwar, K., & Balcioglu, H. (2016). The relationship between transformational leadership characteristics and effectiveness: A case study of construction companies in Erbil. *International Journal of Science Technology and Management*, 5(2), 250-256
- Bromiley, P., & Rau, D. (2016). Social, behavioral, and cognitive influences on upper echelons during strategy formation: A literature review. *Journal of Management*, 42(1), 174-202.
- Carpenter, M. A., Geletkanycz, M. A., & Sanders, W. G. (2004). Upper echelons research revisited: Antecedents, elements, and consequences of top management team composition. *Journal of Management*, 30(6), 749-778.
- Chen, Y., Liu, H., & Cheung, F. M. (2022). The impact of strategic leadership on firm performance: A meta-analytic review of the mediating role of strategy implementation and the moderating role of environmental factors. *Journal of Management Studies*, 59(2), 372-414.
- Cooper, D. & Schindler, P. (2011). *Business research methods*. Boston: McGraHill.
- Cortes, A. F., & Herrmann, P. (2021). Strategic leadership of innovation: a framework for future research. *International Journal of Management Reviews*, 23(2), 224- 243.
- de Oliveira, C. A., Carneiro, J., & Esteves, F. (2019). Conceptualizing and measuring the “strategy execution” construct. *Journal of Business Research*, 105, 333-344.
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in Organisational fields. *American Sociological Review*, 48(2), 147-160.
- Drees, J. M., & Heugens, P. P. (2013). Synthesizing and extending resource dependence theory: A meta-analysis. *Journal of Management*, 39(6), 1666-1698.
- Elbanna, S., Andrews, R., & Pollanen, R. (2020). Strategic planning and implementation success in public service organisations: Evidence from Canada. *Public Management Review*, 22(1), 77-100.
- Field, A. (2000). *Discovering statistics using SPSS for windows*. London–Thousand Oaks
- Fuertes, G., Alfaro, M., Vargas, M., Gutierrez, S., Ternero, R., & Sabattin, J. (2020). Conceptual framework for the strategic management: a literature review— descriptive. *Journal of engineering*, 2020(1), 6253013.
- Garud, R., Hardy, C., & Maguire, S. (2007). Institutional entrepreneurship as embedded agency: An introduction to the special issue. *Organisation Studies*, 28(7), 957- 969.
- Gini, K. B., & Agala, H. O. (2023). The Impact of Macro-Environmental Factors on Business Performance. *International Journal of Research and Innovation in Social Science*, 7(11), 1837-1843.
- Gitahi, A.W., (2016). Organisational capacity, strategy implementation, competitive environment and performance of companies listed on the Nairobi Securities Exchange. School of Business, University of Nairobi.
- Gupta, V., Jain, R., & Agarwal, U. A. (2020). Strategic leadership and organisational performance: The mediating role of strategy implementation and the moderating role of environmental dynamism. *Global Business Review*, 21(6), 1397-1420.

- Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organisation as a reflection of its top managers. *Academy of Management Review*, 9(2), 193-206.
- Heyden, M. L., Foaegbu, J., Kasseeah, H., Essen, M., & Hagen, J. M. (2018). Upper echelons research in management journals: An intersectional study of top management teams. *European Management Review*, 15(3), 309-328.
- Hillman, A. J., Withers, M. C., & Collins, B. J. (2009). Resource dependence theory: A review. *Journal of Management*, 35(6), 1404-1427
- Hitt, M. A., Ireland, R. D., & Hoskisson, R. E. (2021). *Strategic management: Competitiveness & globalization: Concepts and cases*. Cengage Learning.
- Ireland, R. D., & Hitt, M. A. (1999). Achieving and maintaining strategic competitiveness in the 21st century: The role of strategic leadership. *Academy of Management Executive*, 13(1), 43-57.
- Kerlinger, F. N. (2007). *Foundations of behavioral research* (4th ed.). Cengage Learning.
- Kibet, T. L. (2019). Market capitalization and financial performance of manufacturing firms listed on the Nairobi Securities Exchange. *Journal of Accounting and Business Research International*, 7(2), 45-60.
- Kostova, T., & Roth, K. (2002). Adoption of an organizational practice by subsidiaries of multinational corporations: Institutional and relational effects. *Academy of Management Journal*, 45(1), 215-233.
- Lunenburg, F. C. (2011). Expectancy theory of motivation: Motivating by altering expectations. *International Journal of Management, Business, and Administration*, 15(1), 1-6.
- Machuki, V. N. (2011). External environment strategy co alignment, firm level institutions and performance of publicly quoted companies in Kenya. Unpublished PhD Thesis. School of Business, University of Nairobi.
- Machuki, V., & Aosa, E., (2011). Corporate Governance, strategic choices and performance of financial institutions in Kenya. *International Journal of Business Management*, 13(7), 169-178.
- Machuki, V. N., & Oketch, N. A. (2012). Corporate governance structures and firm performance: A study of listed companies at the Nairobi Securities Exchange, Kenya. *Journal of Finance and Investment*, 1(1), 55-70.
- Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83(2), 340-363
- Misati, R. N., Nyamongo, E. M., & Mwangi, I. (2019). Commodity price shocks and inflation in a net oil-importing economy. *OPEC Energy Review*, 43(3), 327- 344.
- Mugambi, M., & Okech, T. C. (2018). Effect of macroeconomic variables on stock returns of listed commercial banks in Kenya. *International Journal of Economics, Commerce and Management*, 6(6), 389-409
- Mugenda, O. M., & Mugenda, A. G. (2010). *Research methods, qualitative and quantitative approaches*. Nairobi: African Centre for Technology Studies.

- Mutiso, A. N., & Kilika, J. M. (2022). Strategic leadership, competitive strategy and performance of firms listed in the Nairobi Securities Exchange, Kenya. *Journal of Business and Management Sciences*, 10(1), 20-33.
- Mutuku, J. M., Gakure, R. W., & Ochieng, P. A. (2019). Top management team diversity and organizational performance: Evidence from the Kenyan commercial banking sector. *International Journal of Business and Social Science*, 10(4), 45-58.
- Mwangi, Z. G., Kilika, J. M., & Maingi, J. N. (2019). Effect of leverage on financial performance of selected companies listed in the Nairobi Securities Exchange, Kenya. *International Journal of Scientific & Technology Research*, 8(9), 123-134.
- Mwangi, T., & Kiiru, D. (2021). Strategic management capabilities and performance of pharmaceutical companies in Nairobi City County, Kenya. *Strategic Journal of Business & Change Management*, 8(2), 115-130.
- Mwita, K. (2022). Strengths and weaknesses of qualitative research in social science studies. *International Journal of Research in Business and Social Science*, 11(6), 618-625.
- Naidoo, W., & Wu, T. (2023). Strategic green marketing orientation and environmental sustainability: The moderating role of green absorptive capacity in Tanzanian manufacturing SMEs. *Sustainability*, 15(14), 11053
- Nairobi Securities Exchange (NSE). (2024). Main investment market segment <https://www.nse.co.ke/main-investment-market-segment/>
- Noble, C.H. (1999). Building the strategy implementation network. *Business Horizons*, 19-28.
- Otache, I., & Mahmood, R. (2015). Corporate entrepreneurship and business performance: The role of external environment and organisational culture: A proposed framework. *Mediterranean Journal of Social Sciences*, MCSER Publishing, Rome-Italy, 6(4).
- Parnell, J. A. & P., Wright (1993). Generic strategy and performance: An empirical test.
- Pedrini, M., & Ferri, L. M. (2019). Stakeholder management: a systematic literature review. *Corporate Governance: The International Journal of Business in Society*, 19(1), 44-59.
- Pfeffer, J., & Salancik, G. R. (1978). The external control of organizations: A resource dependence perspective. Harper & Row.
- Porter, M. E. (1980). *Competitive strategy: Techniques for analyzing industries and competitors*. Free Press.
- Powell, W.W., & DiMaggio, P.J. (1991). *The new institutionalism in organisational analysis*. Chicago: University of Chicago Press.
- Saunders, M., Lewis, P., & Thornhill, A. (2007). *Research methods for business students* (4th ed.). Harlow: Prentice Hall, Pearson Education Limited.
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students*. Pearson education.
- Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research methods for business student's* 6th ed.). Pearson Education Limited



- Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (6th ed.). Pearson Education Limited.
- Scott, W.R. (2008). Approaching adulthood: The maturing of institutional theory. *Theory and Society*, 37(5), 427.
- Tabesh, P., Mousavidin, E., & Hasani, S. (2019). Implementing big data strategies: A managerial perspective. *Business Horizons*, 62(3), 347-358.
- Tawse, A., & Tabesh, P. (2021). Strategy implementation: A review and an introductory framework. *European Management Journal*, 39(1), 22-33.
- Teece, D. J. (2018). Dynamic capabilities as (workable) management systems theory. *Journal of Management & Organisation*, 24(3), 359-368.
- Tien, N. H., Diem, P. T., Vu, N. T., Vang, V. T., Hung, N. T., Anh, V. T., & Van Dat, N. (2021). Comparative analysis of business environment in binh duong, dong nai and ba ria vung tau of vietnam using EFE matrix. *International Journal of Research and Growth Evaluation*, 2(4), 769-778.
- Venkatraman, N., & Prescott, J. E. (1986). Environment-strategy coalignment: An empirical test of its performance implications. *Strategic Management Journal*, 7(4), 437-456.
- Vigfússon, K., Jóhannsdóttir, L., & Ólafsson, S. (2021). Obstacles to strategy implementation and success factors: a review of empirical literature. *Strategic Management-International Journal of Strategic Management and Decision Support Systems in Strategic Management*, 26(2).
- Vroom, V. H. (1964). *Work and motivation*. San Francisco, CA: Jossey-Bass.
- Wang, X., & Cheng, Z. (2020). Cross-sectional studies: strengths, weaknesses, and recommendations. *Chest*, 158(1), S65-S71.
- Wong, L., Gerras, S., Kidd, W., Pricone, R., & Swengros, R. (2022). *Strategic leadership competencies*. Strategic Studies Institute of the US Army War College..
- Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). Thousand Oaks, CA: Sage.
- Zeshan Anwar, D. K. A., & Shaikh, S. (2019). Impact of political stability and managerial ownership on firm's profitability. *Journal of Business*, 13(1), 59-70.