



Vol. 7, Iss. 1 (2026), pp 177 – 198, April 30, 2026. www.reviewedjournals.com, ©Reviewed Journals

STRATEGIC CONTROL AND PERFORMANCE OF NETWORK FACILITIES PROVIDERS IN MOMBASA COUNTY, KENYA

¹ Omar Mohammed Ruwa; & ² Dr. Titus Muthami Kising'u, PhD

¹ Master's Candidate, Jomo Kenyatta University of Agriculture & Technology (JKUAT), Kenya

² Lecturer, Jomo Kenyatta University of Agriculture & Technology (JKUAT), Kenya

Accepted: April 13, 2026

DOI: <https://doi.org/10.61426/business.v7i1.502>

ABSTRACT

This research examined the influence of strategic control on performance of network facilities providers in Mombasa County, Kenya. Specifically, the research examined the influence of strategic premise control and strategic surveillance control on performance of network facilities providers in Mombasa County, Kenya. The theoretical framework was underpinned by the resource-based theory, the theory of constraints, contingency theory and firm growth theory. The study employed the correlational research design to test non-causal relationships among study variables. The target population consisted of 88 managers of the 11 network facilities providers in Mombasa County, Kenya. The proportionate stratified random sampling technique was used to select a sample size of 72 managers of the 11 network facilities providers in Mombasa County, Kenya. A pilot study was conducted to ascertain the validity and reliability of the constructed survey questionnaire. A cross-sectional survey-based approach was used to collect primary data. With the help of 3 research assistants, the researcher utilized the drop and pick method to hand deliver the survey questionnaires to the project implementation team in charge of the road construction projects. The collected data was processed and entered into the statistical package for social sciences (SPSS) version 26 to create a data sheet used for statistical analysis. The collected data was analyzed using descriptive statistics and inferential statistics. The Pearson's product moment correlation results indicated that strategic control had positive and significant relationship with performance of network facilities providers in Mombasa County, Kenya. The regression results indicated that that strategic premise control and strategic surveillance control had positive and significant influence on performance of network facilities providers in Mombasa County, Kenya. The project managers should recognize the importance of strategic control and apply them to foster the performance of network facilities providers. The policymakers should initiate policy review to motivate project managers to recognize the importance of strategic control and apply them to foster performance of network facilities providers. Future researchers should examine moderating effect of project complexity on the relationship between strategic control and performance of network facilities providers in other regions or contexts.

Key words: Performance of Network Facilities Providers, Strategic Control, Strategic Premise Control, Strategic Surveillance Control, Kenya

CITATION: Ruwa, O. M., & Kising'u, T. M. (2026). Strategic control and performance of network facilities providers in Mombasa County, Kenya. *Reviewed Journal International of Business Management*, 7 (1), 177 – 198.

INTRODUCTION

The telephony sector and broader mobile ecosystem act as a cornerstone of the global economy. The telephony sector is a cornerstone of Kenya's economy, significantly driving Gross Domestic Product (GDP), enhancing financial inclusion via mobile money (such as M-Pesa), and boosting productivity (Emara & Katz, 2024). The telephony sector played a critical role in communication, contributed to the GDP, created economic opportunities through mobile money agents, facilitated economic activities, and provided mobile money and internet services (Mwaniki & Anene, 2023). Telecommunications plays a pivotal role in driving global economic development by enabling connectivity, fostering innovation, and enhancing productivity across industries (Ibrahim, Magaji, & Salisu, 2023). However, the implementation of telecommunications solutions for IoT is fraught with challenges related to interoperability, security, and cost considerations (Uzoka, Cadet, & Ojukwu, 2024). The ecosystem's future remains uncertain, influenced by operators' strategic choices, business model innovation, national and industrial policies, regulations, and cross-industry investments (Meraviglia *et al.*, 2026). The sector has been facing a decline in performance in the recent past orchestrated by increased dynamisms and uncertainties in the operating environment (Njoroge, 2024).

The Global System for Mobile Communications (GSM) is a foundational technology that significantly supports domestic government communication initiatives, acting as a critical link between various national sectors. GSM plays a vital part domestically in supporting the various government communications initiatives and thereby linking all the sectors of the country together in order to achieve a common goal (Ibrahim *et al.*, 2023). By providing wide-area coverage and reliable communication, GSM facilitates the coordination needed to achieve national goals (Singh, 2026; Singh & Kumar, 2026). Mobile telecommunication services are an integral part of economic activities so it continues to offer unprecedented opportunities for economic growth especially in the developing market (Musa, Magaji, Eke, & Salisu, 2022). However, most network service providers are reluctant to publicly share their 5G traffic data (Choi *et al.*, 2023). The performance of telecom firms is crucial for sustained economic growth, facilitating trade, and providing essential internet services (Hajar *et al.*, 2022). However, telecom companies and businesses rely on complex networks and systems that must operate seamlessly to meet growing customer expectations and ever-changing market demands (Collins, Hamza, Eweje, & Babatunde, 2023).

Globally, internet access is widely acknowledged as a cornerstone of sustainable development. The United Nations recognizes online freedom as a human right, asserting that the same rights individuals hold offline must also be protected online (Shabangu & Jita, 2025). However, a significant digital divide persists, particularly between developed and developing countries (Chisika & Yeom, 2024; Mbithi & Ondara, 2026). Lack of high-speed broadband connectivity remains a critical barrier to inclusive digital transformation, particularly in rural areas of developing countries (Kibinda, Shao, Mwogosi, & Mambile, 2025). The sector has faced performance fluctuations and stiff competition challenges within and without over the years even with continuous alliance partnership formations with other strategic organizations (Musyoka, 2023). The network facilities providers have faced challenges in optimizing performance.

Strategic control involves monitoring and adjusting an organization's long-term strategy during implementation. Strategic control is the process used by organizations to control the formation and execution of strategic plans (Sundström & Svärdsten, 2026). Strategic control serves as a crucial mechanism in the adaptation process, enabling organizations to identify and interpret triggers for change (Balachandra & Pinowski, 2021). Strategic control is the terminal part of the strategic management process (Muasya & Kising'u, 2025; Sihombing & Surbakti, 2026). The strategic control process is the course of action for achieving what needs to be done and the way to take corrective measures in the event of failure or deviation from the path of progress so that performance remains on the proper path (Yeboah, Diaba, Mohammed, & Boateng, 2023). The process of strategic management involves its control function (Sani &

Seresht, 2025). Strategic control is incorporated into the administrative process, measuring and evaluating public institutes' financial performance to apply corrective measures (Bchennaty, Khan, Massoud, & Elhassan, 2024). The strategic control process is important since the internal and external factors of the business environment may follow different trends than what was expected before the planning of the strategy (Kariuki & Mwanzia, 2024). Strategic control is of utmost importance in enabling organizations to effectively accomplish their strategic objectives in a dynamic and constantly evolving environment (Kovalyk & Yang, 2025). Therefore, effective strategic control systems play a crucial role in achieving strategic goals in today's rapidly changing organizational environment.

There are four primary types of strategic control: premise control, implementation control, special alert control, and strategic surveillance control. The four main types of strategic control include premise control, implementation control, strategic surveillance, and special alert control (Yeboah *et al.*, 2023). The premise control ensures that the strategy's foundational assumptions remain valid (Sundström & Svärdesten, 2026). The implementation control monitors the step-by-step execution of your strategy, ensuring that each phase and activity is on track (Muasya & Kising'u, 2025). The strategic surveillance control involves a broad information scan to identify any overlooked factors that could impact the strategy (Sihombing & Surbakti, 2026). The special alert control responds to unexpected events with a fast and thorough strategy assessment (Bchennaty *et al.*, 2024). Therefore, strategic control involves the strategic premise control (verifying assumptions), implementation control (assessing execution steps), strategic surveillance (monitoring environmental changes), and special alert control (reacting to unforeseen events).

Statement of the Problem

Despite being pivotal to the global economy, the network facilities providers are facing a defining challenge. While the telephony sector and broader mobile ecosystem act as a cornerstone of the global economy (Emara & Katz, 2024), the ecosystem's future remains uncertain, influenced by operators' strategic choices, business model innovation, national and industrial policies, regulations, and cross-industry investments (Meraviglia *et al.*, 2026). Although the performance of telecom firms is crucial for sustained economic growth (Hajar *et al.*, 2022), most network service providers are reluctant to publicly share their 5G traffic data (Choi *et al.*, 2023). Though the sector plays a pivotal role in driving global economic development by enabling connectivity, the telecom companies and businesses rely on complex networks and systems that must operate seamlessly to meet growing customer expectations and ever-changing market demands (Collins *et al.*, 2023). The sector has been facing a decline in performance in the recent past orchestrated by increased dynamisms and uncertainties in the operating environment (Njoroge, 2024).

Although internet access is widely acknowledged as a cornerstone of sustainable development, a significant digital divide persists, particularly between developed and developing countries (Chisika & Yeom, 2024; Mbithi & Ondara, 2026). Lack of high-speed broadband connectivity remains a critical barrier to inclusive digital transformation, particularly in rural areas of developing countries (Kibinda *et al.*, 2025). The sector has faced performance fluctuations and stiff competition challenges within and without over the years even with continuous alliance partnership formations with other strategic organizations (Musyoka, 2023). The network facilities providers have faced challenges in optimizing performance. The inability of organizations to achieve their strategic goals may be attributed to a lack of effective strategic control systems (Balachandra & Pinowski, 2021; Bárcenas, Gracia, & Ávila, 2026; Iradukunda & Irechukwu, 2023). While strategic control systems are essential for achieving strategic goals in organizations, there are several challenges associated with implementing and maintaining effective strategic control systems (Yeboah *et al.*, 2023).

Despite extensive attention given to the relationship between strategic control and firm performance, current understanding of this relationship remains fragmented, with empirical results often appearing

ambiguous or inconsistent. The empirical literature has produced mixed results and inconsistent findings (Muasya & Kising'u, 2025). While many studies indicate that effective strategic control systems positively influence performance by aligning actions with goals, others suggest that the impact is highly contingent on contextual factors such as industry, firm size, and the speed of environmental change. The role of strategic control systems in managing organizational performance and achieving strategic objectives is multifaceted (Yeboah *et al.*, 2023). The general business problem is that poor strategic control negatively affects the performance of network facilities providers. The specific business problem is that some project managers lack effective strategic control to improve the performance of network facilities providers.

Research Objectives

The general objective of the study was to examine the influence of strategic control on performance of network facilities providers in Mombasa County, Kenya. The specific research objectives of the study were:

- To establish the influence of strategic premise control on performance of network facilities providers in Mombasa County, Kenya.
- To assess the influence of strategic surveillance control on performance of network facilities providers in Mombasa County, Kenya.

In this study, two null hypotheses were tested.

- H₀₁: Strategic premise control has no significant influence on performance of network facilities providers in Mombasa County, Kenya.
- H₀₂: Strategic surveillance control has no significant influence on performance of network facilities providers in Mombasa County, Kenya.

LITERATURE REVIEW

Theoretical Framework

Theoretical framework is the lens through which the researcher uses to connect the literature with the study results and methodology (Bingham, Mitchell, & Carter, 2024). The theoretical framework was underpinned by the resource-based theory, the theory of constraints, contingency theory and firm growth theory.

Resource-Based Theory

The RBT of the firm (Barney, 1991; Penrose, 1959; Peteraf, 1993) provides an explanation as to why some organizations are performing better and how an organization can perform better (Wu, Yan, & Umair, 2023). The RBT (Rumelt, 1984; Wernerfelt, 1984; Wernerfelt, 1995) recognizes the existence of cost factors and resources, and therefore, informs proper planning so as to realize proper utilization and allocation of these resources towards achieving the project objectives (Teece, 2023a). The RBT of the firm posits that firms' competitiveness even in the same industry varies based on a firm's resources and capabilities (Zulkiffli, Zaidi, Padlee, & Sukri, 2022). The RBT of the firm is a relevant underpinning theoretical framework to explain the influence of strategic control on performance of network facilities providers in Mombasa County, Kenya.

The RBT of the firm emerged in the 1980s, when a number of strategic-management scholars began theorizing that a firm earns rents from leveraging its unique resources (Bosire, Kising'u, & Gichinga, 2025; Teece, 2023b). The RBT of the firm (Barney, 1986; Barney, Ketchen Jr, & Wright, 2011) proposes that the valuable, rare, inimitable and non-substitutable (VRIN) resources give a firm the ability to be more competitive (Chatterjee, Chaudhuri, Vrontis, & Thrassou, 2023). The RBT of the firm suggests that the VRIN resources are difficult to monetize directly through contracting arrangements that would allow other firms to utilize the resources in exchange for service fees (Vieira, Jaramillo, Agnihotri, & Molina, 2023).

The RBT of the firm postulates that the VIRN framework is used to help companies identify certain resources and capabilities that can provide them with a sustained competitive advantage (Alvarez, Newman, Barney, & Plomaritis, 2023; Makazi, Kising'u, & Gichinga, 2025). Therefore, the RBT of the firm is a relevant underpinning theoretical framework to explain the influence of strategic premise control and strategic surveillance control on performance of network facilities providers in Mombasa County, Kenya.

Theory of Constraints

The theory of constraints (Goldratt & Cox, 1984; Goldratt, 1990) asserts that any manageable system is limited in achieving more of its goal by a very small number of constraints, and that there is always at least one constraint (Shenhar *et al.*, 2023). The theory of constraints (Goldratt, 1996) is based on the premise that the rate of goal achievement is limited by at least one constraining process and it's only by increasing flow through the constraint can overall quantity or output can be increased (Leybourne, 2024; Opoku, Nyamah, Nyamah, Agyapong, & Frimpong, 2023). The theory of constraints is a relevant theoretical framework to explain the influence of influence of strategic control on performance of network facilities providers in Mombasa County, Kenya.

The theory of constraints (Kohli & Gupta, 2010) is a methodology for identifying the most important limiting factor or constraint that stands in the way of achieving a goal and then systematically improving that constraint until it is no longer the limiting constraint (Opoku *et al.*, 2023). The theory of constraints (Mabin & Balderstone, 2003) is a multi-faceted systems methodology that has been developed to assist people and organizations to think about their problems, develop breakthrough solutions and implement those solutions successfully (Opoku *et al.*, 2023). The core concept of the theory of constraints (McKinsey, 2001) is that every process has a single constraint and that total throughput can only be improved when the constraint is improved (Loffredo *et al.*, 2024; Shenhar *et al.*, 2023).

The theory of constraints (Goldratt, 1990) provides an action plan for improvement. The constraints theory has provided a substantially better insight into the dimensions and complexity of the problem facing work breakdown structures in project management (Wanjau *et al.*, 2023). The theory of constraints states that the most used strategic control may perform well or poorly from an organizational standpoint (Leybourne, 2024). The theory of constraints basically states that a set of constraints prohibits any management system from achieving more of its objectives (Kabiti & Kikwatha, 2022). Therefore, the theory of constraints is a relevant theoretical framework to explain the influence of strategic premise control and strategic surveillance control on performance of network facilities providers in Mombasa County, Kenya.

Contingency Theory

The contingency theory (Donaldson, 2001; Hanson, 1979; Lucas Jr & Gresham, 1985; Longenecker & Pringle, 1978) proposes that the way firms respond to their external environment affects their performance (Durst, Hinteregger, & Zieba, 2024). The contingency theory acknowledges that firms should develop a strategy to cope with environmental turbulence to realize superior performance (Kariuki, Kinyua, & Waithaka, 2023; Müller, Konzag, Nielsen, & Sandholt, 2024). Therefore, the contingency theory is a relevant theoretical framework to explain the influence of strategic control on performance of network facilities providers in Mombasa County, Kenya.

The contingency theory suggests that no single theory or approach can be universally applicable, and the success of enterprises is determined by the alignment between their organizational structure and specific environmental conditions (Al-Swidi, Al-Hakimi, Al-Sarraf, & Al Koliby, 2024). The theory argues that superior firm performance is achieved by aligning strategic capabilities with the degree of environmental uncertainty (Müller *et al.*, 2024). Therefore, the contingency theory is a relevant theoretical framework to explain the influence of strategic premise control and strategic surveillance control on performance of network facilities providers in Mombasa County, Kenya.

Firm Growth Theory

The theory of the growth of the firm (Lee, 2010; Penrose, 1959; Penrose, 1960) is widely recognized in strategic management (Han & Tong, 2024; Kising'u, 2025a). The firm growth theory (Penrose, 1971; Penrose, 2002; Penrose, 2009) assumes that multifunctional resources enable firms to restructure resources in novel ways to create growth (Ye *et al.*, 2023). The theory of the growth of the firm (Buckley & Casson, 2007; Penrose, 1996) is one the most commonly used basic theories to explain firm growth and firm performance (Buckley & de la Torre, 2024). The theory of the growth of the firm proposes that the relationship between multifunctional resources and firm growth is more closely aligned with firm growth theory (Najafabadi, Sajadi, & Davari, 2022). Therefore, the theory of the growth of the firm provides a relevant theoretical framework to the explain performance of network facilities providers in Mombasa County, Kenya.

The theory of the growth of the firm suggests that the firm represents a collection of productive resources, the disposal of which between different uses and over time is determined by administrative decision (von Nitzsch, Bird, & Saiedi, 2024). The theory of the growth of the firm suggests that the effective exploitation of unused resources is central to achieving firm growth and how firm growth depends on entrepreneurs' supply of entrepreneurial services to their firms (Ye *et al.*, 2023). The theory of the growth of the firm posits that the firm resources can be utilized, redeployed or recombined in different ways to create value (Han & Tong, 2024; Kising'u, 2025b). The theory of the growth of the firm postulates that entrepreneurs have to choose between different alternatives of how to allocate resources to achieve growth under uncertainty (von Nitzsch *et al.*, 2024). The theory of the growth of the firm advocates that entrepreneurial judgment plays an important role in firm growth (Najafabadi & Sajadi, 2023). Therefore, the theory of the growth of the firm provides a relevant theoretical framework to explain the influence of strategic premise control and strategic surveillance control on performance of network facilities providers in Mombasa County, Kenya.

Conceptual Framework

The conceptual framework illustrates that the performance of network facilities providers is conceptualized as the dependent variable. The conceptual framework portrays that strategic premise control and strategic surveillance control are conceptualized as the independent variables. Figure 1 presents the conceptual framework.

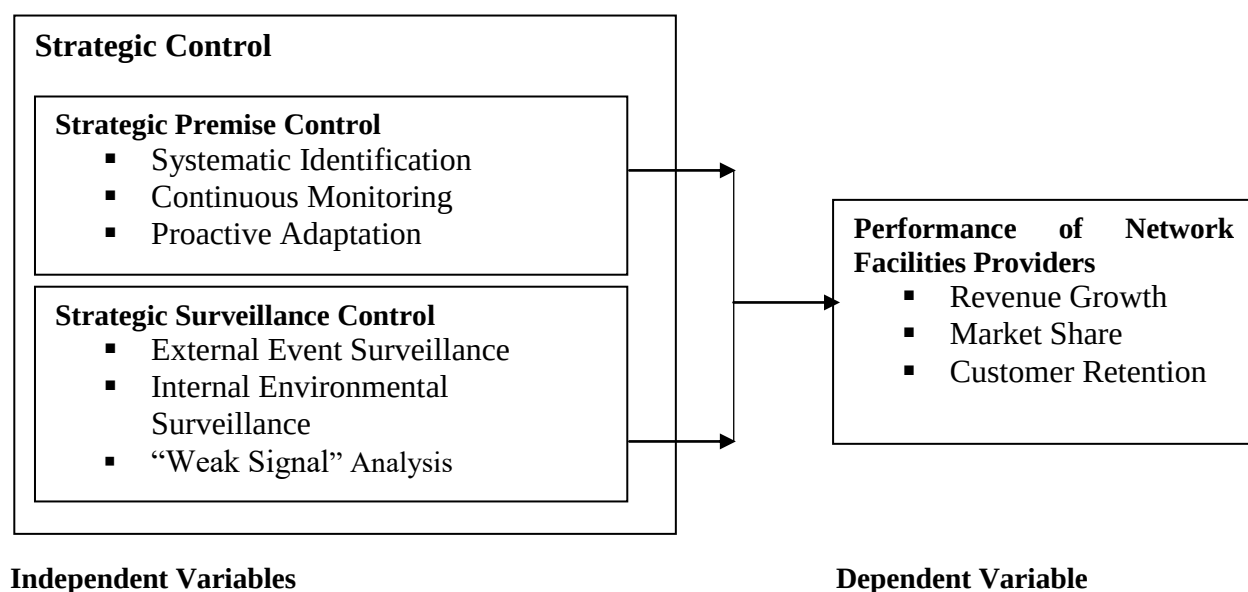


Figure 1: Conceptual Framework

Review of Literature on Variables

Strategic Premise Control

Strategic premise control is a vital component of strategic management designed to systematically and continuously verify whether the assumptions (premises) upon which a company's strategy is based are still valid. The strategic premise control is designed to continually and systematically verify whether those assumptions, which are foundational to your strategy, are still true (Muasya & Kising'u, 2025). The strategic premise control ensures that the strategy's foundational assumptions remain valid (Murunga & Deya, 2022). The premise control evaluates whether the key assumptions (e.g., economic forecasts, market trends, technological advancements) made during strategic planning are still valid (Kariuki & Mwanzia, 2024). The strategic premise control ensures that the foundation of the strategy remains sound (Muchira & Mwanzia, 2025). The strategic premise control validates the foundational assumptions (economic, industry-specific) that a strategy is built upon, ensuring they remain relevant, particularly focusing on those with the highest risk of shifting (Aggarwal *et al.* 2025; Matej & Amadeja, 2026). The key components of strategic premise control include systematic identification, broad scanning, continuous monitoring, information gathering and proactive adaptation.

Strategic Surveillance Control

The strategic surveillance control is a broad-based, unfocused, and ongoing monitoring of both internal and external events. The strategic surveillance control is fashioned for monitoring the different events in and out of the entity which have a likeliness of affecting the strategy (Muasya & Kising'u, 2025). The strategic surveillance control is a broader information scan. The strategic surveillance control involves a broad information scan to identify any overlooked factors that could impact the strategy (Abed, Ahmed, & Olaywi, 2021). Its purpose is to identify overlooked factors both inside and outside the company that might impact your strategy (Murunga & Deya, 2022). The strategic surveillance control could encompass industry publications, online or social mentions, industry trends, conference activities, etc. (Aggarwal *et al.* 2025). The strategic surveillance control process ideally covers any "ground" that might be missed by the more focused tactics of premise and implementation control (Muchira & Mwanzia, 2025). The key components of strategic surveillance control include generalized monitoring, external event surveillance, internal environmental surveillance, and weak signal analysis.

Firm Performance

Firm performance measures a firm's ability to efficiently use resources to achieve objectives. It is the firm's ability to increase market share, operate efficiently, and improve services, products, or sales, innovative practices, and overall profit shares (Qiwen, Taasim, Jumaat, & Johari, 2026). Firm performance, specifically why firms perform differently, is a core theme in strategic management research (Alanazi & Talib, 2025; Siriram & Plessis, 2024). It refers to the set of financial and nonfinancial indicators which provide information on the degree of achievement of set goals and objectives (Torchia & Solarino, 2026). The financial performance indicators are expressed in monetary terms (Yahaya, 2026). However, the non-financial performance indicators are not expressed in monetary terms and are characterized by greater subjectivity in regards to financial measures (Subačienė *et al.*, 2025).

Empirical Review

Strategic Premise Control and Firm Performance

Muasya and Kising'u (2025) examined the influence of strategic premise control on performance of commercial banks in Mombasa County, Kenya. The findings indicated that strategic premise control had a positive and significant relationship with performance of commercial banks. The results indicated that strategic premise control had a positive and significant influence on performance of commercial banks.

Murunga and Deya (2022) examined the influence of premise control on performance of commercial banks

in Nairobi County, Kenya. The results indicated that premise control had a positive and significant relationship with performance of commercial banks. The findings indicated that premise control had a positive and significant influence on performance of commercial banks.

Muchira and Mwanzia (2025) examined the influence of strategic surveillance control on performance of tea processing companies in Kiambu County, Kenya. The findings indicated that strategic surveillance control had a positive and significant relationship with performance of tea processing companies. The results indicated that strategic surveillance control had a positive and significant influence on performance of tea processing companies.

Strategic Surveillance Control and Firm Performance

Muasya and Kising'u (2025) examined the influence of strategic surveillance control on performance of commercial banks in Mombasa County, Kenya. The findings indicated that strategic surveillance control had a positive and significant relationship with performance of commercial banks. The results indicated that strategic surveillance control had a positive and significant influence on performance of commercial banks.

Murunga and Deya (2022) examined the influence of strategic surveillance controls on performance of commercial banks in Nairobi County, Kenya. The results indicated that strategic surveillance controls had positive and significant relationship with performance of commercial banks. The findings indicated that strategic surveillance controls had positive and significant influence on performance of commercial banks.

Muchira and Mwanzia (2025) examined the influence of strategic surveillance control on performance of tea processing companies in Kiambu County, Kenya. The findings indicated that strategic surveillance control had a positive and significant relationship with performance of tea processing companies. The results indicated that strategic surveillance control had a positive and significant influence on performance of tea processing companies.

METHODOLOGY

Research Philosophy

The research was guided by the positivist research philosophy which regards the world as made up of observable and measurable facts and assumes that there is an objective reality out there. The positivist research philosophy regards the world as made up of observable and measurable facts and assumes that there is an objective reality out there (Ma & Xie, 2023).

Research Design

Drawing on a quantitative non-experimental research methodology, the research utilized a correlational cross-sectional survey research design to examine the non-causal relationship between study variables. The design was appropriate for collecting data once from many individuals at a single point in time to test statistical relationships between two or more variables without the researcher controlling or manipulating any of them (Aryuwat *et al.*, 2024).

Target Population

The target population consisted of 88 managers of the 11 network facilities providers in Mombasa County, Kenya. The unit of analysis consisted of the firm, while the unit of observation consisted of the manager. Table 1 presents the target population.

Table 1: Target Population

Strata	Target Population	Percentage
Operations	11	12.5%
Human Resources	11	12.5%
Information Technology	11	12.5%
Customer Service	11	12.5%
Sales	11	12.5%
Marketing	11	12.5%
Procurement	11	12.5%
Finance & Accounting	11	12.5%
Total	88	100.0%

Sampling Frame

The sampling frame for this research consisted of the list of 88 managers of the 11 network facilities providers in Mombasa County, Kenya.

Sample Size and Sampling Techniques

This section presents the sample size and sampling techniques.

Sample Size

The Yamane (1967) formula was used to calculate sample size at 95% confidence level and 5% significance level to ensure that the sample size was truly reflective of the target population.

$$n = \frac{N}{1 + Ne^2}$$

Where:

n = Sample Size;

N = Target Population;

e = Margin of Error = 0.05.

With a target population of 88 managers of the 11 network facilities providers in Mombasa County, Kenya, the minimum recommended sample size for the study was calculated as:

$$n = \frac{88}{1 + 88(0.05)^2} = 72$$

Therefore, the minimum recommended sample size consisted of 72 managers of the 11 network facilities providers in Mombasa County, Kenya. Table 2 presents the sample size.

Table 2: Sample Size

Strata	Target Population	Sample Size
Operations	11	9
Human Resources	11	9
Information Technology	11	9
Customer Service	11	9
Sales	11	9
Marketing	11	9
Procurement	11	9
Finance & Accounting	11	9
Total	88	72

Sampling Techniques

The proportionate stratified random sampling technique was used to select a sample size of 72 managers of the 11 network facilities providers in Mombasa County, Kenya. The choice of the proportionate stratified random sampling technique was justified by the heterogeneous target population.

Data Collection Methods

A self-administered structured questionnaire was the means for collecting primary data. The data collection method was appropriate, because of its ability to collect a large amount of information in a reasonably quick span of time (Saunders & Kulchitsky, 2021).

Data Collection Procedures

A cross-sectional survey-based approach was used to collect primary data. Through the drop and pick method, the researcher and three research assistants hand delivered the survey questionnaire to a random sample of 72 managers of the 11 network facilities providers in Mombasa County, Kenya. A continuous follow up on responses was made by the researcher and research assistants.

Pilot Study

A pilot study was conducted to test the validity and reliability of the constructed survey questionnaire. The pilot study was conducted with a pilot trial sample size of 7 managers of the 11 network facilities providers in Mombasa County, Kenya. The pilot trial sample size consisted of 10% of the study's sample size. A common rule of thumb for pilot study is that a pilot study with at least 10% of the actual study's sample size is sufficient for an effective pilot study (Lee, Zhou, & Spence, 2026). However, the respondents in the pilot study were not included in the main survey.

Data Processing and Analysis

The collected data was checked for accuracy, completeness and consistency. The data was coded, edited, and entered into the Statistical Package for Social Sciences (SPSS) version 26 to create a data sheet that was used for analysis. The descriptive statistics were used to compute, summarize the data in respect to each of the study variables and describe the sample's characteristics. The Pearson's product moment correlation analysis was performed to confirm or deny the relationship between the study variables. A multiple linear analysis was performed with project performance as the dependent variable and strategic premise control and strategic surveillance control as the predictor variables.

Model Specification

The multiple linear regressions model was specified as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon \quad \dots\dots\dots \text{Model 1}$$

Where:

Y = Performance of network facilities providers

β_0 = Constant Term

X_1 = Strategic premise control

X_2 = Strategic surveillance control

$\beta_1 - \beta_2$ = Regression Coefficients to be Estimated

ε = Stochastic Error Term

Hypotheses Testing

In this research, two null hypotheses were tested at 5% level of significance ($\alpha = 0.05$; $t = 1.960$) at a 95% confidence level to statistically help draw acceptable and realistic inferences. Therefore, the decision rule was to reject the H_{0i} if the $P \leq 0.05$, and otherwise fail to reject the H_{0i} if the $P > 0.05$.

Table 2 presents the hypotheses testing procedure.

Table 2: Hypotheses Testing

Hypotheses	Model	Hypotheses Testing	Decision Rule
H_{01} : Strategic premise control has no significant influence on performance of network facilities providers in Mombasa County, Kenya.	$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$ Model 3.1	Standard Multiple Regression Analysis	$H_{01}: \beta_1 = 0$ $H_{11}: \beta_1 \neq 0$ If the $P \leq 0.05$ reject the H_{01} . If the $P > 0.05$ fail to reject the H_{01} .
H_{02} : Strategic surveillance control has no significant influence on performance of network facilities providers in Mombasa County, Kenya.			$H_{02}: \beta_2 = 0$ $H_{12}: \beta_2 \neq 0$ If the $P \leq 0.05$ reject the H_{02} . If the $P > 0.05$ fail to reject the H_{02} .

FINDINGS

Response Rate

Out of the 72 survey questionnaires distributed for the main survey, only 55 valid responses were obtained. Therefore, there was a valid response rate of 76.4%, which was adequate for data processing and analysis. Existent literature posits that survey response rates of 70% or higher are needed if findings are to be considered generalizable (Ericson *et al.*, 2023). Table 3 presents the response rate results.

Table 3: Response Rate

Strata	Frequency	Response Rate
Response	55	76.4%
Non-Response	17	23.6%
Total	72	100.0%

Correlation Results

The Pearson's product moment correlation analysis was performed to confirm or deny the relationships between the study variables. The correlation results indicated that strategic premise control had a moderately strong positive and significant relationship with performance of network facilities providers ($r = 0.560$, $p \leq 0.05$) in Mombasa County, Kenya. However, the correlation results showed that strategic surveillance control had a strong positive and significant relationship with performance of network facilities providers ($r = 0.726$, $p \leq 0.05$) in Mombasa County, Kenya. Table 4 presents the Pearson's product moment correlation results.

Table 4: Correlation Results

Variable		X ₁	X ₂	Y
Strategic Premise Control (X ₁)	Pearson Correlation	1		
	Sig. (2-tailed)			
	n	55		
Strategic Surveillance Control (X ₂)	Pearson Correlation	.470**	1	
	Sig. (2-tailed)	.000		
	n	55	55	
Performance of Network Facilities Providers (Y)	Pearson Correlation	.560**	.726**	1
	Sig. (2-tailed)	.000	.000	
	n	55	55	55

** . Correlation is significant at the 0.01 level (2-tailed).

Multiple Regression Results

A standard multiple linear analysis was performed with performance of network facilities providers as the dependent variable and strategic premise control and strategic surveillance control as the predictor variables. The multiple regression analysis was performed to test to what extent, if any, the two strategic control significantly predict performance of network facilities providers in Mombasa County, Kenya.

Model Summary

From the model summary in table, it is clear that the value of coefficient of correlation (R) was 0.767, while the value of coefficient of determination (R^2) was 0.588, while the value of the adjusted R^2 was 0.572. The value of the std. error of the estimate was 0.237 and the value of the Durbin-Watson test was 2.069. The R value of 0.767 suggested that there was a strong positive correlation between the strategic control and performance of network facilities providers in Mombasa County, Kenya. The R^2 value of 0.588 suggested that the overall model as a whole (the model involving constant, strategic premise control and strategic surveillance control) was able to significantly predict and explain approximately 58.8% of the variance in performance of network facilities providers in Mombasa County, Kenya.

The adjusted R Square value of 0.572 suggested that the overall model as a whole (the model involving constant, strategic premise control and strategic surveillance control) significantly predicted and explained 57.2% of the variance in performance of network facilities providers in Mombasa County, Kenya. The std. error of the estimate value of 0.237 suggested that there could be other factors not included in the model in the current study that could also predict and explain the remaining 34.3% of the variance in performance of network facilities providers in Mombasa County, Kenya. Therefore, there is in need for future research to discover the other variables not included in the model in the current study that also predict the remaining variance in performance of network facilities providers in Mombasa County, Kenya.

From the model summary table, the Durbin-Watson test statistic had a value of 2.069, falling within the optimum range of 1.5 to 2.5, suggesting that there was no severe autocorrelation detected in the in the residual values in the datasets. Generally, Durbin-Watson statistics falling within the optimum range of 1.5 to 2.5 indicates that there is no severe autocorrelation detected in the in the residual values in the datasets (Hair *et al.*, 2021). Table 5 presents the model summary results.

Table 5: Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.767 ^a	.588	.572	.237	2.069

a. Predictors: (Constant), Strategic Surveillance Control, Strategic Premise Control

b. Dependent Variable: Performance of Network Facilities Providers

Analysis of Variance

From the Analysis of Variance (ANOVA) table, the overall model as a whole (the model involving constant, strategic premise control and strategic surveillance control), achieved a high degree of fit, as reflected by $R^2 = 0.588$, adj. $R^2 = 0.572$, $F(2, 52) = 37.129$, $p \leq 0.05$. The null hypothesis was that the linear combination of predictor variables (strategic premise control and strategic surveillance control) was not able to significantly predict performance of network facilities providers in Mombasa County, Kenya. However, the alternative hypothesis was that the linear combination of predictor variables (strategic premise control and strategic surveillance control) was able to significantly predict performance of network facilities providers in Mombasa County, Kenya. The standard multiple linear regression results showed that the linear combination of predictor variables (strategic premise control and strategic surveillance control) significantly predicted performance of network facilities providers in Mombasa County, Kenya. The null hypothesis was rejected in favor of the alternative hypothesis. Therefore, the decision was that the linear combination of predictor variables (strategic premise control and strategic surveillance control) significantly predict performance of network facilities providers in Mombasa County, Kenya. Table 6 presents the ANOVA results.

Table 6: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.185	2	2.092	37.129	.000 ^b
	Residual	2.931	52	.056		
	Total	7.115	54			

a. Dependent Variable: Performance of Network Facilities Providers

b. Predictors: (Constant), Strategic Surveillance Control, Strategic Premise Control

Multiple Regression Coefficients

From the coefficients table, when the unstandardized regression coefficients (B) were substituted to the multiple regression model specified for the study, the final predictive equation was:

$$Y = 1.996 + 0.164X_1 + 0.334X_2$$

The final predictive equation suggested that holding all factors in to account constant (strategic premise control and strategic surveillance control), constant at zero, performance of network facilities providers in Mombasa County, Kenya would be 1.996. The final predictive equation postulated that with all other factors held constant, a unit increase in strategic premise control would lead to 0.164 unit increase in performance of network facilities providers in Mombasa County, Kenya. The final predictive equation suggested that with all other factors held constant, a unit increase in strategic surveillance control would lead to 0.334 unit increase in performance of network facilities providers in Mombasa County, Kenya. Based on the magnitude of the unstandardized regression coefficients (B) of the independent variables, strategic surveillance control was the best predictor of the variance in performance of network facilities providers in Mombasa County, Kenya.

The multiple regression results indicated that strategic premise control had a positive and significant influence on the performance of network facilities providers ($\beta_1 = 0.282$; $t = 2.792$; $p \leq 0.05$) in Mombasa County, Kenya. The regression results indicated that strategic surveillance control had a positive and significant influence on the performance of network facilities providers ($\beta_2 = 0.593$; $t = 5.883$; $p \leq 0.05$) in Mombasa County, Kenya. Table 7 presents the multiple regressions coefficients results.

Table 7: Regression Coefficients^a

Model	Unstandardized coefficients		Standardized Coefficients Beta	t	Sig.	Collinearity Statistics	
	B	Std. Error				Tolerance	VIF
1 (Constant)	1.996	.225		8.881	.000		
Strategic Premise Control	.164	.059	.282	2.792	.007	.779	1.284
Strategic Surveillance Control	.334	.057	.593	5.883	.000	.687	1.456

a. Dependent Variable: Performance of Network Facilities Providers

Hypotheses Test Results

In this research, 4 null hypotheses were tested. The hypotheses were tested at 5% level of significance, $\alpha = 0.05$, $t = 1.960$, and 95% confidence level to statistically help draw acceptable and realistic inferences. Therefore, the decision rule was to reject the null hypothesis H_{0i} if the $P \leq 0.05$, and otherwise fail to reject the null hypothesis H_{0i} if the $P > 0.05$.

Hypothesis One Test Results

The H_{01} predicted that strategic premise control has no significant influence on performance of network facilities providers in Mombasa County, Kenya. The decision rule was to reject the H_{01} if the $\beta_1 \neq 0$, $t \geq 1.960$, $P \leq 0.05$, and otherwise fail to reject the H_{01} if the $\beta_1 = 0$, $t < 1.960$, $P > 0.05$. The standard multiple regression results showed that strategic premise control had a positive and significant influence on the performance of network facilities providers ($\beta_1 = 0.282$; $t = 2.792$; $p \leq 0.05$) in Mombasa County, Kenya. The H_{01} was rejected, providing the empirical support for H_{11} . Therefore, deduction was made that strategic premise control has a significant influence on performance of network facilities providers in Mombasa County, Kenya.

Hypothesis Two Test Results

The H_{02} predicted that strategic surveillance control has no significant influence on performance of network facilities providers in Mombasa County, Kenya. The decision rule was to reject the H_{01} if the $\beta_1 \neq 0$, $t \geq 1.960$, $P \leq 0.05$, and otherwise fail to reject the H_{01} if the $\beta_1 = 0$, $t < 1.960$, $P > 0.05$. The standard multiple regression results showed that strategic surveillance control had a positive and significant influence on the performance of network facilities providers ($\beta_2 = 0.593$; $t = 5.883$; $p \leq 0.05$) in Mombasa County, Kenya. The H_{02} was rejected, providing the empirical support for H_{12} . Therefore, deduction was made that strategic surveillance control has a significant influence on performance of network facilities providers in Mombasa County, Kenya. Table 8 presents the hypotheses test results.

Table 8: Hypotheses Test Results

Hypothesis	β	t	Sig.	Decision
H_{01} : Strategic premise control has no significant influence on performance of network facilities providers in Mombasa County, Kenya.	.282	2.792	.007	Reject the H_{01}
H_{02} : Strategic surveillance control has no significant influence on performance of network facilities providers in Mombasa County, Kenya.	.593	5.883	.000	Reject the H_{02}

Discussions

The purpose of this quantitative correlational research was to examine the influence of strategic control on

performance of network facilities providers in Mombasa County, Kenya. Specifically, the research sought to examine the influence of strategic premise control and strategic surveillance control on performance of network facilities providers in Mombasa County, Kenya. The Pearson's product moment correlation analysis was performed to confirm or deny the relationship between the study variables. The correlation results indicated that the strategic control had positive and significant relationship with performance of network facilities providers in Mombasa County, Kenya. A standard multiple linear analysis was performed with performance of network facilities providers as the dependent variable and strategic premise control and strategic surveillance control as the predictor variables. The regression results showed that the strategic control had positive and significant influence on performance of network facilities providers in Mombasa County, Kenya. The results are consistent to the results of previous studies (Bchennaty *et al.*, 2024; Lerai, 2023; Muasya & Kising'u, 2025; Muchira & Mwanzia, 2025; Murunga & Deya, 2022).

The first specific objective was to establish the influence of strategic premise control on performance of network facilities providers in Mombasa County, Kenya. The first null hypothesis (H_01) predicted that strategic premise control has no significant influence on performance of network facilities providers in Mombasa County, Kenya. The Pearson's correlation results indicated that strategic premise control had a moderately strong positive and significant relationship with performance of network facilities providers in Mombasa County, Kenya. The regression results showed that strategic premise control had a positive and significant influence on performance of network facilities providers in Mombasa County, Kenya. The H_01 was rejected, providing the empirical support for the H_11 . Therefore, the decision was that strategic premise control has a significant influence on performance of network facilities providers in Mombasa County, Kenya. The results are consistent to the results of previous studies (Muasya & Kising'u, 2025; Muchira & Mwanzia, 2025; Murunga & Deya, 2022).

The second specific objective was to assess the influence of strategic surveillance control on performance of network facilities providers in Mombasa County, Kenya. The second null hypothesis (H_02) predicted that strategic surveillance control has no significant influence on performance of network facilities providers in Mombasa County, Kenya. The Pearson's correlation results indicated that strategic surveillance control had a strong positive and significant relationship with performance of network facilities providers in Mombasa County, Kenya. The regression results showed that strategic surveillance control had a positive and significant influence on performance of network facilities providers in Mombasa County, Kenya. The H_02 was rejected, providing the empirical support for the H_12 . Therefore, the decision was that strategic surveillance control has a significant influence on performance of network facilities providers in Mombasa County, Kenya. The results are in harmony with the results of past studies (Muasya & Kising'u, 2025; Muchira & Mwanzia, 2025; Murunga & Deya, 2022).

SUMMARY

The purpose of this quantitative correlational research was to examine the influence of strategic control on performance of network facilities providers in Mombasa County, Kenya. The Pearson's product moment correlation analysis was performed to confirm or deny the relationship between the study variables. The correlation results indicated that the strategic control had positive and significant relationship with performance of network facilities providers in Mombasa County, Kenya. A standard multiple linear analysis was performed with performance of network facilities providers as the dependent variable and strategic premise control and strategic surveillance control as the predictor variables. The regression results showed that the strategic control had positive and significant influence on performance of network facilities providers in Mombasa County, Kenya.

The first specific objective was to establish the influence of strategic premise control on performance of network facilities providers in Mombasa County, Kenya. The first null hypothesis (H_01) predicted that

strategic premise control has no significant influence on performance of network facilities providers in Mombasa County, Kenya. The Pearson's correlation results indicated that strategic premise control had a moderately strong positive and significant relationship with performance of network facilities providers in Mombasa County, Kenya. The regression results showed that strategic premise control had a positive and significant influence on performance of network facilities providers in Mombasa County, Kenya. The H_01 was rejected, providing the empirical support for H_11 . Therefore, the decision was that strategic premise control has a significant influence on performance of network facilities providers in Mombasa County, Kenya.

The second specific objective was to assess the influence of strategic surveillance control on performance of network facilities providers in Mombasa County, Kenya. The second null hypothesis (H_02) predicted that strategic surveillance control has no significant influence on performance of network facilities providers in Mombasa County, Kenya. The Pearson's correlation results indicated that strategic surveillance control had a strong positive and significant relationship with performance of network facilities providers in Mombasa County, Kenya. The regression results showed that strategic surveillance control had a positive and significant influence on performance of network facilities providers in Mombasa County, Kenya. The H_02 was rejected, providing the empirical support for H_12 . Therefore, the decision was that strategic surveillance control has a significant influence on performance of network facilities providers in Mombasa County, Kenya.

CONCLUSION

The purpose of this quantitative correlational research was to examine the influence of strategic control on performance of network facilities providers in Mombasa County, Kenya. The Pearson's product moment correlation analysis was performed to confirm or deny the relationship between the study variables. The correlation results indicated that the strategic control had positive and significant relationship with performance of network facilities providers in Mombasa County, Kenya. A standard multiple linear analysis was performed with performance of network facilities providers as the dependent variable and strategic premise control and strategic surveillance control as the predictor variables. The regression results showed that the strategic control had positive and significant influence on performance of network facilities providers in Mombasa County, Kenya. Therefore, the conclusion was that strategic control have significant influence on performance of network facilities providers in Mombasa County, Kenya.

The first specific objective was to establish the influence of strategic premise control on performance of network facilities providers in Mombasa County, Kenya. The first null hypothesis (H_01) predicted that strategic premise control has no significant influence on performance of network facilities providers in Mombasa County, Kenya. The Pearson's correlation results indicated that strategic premise control had a moderately strong positive and significant relationship with performance of network facilities providers in Mombasa County, Kenya. The regression results showed that strategic premise control had a positive and significant influence on performance of network facilities providers in Mombasa County, Kenya. The H_01 was rejected, providing the empirical support for H_11 . Therefore, the first conclusion was that strategic premise control has a significant influence on performance of network facilities providers in Mombasa County, Kenya.

The second specific objective was to assess the influence of strategic surveillance control on performance of network facilities providers in Mombasa County, Kenya. The second null hypothesis (H_02) predicted that strategic surveillance control has no significant influence on performance of network facilities providers in Mombasa County, Kenya. The Pearson's correlation results indicated that strategic surveillance control had a strong positive and significant relationship with performance of network facilities providers in Mombasa County, Kenya. The regression results showed that strategic surveillance control had a positive and

significant influence on performance of network facilities providers in Mombasa County, Kenya. The H_0 2 was rejected, providing the empirical support for H_1 2. Therefore, the second conclusion was that strategic surveillance control has a significant influence on performance of network facilities providers in Mombasa County, Kenya.

RECOMMENDATIONS

Managerial Implications

From the findings of this research, the research recommends that managers implement strategic control to foster the performance of network facilities providers.

Policy Implications

From the findings of this research, the research recommends that policy makers within construction industry should to review the policy framework to encourage project managers to implement strategic control to foster the performance of network facilities providers.

Limitations and Future Research

This research paper generates novel insights into how strategic control predict the performance of network facilities providers. However, the current research has a number of limitations, that need to be taken into consideration. First, the research was limited to the influence of strategic control on performance of network facilities providers in Mombasa County, Kenya. Subsequently, caution should be taken when attempting to generalize the results beyond the construction industry. Future research could examine the influence of strategic control on project performance in other sectors or in other regions. Second, the research was contextually limited to only two strategic control, namely strategic premise control and strategic surveillance control. Future research should examine the influence of other strategic control on performance of network facilities providers. Third, as the research paper relied on a cross-sectional survey design, no inferences about the causality of relationships can be made. Therefore, future researchers should consider conducting a longitudinal study on the influence of strategic control on performance of network facilities providers.

REFERENCES

- Abdulkadir, M. (2023). *Project management schedule planning for a short-distance factory relocation: A case study* (Master's thesis, University of Vaasa).
- Abed, A. A., Ahmed, S. F., & Olaywi, A. H. (2021). The effect of strategic surveillance radar in reducing strategic drift analytical research of the opinions of a sample of workers in private Universities in the Holy Karbala Governorate. *Webology*, 18.
- Aggarwal, K., Khoa, B. T., Sagar, K. D., Agrawal, R., Dhingra, M., Dhingra, J., & Kumar, R. K. (2025). Marketing information system based on unsupervised visual data to manage transportation industry using signal processing. *Expert Systems*, 42(1), e13384.
- Alanazi, S. D., & Talib, A. A. A. (2025). Strategic management practices and strategic performance: A systematic literature review. *WSEAS Transactions on Business and Economics*, 22, 2067-2078.
- Al-Swidi, A. K., Al-Hakimi, M. A., Al-Sarraf, J., & Al Koliby, I. S. (2024). Innovate or perish: Can green entrepreneurial orientation foster green innovation by leveraging green manufacturing practices under different levels of green technology turbulence?. *Journal of Manufacturing Technology Management*, 35(1), 74-94.
- Balachandra, R., & Pinowski, M. (2021). Strategic control system use in healthcare: A systematic

- review. *Journal of Health Organization and Management*, 35(2), 123-140.
- Bandaru, S. (2026). Reliable network infrastructure as critical digital infrastructure for modern society. *Journal of International Crisis and Risk Communication Research*, 9(1), 285.
- Bárceñas, R. E., Gracia, T. J. H., & Ávila, D. D. (2026). The balanced scorecard as a tool for strategic control in organizations: A case study. *Journal of Administrative Science*, 7(14), 1-5.
- Barney, J. (1991). Competitive advantage. *Journal of management*, 17(1), 99-120.
- Barney, J. B. (1986). Organizational culture: can it be a source of sustained competitive advantage?. *Academy of management review*, 11(3), 656-665.
- Barney, J. B. (1986). Strategic factor markets: Expectations, luck, and business strategy. *Management science*, 32(10), 1231-1241.
- Barney, J. B., Ketchen Jr, D. J., & Wright, M. (2011). The future of resource-based theory: revitalization or decline?. *Journal of management*, 37(5), 1299-1315.
- Bchennaty, B., Khan, M. N., Massoud, M., & Elhassan, T. (2024). Appraising the Role of Strategic Control in Financial Performance: The mediating effect of the resource allocation process—The case of the Ministry of Finance—North Lebanon. *International Journal of Financial Studies*, 12(3), 90.
- Bosire, C., Kising'u, T. M., & Gichinga, L. W. (2025). Dynamic Capabilities and Performance of Logistics Companies in Mombasa County, Kenya. *Reviewed Journal International of Business Management*, 6(1), 341-365.
- Buckley, P. J., & Casson, M. (2007). Edith Penrose's theory of the growth of the firm and the strategic management of multinational enterprises. In *Foreign Direct Investment, China and the World Economy* (pp. 53-77). London: Palgrave Macmillan UK.
- Buckley, P. J., & de la Torre, J. R. (2024). The Theory of the Growth of the Firm: Introduction: Edith Penrose and the next sixty years. *Strategic Management Review*, 5(1-2), 3-26.
- Chatterjee, S., Chaudhuri, R., Vrontis, D., & Thrassou, A. (2023). Revisiting the resource-based view (RBV) theory: from cross-functional capabilities perspective in post COVID-19 period. *Journal of Strategic Marketing*, 1-16.
- Chisika, S. N., & Yeom, C. (2024). Bridging the digital divide: Advancing equitable internet access in rural Kenya for sustainable development. *Asia-Pacific Journal of Convergent Research Interchange (APJCRI)*, 187-202.
- Choi, Y. H., Kim, D., Ko, M., Cheon, K. Y., Park, S., Kim, Y., & Yoon, H. (2023). ML-based 5G traffic generation for practical simulations using open datasets. *IEEE communications magazine*, 61(9), 130-136.
- Collins, A., Hamza, O., Eweje, A., & Babatunde, G. O. (2023). Adopting agile and DevOps for telecom and business analytics: Advancing process optimization practices. *International Journal of Multidisciplinary Research and Growth Evaluation*, 4(1), 682-696.
- Donaldson, L. (2001). *The contingency theory of organizations*. Sage.
- Durst, S., Hinteregger, C., & Zieba, M. (2024). The influence of environmental turbulence on cyber security risk management and organizational resilience. *Computers & Security*, 137, 103591.
- Emara, N., & Katz, R. (2024). Assessing the economic impact of mobile telecommunications in Egypt: A structural model approach. *Digital Policy, Regulation and Governance*, 26(5), 501-525.

- Fullan, M. (2007). Change theory as a force for school improvement. In *Intelligent leadership: Constructs for thinking education leaders* (pp. 27-39). Dordrecht: Springer Netherlands.
- Funnell, S. C., & Rogers, P. J. (2011). *Purposeful program theory: Effective use of theories of change and logic models*. John Wiley & Sons.
- Goldratt, E. M. (1990). *Theory of constraints* (pp. 1-159). Croton-on-Hudson: North River.
- Goldratt, E. M. (1996). *Production the TOC way: work book*. Avraham Y. Goldratt Institute.
- Goldratt, E. M., & Cox, J. (1984). *The Goal*, Croton-on-Hudson. NY: North River Press Inc.
- Hair Jr, J. F., & Sarstedt, M. (2021). Data, measurement, and causal inferences in machine learning: opportunities and challenges for marketing. *Journal of Marketing Theory and Practice*, 1-13.
- Hajar, M. A., Alkahtani, A. A., Ibrahim, D. N., Al-Sharafi, M. A., Alkaws, G., Iahad, N. A., ... & Tiong, S. K. (2022). The effect of value innovation in the superior performance and sustainable growth of telecommunications sector: Mediation effect of customer satisfaction and loyalty. *Sustainability*, 14(10), 6342.
- Han, N., & Tong, T. W. (2024). The role of knowledge resources in Penrose's the theory of the growth of the firm: An IPR Perspective. *Strategic Management Review*, 5(1-2), 125-147.
- Hanson, E. M. (1979). School management and contingency theory: An emerging perspective. *Educational Administration Quarterly*, 15(2), 98-116.
- Hernandez, M., & Hodges, S. (2003). Building upon the theory of change for systems of care. *Journal of Emotional and Behavioral Disorders*, 11(1), 19-26.
- Ibrahim, M., Magaji, S., & Salisu, A. (2023). Mobile telecommunication and economic growth: Evidence from ARDL Modeling. *International Journal of Entrepreneurship, Business and Creative Economy*, 3(1), 15.
- Iradukunda, C., & Irechukwu, E. N. (2023). Strategic controls and organizational performance in Rwanda. A case of Duterimbere IMF PLC. *Journal of Strategic Management*, 7(5), 40-60.
- Kariuki, A. W., & Mwanzia, M. (2024). Strategic control techniques and financial performance of savings and credit cooperatives in Nairobi City County, Kenya. *International Journal of Social Sciences Management and Entrepreneurship (IJSSME)*, 8(4), 225-239.
- Kariuki, J., Kinyua, G. M., & Waithaka, P. (2023). The moderating influence of environmental turbulence on the relationship between core competences and firm performance of star rated hotels Nairobi City County, Kenya. *International Journal of Managerial Studies and Research (IJMSR)*, 11(10), 17-34.
- Kibinda, N., Shao, D., Mwogosi, A., & Mambile, C. (2025). Broadband infrastructure sharing as a catalyst for rural digital economy: A systematic review for developing countries. *Telecommunications Policy*, 103028.
- Kising'u, T. M. (2025b). Smart agricultural technologies and sustainability of agricultural projects in Kwale County, Kenya. *Reviewed Journal of Science & Technology*, 3(1), 17-42.
- Kising'u, T. M. (2025a). *Business model innovation and performance of small and medium-sized enterprises in Mombasa County, Kenya*. *Reviewed Journal of Science & Technology*, 3 (1), 43–65.
- Kovalyk, O., & Yang, C. (2025). Formation of an innovative mechanism for strategic control at an enterprise. *Економіка розвитку систем*, 7(2), 85-90.

- Kyendo, R. K., & Sigei, R. (2025). Competitive strategies and performance of firms in the telecommunication industry in Kenya. *International Journal of Management and Business Research*, 7(1), 58-74.
- Lee, C. Y. (2010). A theory of firm growth: Learning capability, knowledge threshold, and patterns of growth. *Research Policy*, 39(2), 278-289.
- Lee, S. F., Zhou, K., & Spence, J. (2026). Internal pilot sample size re-estimation for the B-free trial: A case study of a cluster randomized crossover trial. *Contemporary Clinical Trials*, 108293.
- Lerai, S. E. (2023). Influence of strategic control on organizational performance of commercial-based parastatals in Kenya. *Journal of Strategic Management*, 3(2), 15-22.
- Longenecker, J. G., & Pringle, C. D. (1978). The illusion of contingency theory as a general theory. *Academy of Management Review*, 3(3), 679-683.
- Lucas Jr, G. H., & Gresham, L. G. (1985). Power, conflict, control, and the application of contingency theory in marketing channels. *Journal of the Academy of Marketing Science*, 13(3), 25-38.
- Mabin, V. J., & Balderstone, S. J. (2003). The performance of the theory of constraints methodology: Analysis and discussion of successful TOC applications. *International Journal of Operations & Production Management*, 23(6), 568-595.
- Makazi, D. M., Kising'u, T. M., & Gichinga, L. W. (2025). Dynamic Capabilities and Performance of State Corporations in Mombasa County, Kenya. *Reviewed Journal of Education Practice*, 5(1), 57-79.
- Matej, Č., & Amadeja, L. (2026). Work has changed, has HRM? Designing for the distributed, fragmented, and fluid era. *Human Resource Management*, 65(2), 305-324.
- Mbithi, B., & Ondara, B. (2026). Optimizing anomaly detection in 5G and beyond networks using reinforcement learning. *International Journal for Multidisciplinary Research (IJFMR)*, 8(1), 1-17.
- Meraviglia, E., Magnaghi, M., Capone, A., Melazzi, N. B., Valsecchi, M., & Dozio, L. (2026). Exploring the future of telecommunications through a Techno-Economic lens. *Computer Networks*, 276, 111984.
- Muasya, M. N., & Kising'u, T. (2025). Strategic control and performance of commercial banks in Mombasa County, Kenya. *The Strategic Journal of Business & Change Management*, 12(1), 276–290.
- Muchira, N. W., & Mwanzia, M. (2025). Strategic control techniques and performance of tea processing companies in Kiambu County, Kenya. *International Journal of Innovation, Enterprise, and Social Sciences*, 5(1), 139-155.
- Müller, S. D., Konzag, H., Nielsen, J. A., & Sandholt, H. B. (2024). Digital transformation leadership competencies: A contingency approach. *International Journal of Information Management*, 75, 102734.
- Murunga, N. J., & Deya, J. (2022). Influence of strategic controls on performance of commercial banks in Nairobi County, Kenya. *International Academic Journal of Human Resource and Business Administration*, 4(1), 328-345.
- Musa, I., Magaji, S., Eke, C. I., & Salisu, A. (2022). Analysis of mobile telecommunication and economic growth evidence from ARDL Modeling. *FORCE: Focus on Research in Contemporary Economics*, 3(2), 369-393.
- Musyoka, M. N. (2023). *Porter's generic competitive strategies, alliance partnerships and performance of*

- mobile telephone network service providers in Kenya* (Doctoral dissertation, Machakos University).
- Mwaniki, S. W., & Anene, E. (2023). Competitive strategies and performance of firms in the telecommunication industry in Kenya. *International Academic Journal of Economics and Finance*, 3(10), 471-525.
- Najafabadi, R. N., Sajadi, S. M., & Davari, A. (2022). The Penrose's growth theory: A systematic review of the literature.
- Njoroge, G. W. (2024). *Digital capabilities and performance of telecommunication companies in Kenya* (Doctoral dissertation, Kenyatta University).
- Olatunde-Thorpe, J., Aifuwa, S. E., Oshoba, T., Ogbuefi, E., & Akokodaripon, D. (2022). Integrating load balancing strategies: Conceptual frameworks ensuring optimized performance across enterprise and service provider networks. *Journal of Frontiers in Multidisciplinary Research*, 3(2), 170-181.
- Penrose, (E. T). (1971). *The growth of firms, Middle East oil and other essays*. Frank Cass, London, UK.
- Penrose, E. (1959). *The theory of the growth of the firm*. Oxford, UK: Oxford University Press.
- Penrose, E. T. (1960). The growth of the firm: A case study: The Hercules Powder Company. *Business History Review*, 34(1) 1-23.
- Penrose, E. T. (1996). *Growth of the firm and networking*. W. Warner, ed. International Encyclopedia of Business and Management. Routledge, London, 1716-1724.
- Penrose, E. T. (2002). *The growth of the firm: The legacy of Edith Penrose*. OUP Oxford.
- Penrose, E. T. (2009). *The theory of the growth of the firm*. Oxford university press.
- Peteraf, M. A. (1993). The cornerstones of competitive advantage: a resource-based view. *Strategic management journal*, 14(3), 179-191.
- Qiwon, J., Taasim, S. I. B., Jumaat, N. J. B., & Johari, S. B. (2026). Intangible resource influence on sustainable firm performance: A qualitative analysis of Chinese firms. *Perinatal Journal*, 34(1), 1077-1096.
- Sani, S. M. B., & Seresht, H. R. (2025). The role of strategic control levers on organizational project performance: The mediating effect of strategic agility. *Future of Work and Digital Management Journal*, 3(4), 1-12.
- Shabangu, P., & Jita, T. (2025). Digital divide and social justice in south african rural schools. *International Journal of Learning, Teaching and Educational Research*, 24(10), 892-910.
- Sihombing, P. S. D., & Surbakti, L. P. (2026). Digitalization in strategic management accounting: The role of strategic control systems, performance measurement, and decision-making. *JEMBA: Jurnal Ekonomi Pembangunan, Manajemen & Bisnis, Akuntansi*, 6(1), 66-75.
- Singh, S. K. (2026). Regulations and standards in wireless communication. In *Advanced Wireless Communication Systems: A Comprehensive Guide* (pp. 30-81). Bentham Science Publishers.
- Singh, S. K., & Kumar, A. (Eds.). (2026). *Advanced wireless communication systems: A comprehensive guide*. Bentham Science Publishers.
- Siriram, R., & Plessis, C. D. (2024). A systems thinking approach to improving firms' competitive capabilities and firm performance. *Systemic Practice and Action Research*, 37(6), 1241-1280.
- Subačienė, R., Arbidane, I., Mietule, I., Kotane, I., Auzina-Emsina, A., & Lace, N. (2025). System of Non-

- Financial Performance Indicators in the Manufacturing Sector. *Administrative Sciences*, 16(1), 17.
- Sundström, A., & Svärdesten, F. (2026). Modes of strategic control: shifting dynamics between planning and control tools in strategy implementation. *Public Management Review*, 28(4), 1062-1086.
- Torchia, M., & Solarino, A. (2026). Gender, ethnic and nationality board diversity and firm performance: A meta-analysis. *Corporate Governance: The International Journal of Business in Society*, 26(1), 233-252.
- Uzoka, A., Cadet, E., & Ojukwu, P. U. (2024). The role of telecommunications in enabling Internet of Things (IoT) connectivity and applications. *Comprehensive Research and Reviews in Science and Technology*, 2(02), 055-073.
- Von Nitzsch, J., Bird, M., & Saiedi, E. (2024). The strategic role of owners in firm growth: Contextualizing ownership competence in private firms. *Strategic Entrepreneurship Journal*, 18(3), 553-581.
- Walton, R. E., Cutcher-Gershenfeld, J., & McKersie, R. B. (2000). *Strategic negotiations: A theory of change in labor-management relations*. Cornell University Press.
- Wernerfeld, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171-180.
- Wernerfelt, B. (1995). The resource-based view of the firm: Ten years after. *Strategic management journal*, 16(3), 171-174.
- Yahaya, O. A. (2026). Effect of energy efficiency reporting on the financial performance of Nigerian listed firms. *International Journal of Accounting and Finance Studies*, 11(2), 60-88.
- Yeboah, O. W., Diaba, B., Mohammed, A. R., & Boateng, P. A. (2023). Role of strategic control systems in achieving strategic goals. *International Journal of Research and Scientific Innovation X*, 232-41.
- Ye, K., Li, Y., Wu, P., & Ye, Z. (2023). Competitive strategy, development zone policy and firm growth: Empirical evidence from China. *Plos one*, 18(10), e0292904.