**STRATEGIC MANAGEMENT PRACTICES AND THEIR IMPACT ON RESIDENTIAL CONSTRUCTION PERFORMANCE: A CASE STUDY OF NAIROBI CITY COUNTY, KENYA**

# ABSTRACT

This study examined how strategic management practices influenced the performance of public housing building projects in Nairobi City County, Kenya, where such projects often failed to meet their goals. Grounded in Decision Theory, Resource-Based View Theory, and Stakeholder Theory, the research explored how public entities made strategic choices in planning, resource allocation, and contract selection. It aimed to determine how projects could leverage unique resources and capabilities while addressing stakeholder needs to enhance success. The study focused on several strategic management aspects: decision-theory-informed planning, resource scheduling aligned with the resource-based view, stakeholder-oriented funding, effective communication throughout the project lifecycle, and control and evaluation practices that enhanced performance and accountability. Employing a descriptive research design, the study used stratified random sampling to select 145 participants, including strategic managers, supervisors, engineers, and contractors involved in public residential construction projects. Data were collected via questionnaires, preceded by a pilot study to ensure validity and reliability. Quantitative data analysis was conducted using SPSS software, applying summary statistics and multivariable regression to assess the relationship between strategic management practices (predictors) and project success (outcome). Results were presented in tables and graphs, aiming to identify key strategic methods that improved project outcomes. Ultimately, the findings were intended to inform policies and implementation strategies to enhance the effectiveness and success of public housing initiatives in Nairobi City County.

**Keywords:** *Strategic management, public housing, project performance, resource-based view, stakeholder theory, decision theory*.

**1.0 INTRODUCTION**

The strategic effectiveness of construction projects fundamentally revolves around achieving successful outcomes that meet the diverse demands of stakeholders. Construction strategy, as defined by the Strategic Management Institute (SMI), encompasses a broad range of critical factors including stakeholder interests, quality standards, project timelines, and costs. However, despite clearly defined benchmarks, many construction projects struggle to meet these targets due to the inherent uncertainties and complexities that characterize the construction sector. The Construction Extension of the highlights that construction projects operate within intricate environments influenced by variables such as weather conditions, site-specific challenges, and economic fluctuations. These factors often lead to project delays and cost overruns, underscoring the pressing need for effective strategic management to enhance both efficiency and effectiveness.

Research from various global contexts identifies common problems faced by construction projects, including delays, cost overruns, and failure to meet key constraints. Strategic management tools such as proper planning, resource scheduling, and continuous monitoring have been shown to mitigate these issues by ensuring the availability and efficient use of resources. The “funnel approach” to strategic management, which breaks down broad objectives into actionable plans, allows projects to adapt better to changing circumstances and improve overall performance. For instance, a study by Odhiambo and Njuguna (2021) focusing on health non-governmental organizations in Nairobi, Kenya, confirmed that strategic management practices especially effective planning, resource allocation, and monitoring—are crucial in enhancing organizational performance, reducing risks, and improving project outcomes. This finding mirrors challenges in construction projects, where strategic management significantly boosts performance and reduces waste.

The effectiveness of strategic management practices varies by country and project context. Influential factors such as corruption, funding availability, project complexity, and stakeholder involvement significantly affect project outcomes. Despite global efforts to improve strategic management in construction, problems like cost overruns and schedule delays persist across both developed countries such as the United Kingdom and the United State of America and developing countries like Kenya, Nigeria, and Afghanistan. Regional challenges also exist, necessitating context-specific solutions. For example, in Africa, poor strategic management has severely hampered public construction projects. Similarly, in regions like Hong Kong, Qatar, and Australia, ineffective strategic management has undermined public project success. This widespread issue highlights the importance of conducting focused research, particularly on residential construction projects, to assess how strategic management influences performance in key areas such as planning, resource scheduling, funding, monitoring, and evaluation. Addressing these factors enables stakeholders to better navigate the complexities typical of residential construction and positively impact project outcomes.

Strategic management practices cover a wide scope of activities undertaken by managers to ensure the successful implementation of strategies. These include initiation, planning, execution, monitoring, evaluation, and securing funding (Harvey, 2019). Proper execution of these practices is vital for maintaining the original budget, timeline, and quality requirements. Miller and Lessard (2018) emphasize that organizations can tailor and implement various effective construction management strategies. Skeggs (2018, 2021) further identifies key strategic management activities that critically influence construction performance. These include resource scheduling, monitoring and evaluation, strategic planning, and strategic finance. Mastery of these areas by managers is essential for successful project completion.

Strategic planning, as described by the Strategic Management Institute (2016), occurs prior to project commencement and involves defining the project scope, setting and refining objectives, and outlining necessary actions. Essentially, it answers what needs to be done, how, when, by whom, and with what resources, ensuring a smooth start and the availability of prerequisites. Kihoro and Waiganjo (2015) note that strategic planning involves initiation, articulation, and assessment phases, sometimes accompanied by review and judgment steps. Funding plays a crucial role in construction strategies, especially residential projects, because effective financing supports the coordination of multiple project activities. Ruuska (2016) explains that strategic funding involves identifying and securing financial resources while considering the project's financial needs, associated risks, and stage of development.

Effective funding requires timely and accurate information sharing with stakeholders. Crivelli and Gupta (2018) highlight the importance of resource scheduling, which organizes technical, physical, human, and financial resources to achieve project success. Miller and Lessard (2020) underscore the need for financial resources to cover machinery, fuel, maintenance, and labor costs, while Kihoro and Waiganjo (2019) stress the management of human resources as vital. Strategy monitoring and evaluation (M\&E) track project progress and assess design, implementation, and outcomes, as described by Harrison (2018) and expanded by Mambo and Chiragu (2019). Monitoring provides timely reports on progress and input deliveries, while evaluation offers objective assessments. Strategic M\&E is thus indispensable for effective project management and performance improvement.

The recurring problems of cost overruns and project delays are significant concerns for developers and have driven ongoing research into their root causes. Kenya has seen a surge in residential development, leading architects and planners to explore diverse building designs to meet varied customer preferences. Landman (2021) notes the growing popularity of gated communities, which offer secure, enclosed environments with controlled access, catering to different housing styles from duplexes to luxury houses. Successful construction projects are generally judged based on criteria like timely completion, adherence to budgets, and quality standards set by stakeholders (Kihoro & Waiganjo, 2021). Current perspectives on project success also consider relevance to project purpose and the necessity for rework (Pidd, 2019).

Strategic performance is critically important in construction due to its economic significance, particularly in addressing fundamental housing needs. The construction industry contributes nearly 10% to Kenya’s gross national product and supports major national development goals (Kihoro & Waiganjo, 2018). Gioko and Njuguna (2019) highlight that strategic planning practices are essential for effective resource use, risk management, and alignment of goals, which are vital for private and residential construction success. Globally, the rising population drives increasing demand for housing, influencing residential construction trends. For example, Florida, USA, has witnessed a rise in gated community developments targeting affluent populations seeking safe and private living environments (Kihoro & Waiganjo, 2020). Lebanon’s private sector has also been active in gated community development, addressing housing needs on a smaller scale (Atkinson, 2019). Similarly, gated community housing in Kenya predominantly serves middle- and upper-class groups (Kihoro & Waiganjo, 2021). To stay competitive, developers continuously incorporate innovative designs and technologies.

While some construction projects may appear successful by certain metrics, such as the number of completed units, challenges like project delays continue to hamper full success, often resulting in failure to deliver on initial promises (Oguoko, 2019). Clients rely heavily on the strategic management capabilities and professionalism of managers, developers, and contractors to ensure the successful delivery of residential gated community projects. Key indicators of strategic performance include completion time, cost control, and overall satisfaction, which are crucial for determining project success. Residential construction is a dominant housing option in many Western countries, with millions living in such communities. Similar trends have emerged in Africa, where housing projects and gated communities have become increasingly popular. In Cairo, housing projects have seen notable growth in recent years (Kasseiba, 2019). South Africa’s Gauteng province has experienced such developments since the early 1990s (Mukuka et al., 2020). In Nigeria, residential construction is gaining traction, driven partly by security concerns (Gbahabo & Ajuwon, 2017; Muiga & Rukwaro, 2016). Kenya’s capital, Nairobi, has seen a marked shift among the middle class toward gated communities, which account for about 90% of recent residential construction projects, with roughly 75% concentrated in Nairobi City County (Muiga & Rukwaro, 2016). This concentration makes Nairobi a representative case for studying residential construction dynamics.

Building and construction projects are significant contributors to Kenya’s economy and involve complex processes with numerous stakeholders, contractors, and regulatory requirements (SMI, 2019). Strategic management practices are vital for the success and sustainability of residential projects. According to Mumbe and Njuguna (2019), the performance of small and medium-sized enterprises (SMEs) in construction heavily depends on effective strategic management. This is particularly true for residential construction, where planning, resource allocation, and stakeholder coordination are critical. This body of research focuses on residential construction projects in Nairobi County, emphasizing gated community developments, while excluding mixed-use projects involving commercial buildings.

**1.1 Research Problem**

The performance of construction strategies plays a vital role in determining project success, especially in residential construction, where varying strategic management practices are applied to improve outcomes. Despite these efforts, nearly 90% of residential construction projects experience cost overruns, sometimes reaching up to 183% above initial estimates, highlighting inefficiencies in strategic execution. Key strategic management components—such as planning, resource scheduling, funding, communication, monitoring, and evaluation—significantly influence project outcomes. In Kenya, while diverse models have been introduced in the residential construction market, performance issues persist due to poor planning, inadequate resource scheduling, insufficient funding, and ineffective oversight. Although extensive research exists on strategic management in construction, much of it focuses on public sector projects, leaving a gap in understanding private residential projects, particularly within Nairobi City County. Sector-specific factors such as differing management standards and contextual challenges between public and private projects influence strategic effectiveness. Comparisons with sectors like banking underscore the importance of strategic positioning in achieving financial sustainability. Even in the private sector, which is expected to maintain higher management standards, performance challenges remain evident in Nairobi. Past studies have called for more emphasis on monitoring and evaluation to better assess the benefits of strategic actions. However, differences in cost control practices and the influence of political and economic factors further complicate project outcomes. This study aims to fill the existing research gap by exploring the impact of strategic practices specifically in planning, resource allocation, financing, builder competency, and monitoring—on residential construction performance in Nairobi City County. It seeks to provide insights into how strategic management techniques can be optimized to enhance execution and efficiency in housing development projects within this urban setting.

**1.2 Research Objective**

This study was guided by the following general objective to: determine the effects of strategic performance on the performance of residential construction in Nairobi City County, Kenya.

Specific Objectives were to; determine how strategic planning affects the performance of the residential construction, assess the impact of strategic resource scheduling on the performance of the residential construction, identify how communication affects the performance of the residential construction, and to determine how monitoring and evaluation affects the performance of residential construction in Nairobi city county Kenya.

**1.3 Research Questions**

The ensuing research questions outlined this investigation:

How does strategic planning influence the performance of residential construction projects in Nairobi City County, Kenya?

What is the impact of strategic resource scheduling on the performance outcomes of residential construction projects in Nairobi City County, Kenya?

In what ways does communication affect the performance of residential construction projects within Nairobi City County, Kenya?

How does the implementation of monitoring and evaluation processes affect the performance of residential construction projects in Nairobi City County, Kenya?

**1.4 Justification of the Study**

This study is significant for its contribution to the understanding of strategic management practices in residential construction and their impact on project performance. It focused on key strategies such as planning, resource scheduling, funding strategies, and monitoring and evaluation—elements deemed vital for project success. The research addressed a gap in the literature, particularly regarding how strategic approaches influence outcomes in the private housing sector, which has received less scrutiny than public works like road construction. The findings are valuable to government officials, contractors, consultants, and scholars, offering insights that can improve residential building practices and tackle challenges such as delays, cost overruns, and customer dissatisfaction. With residential construction playing a vital role in economic growth and affordable housing, especially under Kenya’s housing agenda, the study’s implications are particularly relevant in Nairobi City County. Its results are expected to inform housing policies, enabling the Ministry of Housing to prioritize effective practices and eliminate ineffective ones to enhance project outcomes.

**1.5 Study Limitations**

The research project faced several limitations. The target population—contractors, managers, and engineers—were widely dispersed across remote areas in Nairobi City County, making data collection difficult. To address this, research assistants were enlisted to reach distant respondents. Some participants were hesitant to share sensitive information due to fear of reprisals, but verbal persuasion and an introductory letter from the university helped build trust. Additionally, time constraints prevented some respondents from completing questionnaires in one sitting, so a drop-and-pick method was used, allowing them to respond at their convenience. Other common challenges in residential construction projects—such as logistical, funding, and regulatory issues—also affected the research. These factors impacted participant availability and willingness. To mitigate these issues, proactive measures were taken to ensure the collection of comprehensive and accurate data.

**2.0 LITERATURE REVIEW**

The theoretical review of literature on strategic management practices in residential construction projects in Nairobi City County, Kenya, is grounded in four core frameworks: Stakeholder Theory, Resource-Based View (RBV) Theory, Decision Theory, and the Cost-Benefit Analysis (CBA) Model.

***Stakeholder Theory,*** originally advanced by Freeman and later expanded upon by researchers like Valentinov et al. (2019), emphasizes the significance of balancing stakeholder interests to ensure project success. In residential construction, the range of stakeholders is broad and includes government bodies, private developers, project managers, engineers, architects, contractors, workers, and future residents. Each group has unique needs and expectations that influence project outcomes. For instance, owners focus on cost, time, and quality; managers ensure proper resource allocation and communication; and the project team contributes through their expertise and morale. Even future residents play a role by demanding high standards in safety, quality, and timeliness. Effective stakeholder engagement, as Buertey et al. (2016) argue, enhances trust, improves collaboration, and facilitates efficient resource allocation. Integrating stakeholder feedback into decision-making and strategic planning contributes to better risk management and successful project delivery. Hence, by applying the principles of stakeholder theory, strategic management in Nairobi’s residential construction can align with broader stakeholder goals and ensure sustainable, satisfactory outcomes.

***Resource-Based View (RBV) Theory***, as conceptualized by Barney, frames a firm as a collection of resources that can yield competitive advantage if they meet the VRIN criteria: valuable, rare, inimitable, and non-substitutable. The theory assumes that these resources are not easily replicable and differ across organizations, which introduces firm heterogeneity and resource immobility. Within the context of residential construction, this theory aids managers in identifying, deploying, and optimizing unique resources such as skilled labor, advanced equipment, and proprietary processes. Almarri and Gardiner (2019) assert that aligning resources according to VRIN helps overcome typical construction challenges such as delays and budget overruns. Managers must ensure that the deployment of resources is strategic, and this careful planning enhances overall project efficiency and performance. RBV theory ultimately provides a strategic lens for understanding how internal strengths can be leveraged for sustained project success in an otherwise competitive and resource-constrained industry.

***Decision Theory***, developed by Leonard Savage, provides a systematic approach for making rational decisions, especially under conditions of uncertainty—a common situation in construction projects. The theory identifies three major types of decision-making environments: certainty, risk, and uncertainty. Each involves analyzing different outcomes, actions, and events to choose the most beneficial course of action. Brown (2012) and Ibadov (2020) emphasize that strategic decision-making in construction involves evaluating alternatives based on cost, time, and performance metrics to mitigate risk and enhance project delivery. For instance, decisions related to scheduling, procurement, or labor distribution can significantly impact project progress and financial performance. Decision theory supports the use of probabilistic models and scenario analysis to better handle unpredictable elements such as material delays or supplier performance. Shehu and Wang (2020) highlight how this theory helps determine the best organizational structure and supply chain strategies to minimize disruptions and cost escalations. Therefore, decision theory reinforces the need for thorough, data-driven analysis in planning and executing strategic actions within residential construction projects.

***Cost-Benefit Analysis (CBA) Model***, initially applied by Jules Dupuit and later formalized through works of Otto Eckstein and others, is crucial for evaluating the viability of strategic decisions in construction by quantifying the relationship between incurred costs and projected benefits. This model is particularly important in large capital-intensive projects, such as residential construction, where decisions regarding risk mitigation strategies, resource allocation, and organizational structures must be financially justified. According to Belay et al. (2016), CBA helps managers weigh different strategic options, ensuring that the benefits significantly outweigh the costs. It allows for a comparison of alternatives while considering factors like time, scope, and resource efficiency. Shehu and Wang (2020) stress that cost control is essential in maintaining desirable project performance, and CBA serves as a roadmap for selecting the most efficient strategies. Additionally, Muchai et al. (2018) note that when evaluating organizational structures, CBA helps identify options that promote productivity, communication, coordination, and control while ensuring that implementation costs do not compromise performance. The model thus supports robust strategic planning by ensuring all costs and potential benefits are transparently assessed.

Collectively, these four theories provide a comprehensive framework for analyzing and implementing strategic management practices in residential construction projects in Nairobi. Stakeholder theory ensures that diverse interests are managed for cohesive outcomes. RBV highlights the importance of internal resources and how they can be leveraged for strategic advantage. Decision theory supports rational planning and flexibility in dealing with uncertainty and complexity. Lastly, CBA provides an economic justification for the chosen strategies, balancing investment against potential returns. Integrating these theoretical perspectives equips project managers and decision-makers with the tools necessary to navigate the multifaceted challenges of residential construction, ultimately leading to more successful, timely, and cost-effective project completions.

**2.1 Empirical Review**

The empirical review of literature provides a comprehensive analysis of four critical components of strategic performance in project management: strategic planning, resource scheduling, communication, and monitoring and evaluation (M\&E). These components are examined across diverse industries and project contexts, primarily in construction, agriculture, and development sectors. Each subsection draws on various empirical studies to emphasize how these factors influence strategic outcomes and project success.

**Planning and Strategic Performance**

Strategic planning is widely acknowledged as a cornerstone of successful project execution. Serrador (2022) underlines that strategic planning plays a vital role in multiple domains—construction, software, and strategic management—and generally correlates positively with strategy success. Despite this, there is an observable trend towards compressing the planning phase, which raises concerns about the overall efficacy of implemented strategies. Supporting this, Umulisa et al. (2020) focus on construction projects and assert that planning in areas like human resources, finance, materials, and time management is essential to project success. Their findings stress that effective planning practices across all dimensions of project management are strongly associated with positive outcomes.

Naeem et al. (2018) also explore planning in construction, emphasizing its importance at the initiation phase of a project. They argue that strategic planning, moderated by organizational culture and mediated by risk management, lays the groundwork for effective execution. Simiyu (2018), studying agricultural projects, expands on this by highlighting the value of early-stage planning in resolving implementation challenges. His study identifies planning as part of a broader strategic framework that includes implementation, monitoring, evaluation, and communication—all integral to overcoming project hurdles.

Collectively, these studies affirm the foundational role of strategic planning in various project settings. However, gaps remain, particularly regarding the optimal length and depth of planning required. Future research might explore the trade-offs between thorough planning and execution agility and delve deeper into how planning interacts with risk management and organizational culture to shape strategic performance.

**Resource Scheduling and Strategic Performance**

Resource scheduling is another critical determinant of strategic success. Nagaraju and Reddy (2012) examine resource scheduling within the complex domain of construction project management, identifying it as the core of effective strategy due to the intricate and high-risk nature of resource allocation. They argue that construction projects are unique and involve complex resource deployment patterns, which heightens the necessity for deliberate and efficient scheduling practices to mitigate delays and uncertainties.

Yaghootkar and Gil (2012) reinforce this by analyzing multi-project environments and showing that a deadline-driven strategy improves long-term project outcomes. However, insufficient staffing and resource capacity often impair schedules and productivity. Frequent staff reassignment exacerbates the problem, diminishing overall efficiency and delaying project delivery. Obegi and Kimutai (2017) explore NGO projects in Nairobi and found that successful resource scheduling depends on several factors: routine budget monitoring, flexibility in adapting to strategic changes, adequate staffing with appropriate tools, and ongoing performance assessment. These elements collectively ensure alignment with project goals and facilitate timely, successful outcomes.

In a similar vein, Ochenge (2018) investigates residential infrastructure in Kenya and concludes that strategic resource mobilization, group dynamics, and robust monitoring and evaluation significantly influence performance. Importantly, organizational structure is identified as a mediating factor linking strategic management practices to success. Pinha and Ahluwalia (2019) also highlight the consequences of poor resource oversight, such as budget overruns and schedule delays. They advocate for dynamic and adaptable asset management approaches to improve efficiency, particularly in complex project settings. Overall, resource scheduling emerges as a pivotal function that underpins strategic performance, demanding both structure and flexibility.

**Communication and Strategic Performance**

Effective communication is repeatedly identified as vital to project success. Wepari et al. (2024), studying construction professionals in Ghana, reports that strategic communication plays a decisive role in mitigating delays, cost overruns, and even project abandonment. Respondents in the study confirmed that communication is integral to their daily work, and its absence leads to significant challenges. The study advocates for structured communication plans as part of every construction strategy.

Earlier work by Ziek and Anderson (1997) provides foundational insights, showing that communication in strategic projects often flows in a one-way, top-down manner rather than as interactive dialogue. This suggests a need for more inclusive and dialogic communication models. Strategic managers emphasized the necessity of delivering clear, complete, and unambiguous messages—underscoring communication as a managerial competency and a determinant of project outcomes.

Wu et al. (2017) distinguish between different types of communication conflicts and their effects. While task conflicts, when well-communicated, can lead to improved outcomes, relationship and process conflicts, often exacerbated by poor communication, tend to harm project performance. The study further found that formal communication and team members’ willingness to communicate positively impact project success, whereas informal communication can sometimes have adverse effects.

Franz et al. (2017) add to this discourse by examining communication within cohesive teams in building projects. Their research underscores that formal and timely communication fosters team integration, which in turn improves cost, schedule, and quality performance. Afroze and Khan (2017) reinforce these findings in the context of international development in Pakistan. Their study shows that bi-directional and high-quality communication positively correlate with strategic performance, even in complex task environments. In sum, communication—especially when structured, inclusive, and timely—is crucial for strategic alignment and project efficiency.

**Strategy Monitoring and Evaluation and Strategic Performance**

Monitoring and Evaluation (M\&E) is a critical component of strategic success, particularly in public sector, agricultural, and community-based projects. Joe and Nay (2016) assert that M\&E is essential for gathering actionable strategic insights, which help guide implementation and improve performance. They stress the importance of feedback mechanisms that inform both the strategy and institutional learning processes.

However, challenges persist. Ndagi et al. (2016) and Waithera and Wanyoike (2015) note that M\&E often lacks adequate planning and stakeholder involvement. In agricultural projects, for example, poor communication and lack of collaboration negatively impact M\&E execution, leading to suboptimal project outcomes. Additionally, Waithera and Wanyoike emphasize the need for proper training to enable teams to effectively conduct M\&E activities, particularly when specialized personnel are unavailable.

Phiri (2015) and Ngatia (2016) further highlight both the potential and the challenges of M\&E. Phiri demonstrates that within the African Virtual University, establishing a permanent M\&E unit significantly enhanced strategy effectiveness. Ngatia identifies logistical and funding constraints as major barriers to effective M\&E in community-based projects. These structural challenges limit the ability of organizations to conduct thorough evaluations and make data-driven adjustments to their strategies.

Nzigu and Karanja (2018) address M\&E in the context of gated housing projects and find that most lack a formal M\&E framework. They recommend that strategic budgets explicitly include M\&E allocations and that standardized tools be used throughout project execution. While the literature clearly supports the value of M\&E, common barriers such as insufficient planning, lack of qualified personnel, and limited resources hinder its effectiveness. Future studies may focus on innovative solutions to overcome these issues and enhance M\&E practices across diverse sectors.

**3.0 METHODOLOGY**

The study on the effectiveness of residential building projects in Nairobi City County, Kenya, adopted a descriptive research design to examine the influence of strategic management practices on project performance. The choice of this design was rooted in its suitability for exploring current conditions and describing patterns without manipulating variables. Unlike experimental designs that seek to determine causal relationships, descriptive research aims to uncover characteristics or relationships as they naturally occur. This approach aligned well with the study's objective of understanding how strategic management principles are applied and perceived to influence construction project outcomes. Grounded in a conceptual framework that integrates theories such as strategic management, project management, decision theory, resource-based view theory, and stakeholder theory, the research design enabled structured data collection and analysis. These theoretical perspectives informed the construction of the survey instrument and guided the interpretation of results, linking strategic management practices directly with project performance metrics.

Beyond its theoretical strengths, the descriptive research design also offered practical advantages. It allowed for broad data collection across a large sample in a cost-effective and time-efficient manner. Given the goal of gathering diverse viewpoints from stakeholders involved in Nairobi’s residential construction sector, this was particularly important. The use of questionnaires as the primary data collection tool complemented the design well by enabling the collection of self-reported information from a wide range of participants, including strategic managers, engineers, contractors, and supervisors. Thus, the methodological setup—coupled with an appropriate data collection instrument and a robust theoretical basis aimed to provide a comprehensive picture of the strategic practices influencing project performance in the local context.

The target population of the study comprised individuals directly involved in the strategic aspects of residential construction projects in Nairobi. Drawing from Cooper and Schindler’s (2003) definition of population in research, the term "target population" was defined specifically to include individuals who could provide valuable insights into the management of residential projects. The population included 145 professionals such as strategic managers, supervisors, engineers, and contractors working on projects overseen by the Ministry of Housing in Nairobi City County. These individuals formed the sampling frame for identifying study participants and ensured the research captured perspectives from a relevant and informed group.

The sampling process was critical in ensuring that the data collected was representative of the population. A sample, as explained by Pavan and Kulkarni (2014), is a smaller group selected from the larger population that accurately reflects the characteristics of the whole. Slovin’s formula was employed to determine a suitable sample size, factoring in a 5% margin of error to balance accuracy and resource feasibility. Using the formula $n = \frac{N}{1 + N(\alpha)^2}$, the appropriate sample size was calculated as 106 participants from the original 145. To ensure representative coverage of the different roles within the construction projects, the study used stratified random sampling. This involved categorizing the population into four strata—Residential Engineers, Strategic Managers, Contractors’ Consultants, and Residential GC Supervisors—before randomly selecting participants from each group.

To collect data, the study employed a structured questionnaire. This tool was designed to cover all the essential themes of the research and comprised six sections: demographic information (Section A), strategy performance (Section B), planning (Section C), resource scheduling (Section D), communication (Section E), and strategy monitoring and evaluation (Section F). According to Debois (2016), questionnaires serve as effective instruments for collecting both oral and written responses that align with a study’s objectives. The questionnaire integrated both primary data, gathered firsthand from respondents, and secondary data, which involved existing processed information. The design of the questionnaire ensured comprehensive coverage of all aspects central to strategic management and construction performance, thereby aligning the data collection process with the study’s overarching goals.

The research also emphasized validity and reliability of its instruments. Validity refers to the degree to which an instrument accurately measures what it is intended to. Following the guidance of Creswell and Creswell (2017), the study established content validity through a review by three strategic management experts who ensured full coverage of the relevant concepts. A pre-test with a small group of participants was conducted to assess face validity and to identify and correct any unclear or ambiguous questions. Additionally, construct validity was ensured by evaluating how well the questionnaire differentiated between unrelated concepts (discriminant validity) and measured related constructs (convergent validity). These steps were taken to ensure that the instrument provided accurate data about strategic management practices.

To confirm reliability, which refers to the consistency of an instrument in yielding similar results over time, the study used the test-retest method. The same questionnaire was administered to the same group at two different times, and the consistency of responses was analyzed using Cronbach’s Alpha Coefficient. A reliability threshold of 0.70 was set, as per McNeish (2017). The results showed strong internal consistency: strategic planning scored 0.82, resource scheduling 0.79, communication 0.81, and monitoring and evaluation 0.84. These high scores indicated that the instrument reliably measured the intended constructs. Any variables falling below the reliability threshold were reviewed, and ambiguities were corrected to enhance overall consistency.

The data collection procedure involved the distribution of questionnaires using the drop-and-pick method. This approach allowed respondents to complete the questionnaire at their convenience, which was especially useful given the busy schedules of many professionals. The researcher included all the necessary documentation, including permission letters, a cover letter, and research approvals from Kenyatta University and NACOSTI. During the collection phase, the researcher remained available to provide clarification and guidance, ensuring that respondents fully understood the questionnaire. Completed surveys were thoroughly reviewed for completeness and accuracy before data analysis commenced. Finally, the data analysis and presentation involved systematic processes to organize and interpret the information collected. Initial steps included cleaning, coding, and categorizing the data. Descriptive statistics such as frequencies, percentages, means, and standard deviations were used to summarize the data, while inferential statistics, particularly regression analysis, were employed to examine relationships between strategic management practices and project outcomes. The data analysis was conducted using SPSS software (Version 123.0). Results were presented in tables, charts, and diagrams to facilitate understanding. The use of both descriptive and inferential methods enabled the study to offer detailed insights into the impact of strategic management on project performance, thereby fulfilling the research objectives.

**4.0 RESULTS AND DISCUSSION**

**4.1 Response Rate**

The study surveyed 145 residential construction professionals, including managers, engineers, contractor advisors, and supervisors. Of these, 125 participated, resulting in a high response rate of 86.21%.

***Table 1: Response Rate***

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| --- | --- | --- |
| Element  | Frequency | Percentage |
| Targeted sample size  | 145 | 100% |
| Questionnaires administered  | 145 | 100% |
| Responses received  | 125 | 86.21% |
| Responses not received  | 20 | 13.79% |

**Source: Survey Data (2025)**

**4.2 Descriptive Statistics**

The descriptive analysis conducted in this study examined five key variables in relation to the performance of residential construction projects: strategic planning, resource scheduling, communication, monitoring and evaluation, and overall performance. For each variable, the analysis involved computing the mean and standard deviation to understand participants’ level of agreement and the consistency of their responses. The findings reveal that most respondents agreed with the statements related to these strategic practices, indicating a general consensus and recognition of their importance in enhancing construction performance.

Strategic Planning and Performance emerged as a significant focus, with an aggregate mean of 4.0131 and a low standard deviation of 0.3894, suggesting that most participants acknowledged the importance of strategic planning. Respondents strongly agreed that their firms had clear strategic plans aligning organizational and project goals. Regular reviews and adaptations of these plans were highlighted, although some firms struggled to respond swiftly to evolving market conditions. Previous studies, such as those by Cazenave and Morales (2021) and Mwendwa (2015), support the idea that direction-setting in strategic planning is crucial for successful project execution. Similarly, Kiprotich et al. (2018) and Kobugabe and Rwakihembo (2022) emphasized that total quality management and risk management strategies integrated within strategic planning significantly enhance performance. Respondents also agreed that strategic planning improves resource allocation, stakeholder involvement, and risk mitigation, reinforcing its value in aligning project execution with broader organizational objectives.

Strategic Resource Scheduling and Performance showed an aggregate mean of 4.013 and a standard deviation of 0.3639, indicating agreement with minimal variability. Firms appear to prioritize resource scheduling as part of their strategic approach. Participants affirmed that resources such as labor, materials, and equipment were allocated effectively to ensure timely project completion. Structured frameworks were noted for prioritizing high-impact activities, and project management tools were employed to optimize scheduling. Respondents further noted proactive adjustments in scheduling to accommodate project status and unforeseen issues, as well as routine monitoring of resource utilization. Research by Kohli and Singh (2017), McGuirk and Mundlak (1991), and Olwande et al. (2019) supports these findings, noting that optimal scheduling and resource allocation are central to improving efficiency and project performance. Strategic resource scheduling, when coupled with tools and frameworks that enhance flexibility and responsiveness, contributes to cost savings and project success.

Communication as a strategic variable also received high agreement from respondents, with a mean of 4.054 and a standard deviation of 0.3551. Participants largely concurred on the importance of effective communication in guiding project execution. The use of timely, reliable, and open communication was emphasized as key to stakeholder coordination and project success. Respondents agreed that their organizations communicate goals clearly, use feedback mechanisms, and rely on digital tools to enhance project execution. They also believed that transparent communication between management and staff helped mitigate conflicts and misunderstandings. Literature from Nwokolo (2017), Shichenga and Njuguna (2021), and Onsomu (2010) reinforces the value of structured and timely communication in improving decision-making, stakeholder alignment, and project efficiency. The high scores for communication suggest that firms recognize their strategic role in ensuring coherence and adaptability throughout the project lifecycle.

Monitoring and Evaluation was another area of strong performance, with an aggregate mean of 4.212 and a standard deviation of 0.3525, indicating substantial agreement among participants. The data revealed that oversight systems in residential construction projects are well-established and efficiently executed. Respondents emphasized that consistent monitoring helps detect potential delays and initiate timely corrective actions. Assessment data were seen to inform ongoing and future projects, and technological integration in M&E processes was acknowledged for boosting productivity. Furthermore, M&E was credited with enhancing cost control, budget adherence, and stakeholder involvement. Studies by Stekelorum et al. (2020), Nwokolo (2017), and Onsomu (2010) corroborate these findings, underlining the critical role of monitoring and evaluation in improving strategic performance, ensuring quality compliance, and supporting evidence-based project adjustments. The high agreement on this variable highlights the strategic integration of M&E systems into construction processes for optimal results.

Finally, the Performance of Residential Construction variable recorded the highest aggregate mean of 4.216 with a low standard deviation of 0.2301, suggesting strong consensus among participants about performance outcomes. Key performance indicators such as timely completion, adherence to quality standards, regulatory compliance, return on investment, and budget control were positively evaluated. Respondents agreed that construction projects in Nairobi City County are generally completed on schedule, meet expected quality and environmental standards, and achieve financial targets. The responses imply that strategic management practices in planning, resource utilization, communication, and monitoring have a cumulative effect on enhancing project outcomes. Supporting studies by Navodera et al. (2021) emphasize that strategic planning improves implementation by ensuring competitive positioning, proper resource deployment, and compliance with industry benchmarks. Effective management practices directly correlate with improved operational efficiency, stakeholder satisfaction, and sustainability in project execution.

**4.3 Correlation Analysis**

Association assessment is a numerical method used to measure the strength of relationships among variables. This research applied it to evaluate how strategic administration practices, strategic forecasting, resource allocation, communication, and oversight affect the strategic effectiveness of housing development projects in Nairobi City County, offering insights into these interconnections for informed analysis**.**

**Table 2 Correlation Analysis**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Strategic Planning  | Resource Scheduling  | Communication  | M & E | Performance of Residential Construction.  |
| Strategic Planning | Pearson Correlation | 1 |  |  |  |  |
| Sig. (2-tailed) |  |  |  |  |  |
| N | 126 |  |  |  |  |
| Resource Scheduling  | Pearson Correlation | .891\*\* | 1 |  |  |  |
| Sig. (2-tailed) | .000 |  |  |  |  |
| N | 126 | 126 |  |  |  |
| Communication | Pearson Correlation | .739\*\* | .705\*\* | 1 |  |  |
| Sig. (2-tailed) | .000 | .000 |  |  |  |
| N | 126 | 126 | 126 |  |  |
| M & E | Pearson Correlation | .831\*\* | .827\*\* | .955\*\* | 1 |  |
| Sig. (2-tailed) | .000 | .000 | .000 |  |  |
| N | 126 | 126 | 126 | 126 |  |
| Performance of Residential Construction. | Pearson Correlation | .710\*\* | .898\*\* | .804\*\* | .733\*\* | 1 |
| Sig. (2-tailed) | .000 | .000 | .000 | .000 |  |
| N | 126 | 126 | 126 | 126 | 126 |
| \*\*. Correlation is significant at the 0.01 level (2-tailed). |

**4.4 Model Summary**

The regression analysis model reveals a strong relationship (R = 0.943) between strategic management practices strategic planning, resource allocation, communication, and oversight & assessment and the performance of residential construction in Nairobi City County. An R-squared value of 0.889 indicates these variables explain 88.9% of the variation in strategic effectiveness, with an adjusted R-squared of 0.885 accounting for the number of predictors. The standard error of 0.3128 reflects a small average deviation, highlighting the model’s forecasting accuracy.

**Table 3 Regression Model Summary for Strategic Performance**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .943a | .889 | .885 | .3128 |
| a. Predictors: (Constant), Strategic Planning, Resource Scheduling, Communication, Monitoring and Evaluation.  |

**Source: Research Data (2025)**

**4.5 Analysis of Variance**

The ANOVA results in Table 4 show that the regression model significantly explains the variation in residential construction performance in Nairobi City County, Kenya. With a Sum of Squares of 94.487, an F-statistic of 241.449, and a p-value of 0.000, the model confirms the relevance of Strategic Planning, Resource Allocation, Communication, and Oversight & Assessment. These variables effectively predict strategic outcomes in housing development, rejecting the null hypothesis and highlighting their importance in driving construction performance.

**Table 4 Regression ANOVA for Strategic Performance**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 94.487 | 4 | 23.622 | 241.449 | .000b |
| Residual | 11.838 | 121 | .098 |  |  |
| Total | 106.325 | 125 |  |  |  |
| a. Dependent Variable: Performance of residential construction |
| b. Predictors: (Constant), Strategic Planning, Resource Scheduling, Communication, Monitoring and Evaluation |

**Source: Research Data (2025)**

**4.6 Coefficients**

The analysis of regression coefficients highlights the varying influence of strategic management methods on the performance of residential construction projects in Nairobi City County, Kenya. The metrics show that Strategic Planning, Resource Scheduling, Communication, and Monitoring and Evaluation (M&E) each have a significant and positive effect on project performance. The multiple regression equation derived is: Y = 0.387 + 0.287X₁ + 0.157X₂ + 0.162X₃ + 0.482X₄ + ε, where Y represents project performance, and X₁ through X₄ are Strategic Planning, Resource Scheduling, Communication, and M&E, respectively. The constant value of 0.387 suggests a baseline level of performance in the absence of strategic interventions. The statistical significance of this constant (p = 0.000) affirms its validity.

Strategic Planning holds a coefficient of 0.287, indicating that increased planning efforts substantially enhance project performance. With a p-value of 0.002, the relationship is statistically significant, underscoring the role of careful planning in construction success. This supports Mucai et al. (2019), who found strategic planning essential for aligning project components and achieving successful outcomes. Resource Scheduling also contributes positively, with a coefficient of 0.157 and a significance level of 0.033. Efficient scheduling promotes timely completion and cost management, essential for construction efficiency. Ndungu et al. (2020) emphasized that effective scheduling leads to better optimization of resources, while Lumosi et al. (2019) viewed it as the backbone of construction processes.

Communication, with a coefficient of 0.162 and p-value of 0.022, is another key contributor to performance. It ensures clarity of objectives, stakeholder coordination, and timely decisions, all vital in construction. Studies by Bukhuni (2022), Omiyale (2019), and Ndungu and Kamau (2019) confirm that strong communication frameworks enhance project coordination and execution, supporting chapter four’s conclusion. Mucai et al. (2020) further found that structured communication ensures better alignment with stakeholders and improved outcomes.

Monitoring and Evaluation has the strongest influence, with a coefficient of 0.482 and a highly significant p-value of 0.000. This underscores the essential role of continuous tracking and assessment in keeping projects aligned with goals. Bukhuni (2020) reported that strong M&E mechanisms help organizations adapt to challenges and meet performance goals. Similarly, Omiyale (2019) and Ndungu and Kamau (2019) emphasized that structured monitoring supports timely decision-making and performance improvements. Mucai et al. (2020) reinforced that compliant monitoring enhances quality, timelines, and overall project delivery.

The collective findings affirm that strategic planning, resource allocation, effective communication, and diligent monitoring are vital to enhancing residential construction performance. The coefficient for Resource Allocation, embedded in Resource Scheduling, reaffirms its value in boosting project efficacy by 0.157 units per unit increase in allocation efforts. This aligns with Lumosi et al. (2021) and Ndungu et al. (2019), who stressed the importance of strategic foresight and resource organization in achieving lasting efficiency. Burugu (2018) also emphasized the strategic need to maintain budgetary discipline while aligning with organizational objectives. In summary, the statistical analysis and supporting literature validate that a comprehensive strategic management approach centered on planning, scheduling, communication, and evaluation is integral to the success of housing development projects in Nairobi City County.

**Table 5 Regression Coefficients for Strategic Performance**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Model | Unstandardized Coefficients | Standardized Coefficients | t | Sig. |
| B | Std. Error | Beta |
| 1 | (Constant) | .387 | .106 |  | 3.661 | .000 |
| Strategic Planning | .287 | .091 | .298 | 3.152 | .002 |
| Resource Scheduling | .157 | .073 | .178 | 2.153 | .033 |
| Communication | .162 | .105 | .169 | 2.596 | .022 |
| Monitoring and Evaluation | .482 | .105 | .557 | 4.596 | .000 |
| a. Dependent Variable: Performance of Residential construction |

**Source: Research Data (2025)**

**5.0 CONCLUSIONS**

This study examined the impact of deliberate administration methods on the efficiency of housing development projects in Nairobi Metropolis. It found that strategic planning, resource allocation, communication, and monitoring and evaluation (M\&E) significantly enhance project performance. Strategic planning was shown to align construction objectives with market demands and regulatory requirements, enabling firms to adapt to changing conditions, manage timelines, and improve outcomes. Effective planning helped define project scopes, reduce risks, and optimize resource use, leading to increased success and better financial performance. Resource allocation also played a critical role; precise timing and distribution of materials, labor, and equipment using tools like project management software and lean methods reduced delays and cost overruns, enhancing quality and profitability. The study highlighted that strong communication among contractors, project managers, suppliers, and clients minimized misunderstandings, delays, and conflicts, enabling quicker decision-making and problem-solving. Clear communication significantly improved the speed and quality of construction. Lastly, monitoring and evaluation were crucial for identifying issues early and ensuring corrective actions were taken promptly. Comparing project progress against objectives helped maintain adherence to budgets, schedules, and quality standards. Organizations with robust M\&E systems achieved better outcomes, higher stakeholder satisfaction, and sustainable success in Nairobi’s competitive residential construction sector. Overall, the study affirmed the importance of intentional management practices in achieving efficient and successful housing development projects.

**6.0 RECOMMENDATIONS**

Kenya-based residential construction companies must adopt organized, data-driven strategic planning practices to enhance long-term performance. Integrating tools like SWOT and PESTLE analyses will help align company goals with market demands while assessing internal and external factors. The Balanced Scorecard framework should be used for regular reviews, tracking performance across financial, customer, internal process, and learning metrics to ensure adaptability to market and technological changes. To optimize resource use, firms should consider implementing ERP-like systems with scheduling tools like Primavera P6 or Microsoft Project. These systems help manage human, material, and financial resources, reducing delays, costs, and waste while improving procurement, inventory, and labor efficiency. Communication is crucial for project success; adopting Building Information Modeling (BIM) and cloud-based project management tools like Procore or PlanGrid can enhance collaboration and coordination among stakeholders. Setting communication KPIs will further improve efficiency and reduce misunderstandings. Firms should also establish a robust Monitoring and Evaluation (M&E) framework using tools like Earned Value Management (EVM), Power BI, or Tableau for real-time tracking, risk identification, and control. Incorporating post-project reviews will strengthen future planning and decision-making. These strategic tools are essential for improving project efficiency, minimizing risk, and promoting sustainable growth and competitiveness in Nairobi’s dynamic housing market.

The study’s findings hold significant policy implications. Given the challenges in strategic planning, communication, resource scheduling, and M&E, policymakers should consider integrating these elements into county housing policies. This could include mandates for quarterly M&E reports, pre-approval of project plans, regular stakeholder forums, and incentives for efficient resource use. These interventions could drive sustainable urban development and improve housing access in Nairobi. Future research could explore the long-term impact of sustainability practices, assess external influences on strategic management, and evaluate stakeholder communication effectiveness. Comparative studies of firms by size could also yield insights into best practices tailored to different organizational contexts, ultimately fostering improved performance and sustainability in the sector.

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