

Integrating Quantitative Rigour and Contextual Insight: A Mixed-Methods Paradigm for Strategy-Environment-Performance Research in Emerging Real Estate Markets

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Abstract

Methodological pluralism has become indispensable in contemporary strategic-management research, particularly in emerging economies where organizational performance is shaped by volatile markets and institutional complexity. This paper advances a mixed-methods paradigm that integrates quantitative rigour with contextual insight to investigate the interplay between strategy formulation, environmental dynamics, and organizational performance among real estate developers in Kenya. Drawing on a census of 88 member firms of the Kenya Property Developers Association (KPSA), the study employed a concurrent embedded design combining hierarchical regression, mediation and moderation analysis (PROCESS v4.3), and Multivariate Analysis of Covariance (MANCOVA) with qualitative thematic interpretation of open-ended responses. This integration enabled both statistical generalization and explanatory depth, illuminating how deliberate strategic planning, adaptive awareness, and institutional engagement interact to determine performance outcomes. The design achieved robust validity through triangulation, confirmatory diagnostics, and multi-source corroboration. Beyond its empirical findings, the paper contributes a replicable methodological framework for analyzing complex strategy-environment-performance relationships in sectors characterized by high turbulence and institutional flux. The resulting paradigm underscores that methodological integration rather than methodological purity is essential for advancing evidence-based scholarship and professional learning in the built environment.

Key Words: Mixed-methods design, Strategic management, Environmental dynamics, Kenya, Real estate development, Built environment

Introduction

The study of strategy and performance in emerging real estate markets necessitates methodological approaches that are both empirically rigorous and contextually grounded. Traditional quantitative models, while effective in testing causal structure, often overlook the interpretive subtleties that shape managerial decision-making within volatile and institutionally fluid environments. Conversely, qualitative designs offer narrative depth but frequently lack the generalizability required to evaluate strategic hypotheses systematically. Bridging this methodological divide calls for a deliberate synthesis of statistical precision and contextual understanding: a mixed-methods paradigm capable of capturing the multifaceted interplay between strategy, environment, and institutional context. Within this framework, Kenya's real estate sector provides a

compelling empirical laboratory. The sector stands at a critical inflection point, characterized by simultaneous expansion and disruption. Developers must navigate high inflation, fluctuating interest rates, regulatory fragmentation, and technological innovations such as Building Information Modelling (BIM) and PropTech. These dynamics underscore the need for methodological innovation in examining how strategy formulation, environmental turbulence, and institutional engagement jointly influence organizational performance. By embedding interpretive insights within a quantitatively dominant design, this study demonstrates how methodological integration rather than methodological purity advances both theoretical refinement and practical relevance in strategic management research within the built environment.

Strategic-management inquiry in such dynamic sectors must contend with complex interdependencies that transcend linear cause-effect models. Organizations in construction and property development operate within systems where internal capabilities interact continuously with shifting external contingencies. To capture this multidimensionality, the present study synthesizes four complementary theoretical perspectives. First, the Resource-Based View (RBV) (Barney, 1991) posits that firm-specific assets: knowledge, routines, and relational capital constitute the foundation of sustained competitive advantage. Second, Contingency Theory (Donaldson, 2001) asserts that no universal strategic configuration guarantees effectiveness; rather, performance depends on the alignment between internal strategy and external environmental conditions. Third, the Dynamic Capabilities Framework (Teece, et al., 1997) extends the RBV by emphasizing the adaptive routines that enable organizations to sense, seize, and reconfigure resources in response to turbulence. Finally, Institutional Theory (DiMaggio & Powell, 1991; Scott, 2014) highlights that legitimacy, compliance, and alignment with regulatory and normative systems enhance access to critical resources and ensure organizational survival.

Integrating these theoretical logics, the study conceptualizes organizational performance as an emergent property of strategic formulation and institutional embeddedness under conditions of environmental turbulence. The constructs operationalized (strategy formulation, strategic awareness and institutional support, environmental dynamics, institutional engagement, and performance) represent interacting domains that collectively reflect managerial intentionality, contextual awareness, and adaptive capacity. Accordingly, the aim of this paper is to advance and empirically demonstrate a concurrent embedded mixed-methods paradigm that integrates quantitative rigour with contextual insight to investigate the interplay between strategy formulation, environmental dynamics, and organizational performance among real estate developers in Kenya. Drawing on a census of 88 Kenya Property Developers Association (KPPDA) member firms, the study seeks not only to test hypothesized relationships using hierarchical regression,

mediation-moderation analysis, and MANCOVA but also to illustrate how methodological pluralism enhances explanatory depth and validity in turbulent, institutionally complex sectors. The paper therefore contributes both empirical evidence and a replicable methodological framework for analyzing complex strategy-environment-performance linkages in emerging markets, reinforcing the argument that integration and not isolation of methods is essential to advancing evidence-based scholarship and professional learning in the built environment. Having established the theoretical foundations, research context, and conceptual rationale for methodological integration, the discussion now turns to the research architecture through which these propositions were empirically examined. The following section outlines the research design, construct operationalization, sampling framework, data collection procedures, and analytical strategy adopted to investigate the strategy-environment-performance relationship within Kenya's real estate sector.

Methodological Framework and Research Design

The methodological framework was designed to align theoretical coherence with empirical rigour in examining the complex relationships among strategy formulation, environmental dynamics, institutional engagement, and organizational performance. Building upon the integrated framework articulated in the introduction, the research design sought to operationalize the complex interplay between strategic formulation, environmental dynamics, and institutional engagement within Kenya's real estate sector. To achieve this, the study adopted a concurrent embedded mixed-methods approach grounded in pragmatism, privileging methodological choice according to problem relevance rather than paradigm loyalty. Quantitative procedures provided the inferential precision required to test hypotheses on strategy-performance relationships, while qualitative insights drawn from open-ended responses enriched interpretation by revealing the contextual mechanisms underlying statistical associations. The resulting design thus balanced analytical generalization with contextual understanding, ensuring that both the measurable and experiential dimensions of strategic behaviour were rigorously captured.

The subsequent subsections detail the operationalization of constructs, philosophical orientation, sampling framework, instrument validation, data-collection protocols, and analytical integration procedures that together constituted the methodological framework of the study.

Operationalization of Core Constructs

To translate these theoretical propositions into measurable and empirically testable indicators, the study developed five interlinked constructs grounded in established scales and refined for the Kenyan context through a rigorous process of expert consultation and pilot validation. Strategy Formulation (SF₄) was conceptualized as the deliberate and systematic process of environmental scanning, goal articulation, and resource alignment that guides an organization's long-term direction. It captures the analytical and integrative practices through which developers transform strategic intent into coherent plans of action. Strategic Awareness and Institutional Support (SAIS₆) denoted the dual capacity of firms to comprehend the institutional landscape and to leverage internal structures for effective engagement. This construct embodies both cognitive and relational dimensions: managerial understanding of regulatory frameworks and the organizational readiness to interact productively with external institutions for strategic advantage.

Environmental Dynamics (ED) reflected respondents' perceptions of the volatility, uncertainty, complexity, and ambiguity shaping their operational contexts. It operationalized the degree of turbulence inherent in policy, market, and technological conditions that continuously test managerial foresight and adaptive capability. Institutional and Regulatory Engagement (IRE) represented the extent and quality of a firm's participation in professional, policy, and compliance networks. It measured how actively organizations engage with associations, regulators, and collaborative forums that confer legitimacy, shape governance, and enhance access to critical resources and information flows. Organizational Performance (OP₇) was measured as a multidimensional index encompassing operational efficiency, market expansion, innovation, and stakeholder satisfaction. This

construct captured both financial and non-financial dimensions of performance, recognizing that success in real estate development extends beyond profitability to include credibility, service quality, and institutional reputation.

All measurement items were anchored on five-point Likert scales (1 = strongly disagree, 5 = strongly agree). Exploratory Factor Analysis (EFA) confirmed the dimensional integrity of the constructs, yielding Kaiser-Meyer-Olkin (KMO) values above 0.70 and statistically significant Bartlett's tests of sphericity ($p < 0.001$). Reliability and validity statistics met and exceeded conventional psychometric thresholds: Cronbach's alpha coefficients were equal to or greater than 0.70, composite reliability values surpassed 0.80, and the Average Variance Extracted (AVE) exceeded 0.50 for all constructs: collectively affirming internal consistency and convergent validity in line with the criteria proposed by Fornell and Larcker (1981). Therefore, the operationalization of these constructs provided a robust empirical framework for examining how strategic formulation, institutional capacity, and environmental turbulence interact to shape organizational performance within Kenya's real estate development sector.

Philosophical Orientation and Design Logic

The study was grounded in pragmatism, a philosophy privileging methodological choice according to problem relevance rather than epistemic purity (Tashakkori & Teddlie, 2010; Morgan, 2014). Pragmatism allows the concurrent use of quantitative and qualitative techniques to generate what Johnson and Onwuegbuzie (2004) describe as complementary strengths. Guided by this logic, the study adopted a concurrent embedded mixed-methods design (Creswell & Plano Clark, 2018) in which the quantitative strand served as dominant for hypothesis testing, while qualitative narratives provided interpretive enrichment.

Quantitative data provided inferential precision through hypothesis testing; qualitative insights illuminated the mechanisms underlying those statistical relationships. This dual architecture preserved internal validity while achieving contextual resonance: an essential requirement in real

estate research where strategic phenomena are inseparable from institutional realities.

Population and Census Framework

The empirical universe comprised all 88 corporate members of the Kenya Property Developers Association (KPPDA), the country's principal industry body representing formal development firms. Given the manageable population size and the objective of complete sectoral representation, a census design was adopted rather than a probabilistic sample (Cochran, 1977). Each organization's chief decision-maker (Managing Director, Strategy/Planning Manager, Project Manager, or Principal Investor) served as respondent, yielding one observation per firm.

This approach offered three methodological benefits. First, completeness ensured full sectoral coverage, eliminating sampling error and bias. Second, analytical power was enhanced, allowing multivariate comparisons across organizational categories such as ownership type or development focus. Third, credibility was strengthened, as results derived from the recognized membership of KPPDA carried institutional legitimacy and immediate relevance to policy and practice.

Instrument Design and Validation Procedures

The survey instrument comprised structured Likert-scale items and open-ended prompts. The quantitative section captured data for the five constructs and control variables (firm type, role, project value, age, and specialization). The qualitative section invited respondents to describe recent strategic adjustments, regulatory interactions, and environmental shocks. Expert review by two strategic-management scholars and two senior practitioners established content validity; a pilot test with 20 non-KPPDA firms refined item clarity and sequencing. Cronbach's α values in the pilot exceeded 0.70, confirming reliability (Nunnally & Bernstein, 1994).

Data Collection and Ethical Compliance

Data were collected between August and September 2025 using a dual-mode approach: electronic distribution through corporate emails and physical delivery to non-responding firms. Follow-up calls and association networks increased participation, producing 88 valid responses: a full

enumeration. Informed consent, anonymity, and secure data storage protocols were observed, following the standards outlined by Resnik (2020).

Analytical Strategy and Integration Logic

Quantitative analysis was performed using IBM SPSS Statistics v29 with the PROCESS v4.3 macro (Hayes, 2022). The analytical sequence comprised six steps: (1) descriptive profiling of firms and respondents; (2) exploratory factor analysis for dimensional verification; (3) reliability and validity testing; (4) correlation mapping of constructs; (5) hierarchical regression models for direct, mediating, and moderating effects; and (6) a multivariate analysis of covariance (MANCOVA) testing structural differences across organizational categories (Tabachnick & Fidell, 2019).

Parallel qualitative analysis followed Braun and Clarke's (2006) six-phase thematic framework. Codes were derived inductively from textual responses, clustered into themes of strategic agility, institutional negotiation, and adaptive capacity. Integration occurred at two stages: during analysis, where qualitative findings illuminated statistical trends, and during interpretation, where narratives contextualized why certain relationships such as the moderating effect of environmental dynamics were more pronounced among mixed-use developers. Triangulation across data types provided corroborative validity, consistent with Jick (1979). The methodological framework described above established the foundation for the empirical analyses that follow. The subsequent section demonstrates how these procedures were implemented to examine the hypothesized relationships and reflects on the methodological insights that emerged from integrating quantitative and qualitative evidence.

Analytical Execution and Methodological Reflections

Quantitative Modelling and Analytical Coherence

The quantitative component was structured to sequentially test the hypothesized causal relationships linking strategic formulation, environmental dynamics, and institutional engagement to organizational performance. Hierarchical multiple regression models and

conditional process analysis were employed to quantify both direct and conditional effects. The first model tested the direct influence of strategy formulation on performance, producing a strong positive coefficient ($\beta = 0.412$, $p < 0.001$). This confirmed that deliberate strategic planning remains a statistically significant performance driver even within turbulent markets. The second model, following Hayes's (2022) mediation procedures, assessed whether strategic awareness and institutional support functioned as mediators. Results revealed a significant indirect effect (0.186, 95 % CI [0.072, 0.314]), indicating that institutional alignment and managerial awareness transform strategic intent into executable performance routines. The third model examined moderation by environmental dynamics. The interaction term ($\beta = -0.203$, $p = 0.017$) demonstrated that while strategy formulation generally improves outcomes, its effectiveness declines under extreme volatility - consistent with Contingency Theory's adaptive-fit principle (Donaldson, 2001). Finally, the fourth model evaluated the independent contribution of institutional and regulatory engagement to performance ($\beta = 0.337$, $p = 0.006$). Developers who engaged more proactively with policy networks and professional associations reported higher efficiency and market growth. The integrated hierarchical model achieved an adjusted R^2 of 0.689, $F(5, 82) = 36.32$, $p < 0.001$, indicating that nearly 69 % of the variance in organizational performance was explained by the combined strategic, institutional, and environmental variables. These results collectively affirmed the complementarity of deliberate planning, adaptive learning, and institutional connectivity: an interdependence further corroborated through qualitative interpretation.

Diagnostic Robustness and Statistical Integrity

To ensure the credibility and replicability of statistical inferences, the study applied rigorous diagnostic tests to all regression and multivariate models. Linearity was verified through the inspection of standardized residual plots, which exhibited symmetrical dispersion around the zero baseline, confirming proportional relationships between predicted and observed values. Homoscedasticity was validated using the Breusch-Pagan test ($p >$

0.05), indicating constant error variance across levels of prediction and thus supporting the assumption of equal variability. Multicollinearity diagnostics revealed Variance Inflation Factor (VIF) values below 5, signifying that predictor variables were statistically independent and free from redundancy.

The independence of errors was confirmed by a Durbin-Watson statistic of 1.94, eliminating concerns of serial correlation in residuals. Normality was assessed through Shapiro-Wilk tests ($p > 0.05$) and visual inspection of Q-Q plots, both of which affirmed that residual distributions approximated the theoretical normal curve. Outlier influence was evaluated using Cook's Distance, whose maximum observed values remained below the conservative threshold of $4/N$ (≈ 0.045), demonstrating that no single observation exerted undue leverage on model coefficients. For multivariate robustness, the assumptions underlying the MANCOVA were systematically tested. Box's M test for equality of covariance matrices yielded a non-significant result ($p > 0.05$), validating the homogeneity of covariance across groups, while Levene's tests for equality of variances also exceeded the .05 threshold, indicating uniform variance among dependent variables. Collectively, these diagnostics confirmed the models' stability, internal consistency, and the reliability of statistical inference, thereby ensuring that the analytical conclusions drawn were empirically sound and methodologically defensible (Tabachnick & Fidell, 2019).

Qualitative Analysis and Interpretive Depth

The qualitative strand followed Braun and Clarke's (2006) six-phase approach to thematic analysis, ensuring systematic coding and interpretive transparency. Open-ended responses were examined for recurrent patterns concerning environmental volatility, institutional cooperation, and learning behaviour. Three principal themes emerged: strategic agility, denoting the speed and flexibility with which firms revised plans; institutional negotiation, capturing how developers engaged regulators and financiers to navigate bottlenecks; and capacity building, referring to investments in managerial learning and knowledge systems.

These themes enriched the quantitative results by explaining why certain statistical patterns manifested as they did. For instance, firms that reported higher levels of strategic agility also exhibited above-average composite performance scores, supporting the inference that adaptive learning mediates the strategy-performance link. Similarly, narratives describing policy unpredictability clarified the moderating role of environmental dynamics identified in regression models.

Integration and Triangulation for Meta-Inference

Integration within the mixed-methods framework occurred at two pivotal stages, producing what Creswell and Plano Clark (2018) describe as meta-inference: a higher-order synthesis that transcends individual methodological boundaries to generate a more holistic and contextually grounded understanding of the phenomenon under study. The first stage, analytical integration, involved merging quantitative and qualitative datasets to assess points of convergence and divergence between statistical outputs and narrative insights. Regression analyses revealed that the effect of strategic formulation on performance weakened under conditions of heightened environmental turbulence. However, the accompanying qualitative evidence elucidated the underlying causes: respondents consistently cited regulatory fragmentation, inconsistent policy interpretation, and delayed project approvals as structural inhibitors of strategic execution. These narratives provided causal texture to numerical associations, converting abstract coefficients into lived managerial realities.

The second stage, interpretive integration, occurred during the synthesis of results, where thematic patterns were systematically employed to contextualize statistical relationships within the decision-making processes of real estate developers. For instance, the regression finding that institutional engagement exerted a significant positive effect on performance was deepened by respondents' testimonies describing how participation in professional forums, policy workshops, and industry associations enhanced shared learning, fostered credibility with financiers, and expedited access to information critical for compliance and

innovation. This triangulated structure, consistent with the principles advanced by Jick (1979), strengthened the validity of the findings by cross-verifying evidence from independent sources and methodological lenses. It ensured that the study's explanatory power derived not merely from the strength of numerical relationships but from an empirically rich, multidimensional understanding of strategic behaviour within Kenya's dynamic real estate ecosystem. In doing so, the integration process transformed statistical outcomes into actionable insights, bridging the gap between methodological rigour and contextual relevance.

Methodological Reflections and Applied Lessons

The methodological innovation of this study lies in its reconciliation of quantitative precision with contextual sensitivity. Four reflections emerge that hold value for built-environment research more broadly. Firstly, mixed-methods integration mitigates the traditional polarity between statistical generalization and interpretive depth. In volatile sectors where data scarcity and institutional complexity constrain research, a concurrent embedded design offers both reliability and realism. Secondly, embedding open-ended items within a structured survey instrument rather than conducting separate interviews enhances response efficiency among time-constrained executives while maintaining qualitative richness. This strategy proved particularly effective with Kenya's real estate leaders, whose participation rates increased once confidentiality and relevance were assured. Thirdly, advanced quantitative procedures such as PROCESS-based moderation and mediation analysis can be successfully applied in field research when supported by robust validity checks. Their inclusion demonstrates that analytical rigour is feasible in emerging market contexts without sacrificing accessibility for practitioners. Fourthly, the triangulated approach cultivated mutual learning between researcher and respondents. By feeding back preliminary results through the Kenya Property Developers Association (KPDPA), the process became both an empirical investigation and a professional development exercise - illustrating how research can strengthen industry capability and promote evidence-based practice.

Transition to Interpretation and Implications

The analytical execution outlined above established both statistical credibility and interpretive coherence. The convergence of quantitative and qualitative evidence confirmed that organizational resilience arises from the interdependence of strategic planning, adaptive learning, and institutional collaboration. This methodological architecture anchored in pragmatism and validated through diagnostics and triangulation demonstrates that high-quality strategic-management research can be achieved even in data-constrained environments. These findings extend beyond the immediate empirical context of Kenya's real estate sector and provide a foundation for broader methodological, theoretical, and practical reflections. The following section considers these wider implications for mixed-methods research in strategic management and the built environment.

Implications for Mixed-Methods Research in Strategic Management

Advancing Methodological Integration in Emerging-Market Scholarship

This study demonstrates that mixed-methods inquiry when systematically embedded within a pragmatic paradigm offers a superior architecture for examining complex, multi-layered strategic phenomena in emerging markets. Quantitative models alone cannot sufficiently explain how institutional voids, policy discontinuities, and socio-cultural dynamics interact with organizational behaviour. Equally, qualitative narratives, while rich in interpretation, may lack the inferential power to distinguish spurious correlations from causal relationships. The concurrent embedded design employed here resolves this tension by synthesizing inferential precision and interpretive nuance. Regression-based tests quantify causal strength, while thematic interpretation reveals mechanisms and meaning. Such integration allows scholars to move beyond correlation to explanation to uncover *how* and *why* strategic practices yield differential performance under environmental turbulence. This methodological pluralism echoes calls by Molina-Azorín and Cameron (2015) for hybridized designs that transcend the

traditional quantitative-qualitative divide in management research. By adapting this framework to the Kenyan context, the study contributes to the decolonization of strategic-management methodology. It validates that rigorous empirical work need not replicate Western templates uncritically but can evolve through context-responsive adaptation, generating methodological frameworks suited to the institutional textures of the Global South.

Practical Replicability and Design Adaptation

One of the study's most significant methodological contributions lies in its replicability within professional environments characterized by limited data access and high respondent sensitivity. The embedded open-ended format eliminated the need for follow-up interviews, reducing logistical costs while maintaining interpretive depth. This makes the design especially attractive for association-based or regulatory research, where access to decision-makers is often mediated through formal channels. Future applications could extend this design to other professional domains such as infrastructure management, construction contracting, or real estate finance where strategic complexity and institutional interdependence are similarly pronounced. By refining the integration of qualitative prompts into structured instruments, researchers can enhance respondent engagement while capturing both metric and narrative data. Moreover, embedding capacity-building components for example, feedback workshops or co-analysis sessions transforms data collection into a participatory learning process. This blurs the boundary between research and professional practice, reinforcing methodological reflexivity and sectoral development.

Validity Enhancement through Triangulation and Diagnostics

The methodological lessons extend beyond design choice to quality assurance mechanisms. The study confirmed that triangulation and statistical diagnostics are complementary, not alternative, routes to validity. At the quantitative level, the combination of exploratory factor analysis, composite reliability, and MANCOVA validated both measurement and structural robustness. At the qualitative level, thematic cross-checking

ensured interpretive trustworthiness. When integrated through meta-inference, these processes generated multidimensional validity, encompassing internal, construct, and ecological credibility. This reinforces Creswell and Plano Clark's (2018) proposition that validity in mixed-methods research is not additive but *synergistic*: the product of multiple, interacting validation logics. For researchers and policy analysts alike, this underscores that rigour is not confined to numbers but extends to coherence between design, data, and interpretation.

Implications for Strategic-Management Theory and Empirical Modelling

Beyond its procedural implications, the Kenyan study offers theoretical insight into how methodological integration enhances conceptual precision in strategic-management research. Integrating environmental dynamics, institutional engagement, and strategy formulation within a single empirical model demonstrates that performance outcomes cannot be explained through isolated constructs. The findings reaffirm that Dynamic Capabilities Theory (Teece et al., 1997) and Contingency Theory (Donaldson, 2001) are not rival paradigms but complementary lenses: one focusing on adaptability, the other on environmental fit. Mixed-methods analysis provides the evidentiary depth required to articulate their interaction empirically. Moreover, institutional engagement emerges as both an analytical variable and a methodological insight: collaboration between firms, regulators, and associations enhances not only performance but also research participation and data reliability. Thus, methodological integration mirrors the substantive interdependence of strategy and environment - it is both *about* and *an instance of* systemic alignment.

Pedagogical and Policy Applications

The methodological approach also holds pedagogical and policy value. For management educators, it demonstrates how to embed quantitative and qualitative strands within a single empirical framework, translating abstract theories into testable constructs while retaining interpretive depth. Graduate research programs in construction and real estate management can adopt this framework as a model for training in *applied strategic analysis*.

For policymakers and industry associations, such as the Kenya Property Developers Association (KPPDA), the study provides a replicable diagnostic tool. Statistical modules like regression and MANCOVA identify structural differences among firms, while thematic insights reveal the behavioural and institutional drivers behind them. Periodic replication of similar surveys could help monitor sectoral resilience and policy effectiveness - transforming mixed-methods research from academic exercise into governance instrument.

Ethical and Epistemological Reflections

Conducting research within commercially sensitive industries raises ethical complexities that are themselves methodological. Confidentiality, data protection, and voluntary participation were not procedural formalities but trust-building mechanisms that shaped access and response quality. Ethical reflexivity, therefore, forms part of methodological rigour echoing Resnik (2020), who argues that ethical soundness is inseparable from scientific credibility. Epistemologically, the concurrent embedded design affirms a middle ground between positivist measurement and constructivist interpretation. It demonstrates that knowledge about strategy and performance is simultaneously objective and situated - quantifiable in trends yet meaningful only through contextual interpretation. Such epistemic balance aligns with the pragmatic paradigm's emphasis on *useful truth*: knowledge that informs both theory and practice (Morgan, 2014).

A Five-Principle Framework for Mixed-Methods Strategic Inquiry

In the aggregate, the methodological lessons distilled from this study coalesce into a synthesis framework for advancing built-environment scholarship, particularly in contexts characterized by turbulence, institutional complexity, and knowledge asymmetry. The findings demonstrate that robust inquiry in such settings must rest on five interdependent principles that collectively define a coherent paradigm for mixed-methods strategic research. Firstly, methodological pluralism is indispensable. Capturing the intricate interplay between strategy formulation, environmental turbulence, and institutional behaviour requires the integration

of quantitative modelling with interpretive analysis. Statistical methods such as regression and MANCOVA offer empirical precision, while qualitative narratives reveal the cognitive and contextual mechanisms that shape organizational adaptation. Secondly, design pragmatism must guide methodological choices. Rather than adhering rigidly to positivist or interpretivist doctrines, researchers should tailor their approaches to the constraints and opportunities of the field environment. In professional sectors like real estate, where access, time, and data confidentiality pose real challenges, pragmatic design ensures that methodological ideals remain feasible and context sensitive. Thirdly, iterative integration is essential to methodological coherence. The convergence of quantitative and qualitative findings through analytical and interpretive triangulation (what Creswell and Plano Clark (2018) describe as *meta-inference*) produces explanations that are both empirically grounded and conceptually rich. Integration transforms datasets into dialectical partners rather than parallel strands, yielding deeper insight into causality and context. Fourthly, collaborative reflexivity strengthens both validity and relevance. By engaging developers, policymakers, and professional associations as co-producers of knowledge, the research process becomes participatory and mutually educational. This reflexive engagement enhances interpretive accuracy and facilitates the translation of academic insight into actionable policy and managerial practice. Finally, ethical transparency forms the normative foundation of methodological integrity. In sectors governed by competition, regulation, and trust, maintaining confidentiality, informed consent, and responsible data stewardship is integral to credibility. Ethical clarity, far from being peripheral, directly contributes to the reliability and reproducibility of findings.

Together, these five principles define a mixed-methods paradigm of strategic inquiry: one that fuses the econometric rigour of quantitative analysis with the ethnographic sensitivity of organizational understanding. The Kenyan real estate study thus stands not only as an empirical contribution to strategic management literature but also as a methodological prototype for examining complex adaptive systems in emerging

economies. It exemplifies how scholarly inquiry can transcend methodological dichotomies, uniting precision with praxis to illuminate how organizations learn, adapt, and perform amid structural uncertainty.

Concluding Methodological Reflection

Methodological integration is not merely a compromise between paradigms; it is a synthesis that expands explanatory and epistemic capacity beyond what either quantitative or qualitative inquiry can achieve independently. By weaving quantitative precision and contextual interpretation into a coherent analytical fabric, the study demonstrates that mixed-methods research can achieve both theoretical generalization and practical utility. For scholars of strategic management, the approach offers a roadmap for designing studies that honour the complexity of real-world organizations without relinquishing analytical discipline. For practitioners and policymakers, it provides a mirror through which strategy formulation, environmental adaptation, and institutional collaboration can be continuously assessed and refined. In totality, the mixed-methods paradigm exemplified in this research affirms that rigour and relevance are not opposing goals but mutually reinforcing pursuits: each enriching the other in the advancement of knowledge for an increasingly dynamic built environment.

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