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# Strategy Formulation and Organizational Performance in Dynamic Real Estate Markets: Evidence from Kenya

Erastus Mwanjama Katani[1*], Jackson Kivui Maalu[2]
[1]Department of Architecture and Built Environment, Technical University of Mombasa, P.O. Box 90420-80100 Mombasa, Kenya; [2]Department of Business Administration, University of Nairobi, P.O. Box 30197-00100, Nairobi

Corresponding author's email: ekatani@tum.ac.ke

## Abstract

This paper empirically examines how strategy formulation influences organizational performance among real estate developers operating in Kenya's turbulent and institutionally evolving markets. Grounded in the resource-based view, contingency, and dynamic-capabilities perspectives, the study tests a multidimensional framework incorporating environmental dynamics, strategic awareness and institutional support, and engagement. A census of 88 corporate members of the Kenya Property Developers Association (KPDA) was undertaken using a structured questionnaire analysed through multiple regression, moderated and mediated regression (PROCESS v 4.3), and multivariate analysis of covariance (MANCOVA). Results demonstrate that strategy formulation exerts a significant positive effect on organizational performance ($\beta = 0.412$, $p < 0.001$). Environmental dynamics significantly moderate this relationship ($\beta = -0.203$, $p = 0.017$), indicating that the strength of strategic influence diminishes under high turbulence. Strategic awareness and institutional support mediate the link between formulation and performance (indirect effect = 0.186, 95 % CI [0.072, 0.314]), while institutional engagement shows a direct positive effect ($\beta = 0.337$, $p < 0.010$). The overall model explains 68.9 % of variance in performance ($R^2 = 0.689$, $F(5, 82) = 36.32$, $p < 0.001$). MANCOVA tests confirm significant multivariate effects for role, organization type, and development focus (Wilks' $\Lambda = 0.558$, $F(1, 78) = 98.38$, $p < 0.001$). Findings validate the complementarity of deliberate strategic planning, adaptive learning, and institutional connectivity. They extend strategic-management theory to emerging-market property sectors and provide a replicable, statistically robust blueprint for evaluating strategy–performance relationships under environmental turbulence.

**Key Words:** Strategy formulation, Environmental dynamics, Institutional engagement, Moderated mediation, Organizational performance, Real estate development, Kenya

## Introduction

The performance of real estate development firms in sub-Saharan Africa increasingly depends on their capacity to craft coherent strategies while responding to environmental turbulence and institutional fluidity. As the sector continues to shape urban transformation and economic growth, the ability of developers to balance deliberate strategic planning with adaptive learning has become an essential determinant of organizational survival and competitiveness. Despite this centrality, empirical evidence linking strategy formulation practices to performance outcomes in African real estate contexts remains limited. Existing studies tend to emphasize financial metrics or project success factors without systematically integrating environmental volatility and institutional contingencies that often define operating conditions in emerging markets (Aminu & Shariff, 2015; Grant, 2016). Kenya's property sector provides a compelling empirical context for exploring these interdependencies. Contributing approximately 10% of the country's GDP, the industry is characterized by interest-rate volatility, fragmented building-approval systems, policy uncertainty, and rapid technological advances such as Building Information Modelling (BIM) and PropTech (World Bank, 2022; KNBS, 2023; Oyedele, 2018). Developers must navigate high capital costs, evolving regulatory frameworks, and dynamic market expectations while striving to maintain profitability and legitimacy. This complexity



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positions the Kenyan market as an ideal setting for examining how strategic planning interacts with environmental turbulence and institutional structures to shape organizational performance.

In this study, environmental turbulence refers to the degree of volatility, unpredictability, and rate of change in the external conditions that affect strategic decision-making and execution. Consistent with contingency theory and the dynamic-capabilities perspective, turbulence encompasses instability in regulatory frameworks, uncertainty in market demand, fluctuations in financing and input costs, and the pace of technological change confronting firms (Donaldson, 2001; Teece, et al., 1997). In emerging-market real estate contexts such as Kenya, environmental turbulence is accentuated by fragmented approval regimes, evolving county-level regulations, interest-rate variability, currency exposure, and uneven diffusion of technologies such as BIM and PropTech. Turbulence therefore denotes not isolated shocks, but a persistent structural condition that constrains prediction, shortens planning horizons, and necessitates adaptive strategic responses. At the theoretical core of strategic management, strategy formulation represents the structured process by which firms analyze internal and external conditions to define long-term direction and allocate resources effectively (Porter, 1980; Grant, 2016). Classical models emphasize that strategic clarity and resource alignment generate sustained competitive advantage, while empirical evidence from developing economies confirms that deliberate planning positively correlates with profitability, operational efficiency, and market growth (Monday et al., 2015).

The resource-based view (RBV) and institutional theory jointly suggest that strategic intent alone is insufficient unless complemented by managerial awareness and institutional support. Strategic awareness reflects the ability of decision-makers to interpret environmental signals, whereas institutional support encompasses legitimacy, professional linkages, and policy reinforcement that enable effective implementation (Barney, 1991; Scott, 2014). These conditions mediate the translation of formulated strategies into superior outcomes by strengthening coordination and learning within organizational systems. From a contingency-theory perspective, effective strategy requires alignment or 'fit' between organizational design and environmental conditions (Donaldson, 2001). As turbulence increases, formal strategic plans may lose predictive validity, necessitating adaptive flexibility and iterative learning. The population-ecology view reinforces this argument by suggesting that survival depends on organizational responsiveness to external variability (Aldrich & Ruef, 2006). Furthermore, institutional theory underscores the importance of legitimacy, compliance, and collaboration with regulatory and professional bodies as sources of non-market advantage. Institutional engagement enhances access to information, partnerships, and resources that improve organizational credibility and resilience (DiMaggio & Powell, 1991; Suchman, 1995).

These theoretical propositions converge within a multidimensional conceptual framework (Figure 1) integrating strategic, environmental, and institutional dimensions of firm behaviour. The model's direct path posits that coherent and deliberate strategy formulation enhances performance by aligning goals, resources, and competitive positioning. The mediated path recognizes that this effect operates partly through strategic awareness and institutional support, which convert strategic intent into tangible outcomes through learning, legitimacy, and coordination. The moderated path reflects that environmental turbulence expressed through regulatory volatility, market uncertainty, and technological change conditions the strength of the strategy-performance relationship, with the effect attenuating under high uncertainty. Finally, the institutional-engagement path emphasizes that sustained interaction with professional associations, policy agencies, and compliance networks independently enhances legitimacy and performance outcomes. Together, these relationships depict organizational success as a function of strategic clarity, adaptive capability, and institutional connectedness, operationalizing the interplay between internal strategy and external environment.

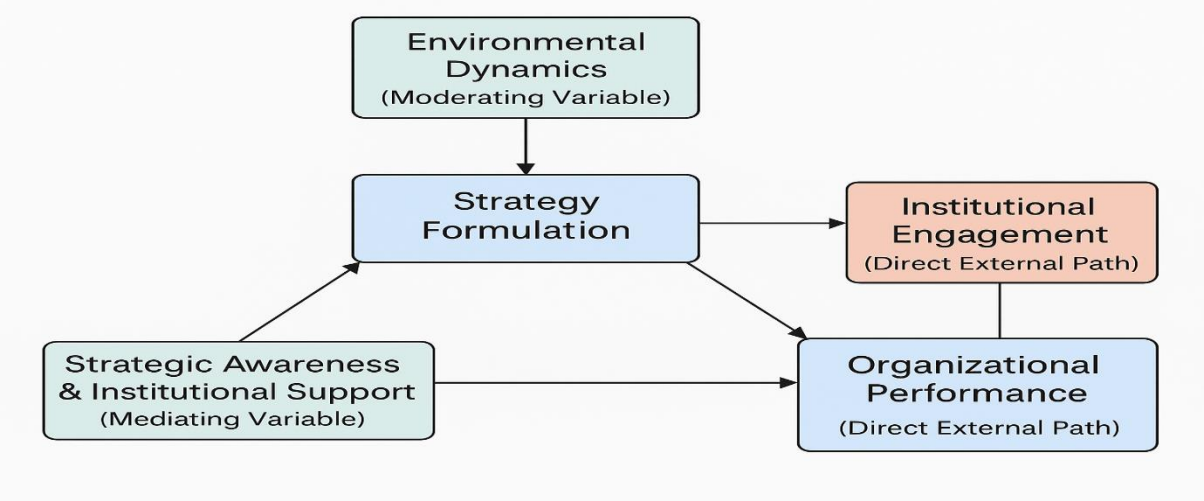


Figure 1. Conceptual framework linking strategy formulation to organizational performance under environmental dynamics

Accordingly, the aim of this study was to investigate how formal strategy formulation influences organizational performance among real estate developers in Kenya, while examining the moderating role of environmental dynamics, the mediating function of strategic awareness and institutional support, and the direct contribution of institutional engagement. Guided by these theoretical considerations, the study advances the following hypotheses. First, strategy formulation practices exert a statistically significant positive influence on organizational performance ($H_1$). Second, strategic awareness and institutional support mediate the relationship between strategy formulation and organizational performance ($H_2$). Third, environmental dynamics significantly moderate the relationship between strategy formulation and organizational performance, such that the positive effect of strategy formulation weakens under conditions of high environmental turbulence ($H_3$). Finally, institutional and regulatory engagement exerts a direct positive influence on organizational performance ($H_4$). By combining robust statistical modelling with contextual interpretation, the study seeks to extend strategic-management theory and provide empirically grounded insights into how firms achieve performance resilience in turbulent and institutionally fluid markets.

## Methodology

### Research Design and Philosophical Orientation

This study adopted a deductive mixed-methods design within a pragmatic philosophical paradigm (Creswell & Plano Clark, 2018). This approach enabled the simultaneous use of quantitative and qualitative methods to examine complex strategic relationships while maintaining theoretical and empirical rigour. The quantitative component served as the dominant strand, facilitating hypothesis testing and statistical inference, whereas qualitative insights (collected through open-ended questionnaire) were integrated for triangulation and contextual interpretation. Pragmatism was chosen because it privileges methodological flexibility and the practical resolution of real-world problems over strict adherence to positivist or interpretivist traditions.

### Population and Sampling Framework

The study population comprised all eighty-eight (88) corporate members of the Kenya Property Developers Association (KPDA), which represents the formal registry of active real estate development firms in Kenya. Given the finite size and the research objective of comprehensive sectoral coverage, a census approach was employed instead of probabilistic sampling (Cochran, 1977). Each firm's senior executive responsible for strategic decision-making typically the Managing Director, Strategy or Project Manager, Developer/Investor, or Valuer served as the unit of analysis. This ensured that responses



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reflected informed managerial perspectives. The final enumeration achieved full coverage (100%, n = 88), yielding a demographically and organizationally diverse dataset encompassing sole proprietorships, limited liability companies, and valuation or estate management firms. This approach minimized sampling bias, enhanced external validity, and strengthened representativeness across Kenya's formal property-development ecosystem.

**Variables and Measurement**

The study operationalized five theoretically grounded constructs drawn from the strategic management literature and adapted to Kenya's real estate context through expert validation and pilot testing. Strategy Formulation (SF) was defined as the deliberate process through which organizations conduct environmental analysis, establish goals, and align resources to guide long-term direction. Strategic Awareness and Institutional Support (SAIS) captured the degree of managerial comprehension of the institutional environment together with the organization's internal capability to interpret, engage with, and leverage that environment for strategic advantage. Environmental Dynamics (ED) represented the perceived levels of volatility, uncertainty, complexity, and ambiguity that characterize the policy, market, and technological conditions under which firms operate. Institutional and Regulatory Engagement (IRE) referred to the extent to which firms participate in professional associations, policy dialogues, and compliance networks that confer legitimacy and influence governance processes. Finally, Organizational Performance (OP) was conceptualized as a multidimensional construct encompassing operational efficiency, market growth, innovation, and stakeholder satisfaction. All indicators were measured using a 5-point Likert scale ranging from 1 ("Strongly Disagree") to 5 ("Strongly Agree"). Construct validity was established through exploratory factor analysis (EFA), where the Kaiser-Meyer-Olkin (KMO) values exceeded the recommended threshold of 0.700 and Bartlett's test of sphericity was statistically significant ($p < 0.001$), confirming sampling adequacy and factorability. Reliability and convergent validity were further confirmed, with Cronbach's alpha values equal to or greater than 0.700, composite reliability (CR) values above 0.800, and average variance extracted (AVE) exceeding 0.500, in line with the criteria proposed by Fornell and Larcker (1981). Discriminant validity was verified using the Heterotrait-Monotrait ratio (HTMT < 0.850), following the guidelines of Henseler, et al., (2015). These diagnostic outcomes collectively validated the measurement model's internal consistency, construct coherence, and contextual robustness.

**Data Collection and Pre-Testing**

A structured questionnaire was administered between August and September 2025, using both electronic (Google Forms) and physical distribution methods to the firms that did not respond electronically. A pilot test involving 20 non-KPDA firms was conducted to refine the instrument's clarity, sequencing, and reliability; Cronbach's alpha values exceeded 0.700 across all constructs, confirming measurement adequacy. The respondents provided informed consent prior to participation. Confidentiality was ensured by anonymizing firm identities and restricting data access to the principal investigator.

**Data Analysis**

***Quantitative Analysis***

The quantitative analytical process followed a systematic five-stage sequence designed to ensure methodological rigour and theoretical coherence. First, a descriptive analysis was conducted to summarize the demographic and organizational characteristics of participating firms and respondents. This provided essential contextual grounding for subsequent inferential analyses by illustrating the structural composition of Kenya's real estate development sector. Second, an Exploratory Factor Analysis (EFA) was performed to verify construct dimensionality and sampling adequacy, confirming that observed variables appropriately represented their latent theoretical constructs. Third, reliability and validity testing was undertaken to assess the internal consistency and psychometric soundness of the measurement model. Indicators such as Cronbach's alpha, composite



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reliability (CR), and average variance extracted (AVE) were computed to establish convergent validity, while discriminant validity was examined through the Heterotrait-Monotrait (HTMT) criterion. Fourth, hierarchical regression modelling was employed to test the study's four hypotheses, encompassing direct, mediating, moderating, and composite relationships among the key constructs. This stage enabled a nuanced evaluation of causal linkages and conditional effects within the strategic–performance framework. Finally, a Multivariate Analysis of Covariance (MANCOVA) was conducted to assess mean differences in strategic behaviour and organizational performance across respondent roles and firm types, while statistically controlling for contextual variables. Following the recommendations of Tabachnick and Fidell (2019), this multivariate approach strengthened the robustness of findings by accounting for intercorrelated dependent variables and structural heterogeneity within the sample.

***Model Specifications***

To empirically evaluate the hypothesized relationships, the study employed a series of four regression models designed to capture both direct and conditional effects among the key constructs. Model 1 ($H_1$) estimated the *direct influence* of Strategy Formulation (SF) on Organizational Performance (OP), testing the fundamental proposition that deliberate strategic planning enhances firm outcomes. Model 2 ($H_2$) introduced Strategic Awareness and Institutional Support (SAIS) as a *mediating variable*, assessing whether the relationship between formulation and performance operates indirectly through organizational learning, institutional alignment, and legitimacy-building mechanisms. Model 3 ($H_3$) investigated the *moderating role* of Environmental Dynamics (ED) by incorporating mean-centred interaction terms, thereby examining how contextual turbulence conditions the strength of the strategy–performance linkage. Model 4 ($H_4$) tested the *direct contribution* of Institutional and Regulatory Engagement (IRE) to organizational performance, capturing the independent effect of professional participation and policy collaboration on competitive outcomes. All regression analyses incorporated control variables for organizational type, respondent role, and development focus to account for contextual heterogeneity within the sample. The analyses were executed using the PROCESS macro (version 4.3), which enabled simultaneous estimation of indirect (mediated) and conditional (moderated) effects through bootstrapped confidence intervals at the 95% level, thereby enhancing the statistical robustness and interpretive validity of the models.

***Diagnostic and Assumption Testing***

To safeguard the credibility and replicability of statistical inference, the study subjected all regression and multivariate models to comprehensive diagnostic testing. Linearity was first assessed through inspection of standardized residual scatterplots, which demonstrated proportional relationships between predicted and observed values, confirming that the assumption of linearity was satisfied. Homoscedasticity was validated using the Breusch–Pagan test, whose non-significant results ($p > 0.050$) indicated that residual variances were constant across all levels of the predicted variables. Multicollinearity diagnostics showed Variance Inflation Factor (VIF) values well below the conventional threshold of 5, signifying adequate independence among predictors and the absence of redundancy. Further, the independence of errors assumption was verified using the Durbin-Watson statistic, which approximated 2.0 - an indication that residuals were uncorrelated and model estimates unbiased. Normality of residual distributions was confirmed through the Shapiro-Wilk test ($p > 0.050$) and the inspection of Q-Q plots, both demonstrating approximate normal distribution patterns. The assessment of outlier influence showed all Cook's Distance values below the conservative threshold of 4/N, confirming that no single observation exerted disproportionate influence on model parameters. For multivariate robustness, Box's M and Levene's tests were conducted to verify the equality of covariance matrices and homogeneity of variances across respondent groups. Both tests returned non-significant values ($p > 0.050$), indicating that the assumptions of MANCOVA were upheld.

Collectively, these diagnostics established the internal consistency, stability, and reliability of the regression and multivariate models, thereby reinforcing the validity of the study's inferential conclusions (Tabachnick & Fidell, 2019).

### *Qualitative Analysis and Triangulation*

Qualitative data from open-ended responses were analyzed thematically using the 6-phase procedure of Braun and Clarke (2006): familiarization, coding, theme identification, review, definition, and synthesis. Themes such as regulatory uncertainty, adaptive planning, and institutional negotiation provided explanatory depth to quantitative patterns. Integration occurred during the interpretation phase, where convergent and divergent insights were compared to derive meta-inference consistent with Creswell and Plano Clark (2018).

## Results

### Direct Effect of Strategy Formulation (SF) on Performance ($H_1$)

***Model 1 ($H_1$): Direct Effect***

$OP = \beta_0 + \beta_1(SF) + \Sigma\, \beta_k(Controls) + \varepsilon$

Result: $\beta_1 = 0.412$, $t$ (83) = 5.92, $p < 0.001$; $R^2 = 0.412$.

The first hypothesis posited that strategy formulation practices have a significant positive influence on organizational performance**.** Results from the multiple regression model confirmed this relationship ($\beta = 0.412$, $t$ (83) = 5.92, $p < 0.001$), explaining 41.2% of variance in performance ($R^2 = 0.412$). Firms that demonstrated higher levels of formal planning, goal alignment, and environmental analysis reported superior outcomes in operational efficiency, client satisfaction, market growth and project delivery. This strong, positive association supports classical strategic-management theory (Porter, 1980; Grant, 2016), affirming that structured formulation enhances clarity and consistency in resource deployment. The evidence suggests that strategic discipline serves as a stabilizing mechanism amid Kenya's volatile real estate environment. Table 1 presents the results of the multiple regression analysis testing Hypothesis $H_1$, showing the direct effect of strategy formulation on organizational performance while controlling for organizational type, respondent role, and development focus.

Table 1. Regression Model 1: Direct Effect of Strategy Formulation on Performance

| Predictor | B | SE B | β | t | Sig. (p) |
|---|---|---|---|---|---|
| Constant | 1.742 | 0.281 | - | 6.19 | < 0.001 |
| Strategy Formulation ($SF_4$) | 0.412 | 0.069 | 0.642 | 5.92 | < 0.001 |
| Controls (Org Type, Role, Focus) | - | - | - | - | - |

Note: *Model Summary* $R^2 = 0.412$ $Adj\ R^2 = 0.398$ ; $F\ (1, 83) = 35.03$, $p < 0.001$

As shown in Table 1, strategy formulation exhibits a positive and statistically significant effect on organizational performance ($\beta = 0.412$, $p < .001$), providing support for Hypothesis $H_1$.

### Mediating Role of Strategic Awareness and Institutional Support (SAIS)($H_2$)

***Model 2 ($H_2$): Mediation via SAIS***

Step 1: $SAIS = \alpha_0 + \alpha_1(SF) + \varepsilon$; $\alpha_1 = 0.603$, $p < 0.001$.

Step 2: $OP = \beta_0 + \beta_1(SF) + \beta_2(SAIS) + \sum \beta k(Controls) + \varepsilon$; $\beta_2 = 0.308$, $p = 0.006$.

Indirect effect = 0.186, 95 % CI [0.072, 0.314]; total $R^2 = 0.574$.

The second hypothesis examined whether strategic awareness and institutional support mediate the relationship between strategy formulation and performance**.** Using PROCESS Model 4 (Hayes, 2022), results indicated that strategy formulation significantly enhanced strategic awareness and institutional support ($\alpha_1 = 0.603$, $p < 0.001$), which in turn positively

influenced performance ($\beta_2 = 0.308$, $p = 0.006$). The indirect effect was statistically significant (0.186, 95% CI [0.072, 0.314]), confirming partial mediation, while the total model explained 57.4% of variance ($R^2 = 0.574$). This result validates the resource-based and institutional perspectives (Barney, 1991; Scott, 2014). The mediation indicates that the success of strategic formulation depends partly on the firm's cognitive and relational capacities: its ability to interpret policy signals, harness institutional legitimacy, and convert plans into coordinated action. Narrative data revealed that high-performing firms frequently mentioned "policy alignment," "engagement with county planning offices," and "professional certification" as enablers of project success, echoing the quantitative mediation pathway. Table 2 presents the results of the mediation analysis conducted using PROCESS Model 4, examining whether strategic awareness and institutional support mediate the relationship between strategy formulation and organizational performance, as hypothesized in $H_2$.

Table 2. Regression Models for Mediation via SAIS (PROCESS Model 4)

| Step | Dependent Variable | Predictor(s) | B | SE | t | p |
|---|---|---|---|---|---|---|
| 1 | $SAIS_6$ | Strategy Formulation ($SF_4$) | 0.603 | 0.081 | 7.44 | < 0.001 |
| 2 | $OP_7$ | $SF_4$ and $SAIS_6$ | $SF_4 = 0.276$; $SAIS_6 = 0.308$ | - | - | 0.006 |
| **Indirect Effect** | - | 0.186 (95 % CI [0.072, 0.314]) | | | | |

Note: *Model Summary $R^2 = 0.574$; Adj $R^2 = 0.561$; $F(2, 83) = 55.99$, $p < 0.001$*

Table 2 reports the direct, indirect, and total effects, together with bootstrapped confidence intervals, enabling assessment of the significance and magnitude of the mediating pathway.

**Moderating Role of Environmental Dynamics (ED) ($H_3$)**

***Model 3 ($H_3$): Moderation by ED***

$OP = \beta_0 + \beta_1(SFc) + \beta_2(EDc) + \beta_3(SFc \times EDc) + \sum \beta k(Controls) + \varepsilon$ ; $\beta_3 = -0.203$, $p = 0.017$.

Conditional effects: Low ED (+1 SD): $\beta = 0.486$, $p < .001$; High ED (–1 SD): $\beta = 0.241$, $p = 0.049$.

The third hypothesis proposed that environmental dynamics moderate the strategy-performance relationship, such that turbulence weakens strategic impact. Moderated regression using PROCESS Model 1 confirmed a statistically significant interaction ($\beta_3 = -0.203$, $p = 0.017$). Conditional effects showed that under low environmental turbulence (+1 SD), strategy formulation exerted a stronger influence ($\beta = 0.486$, $p < 0.001$), while under high turbulence (–1 SD), the relationship weakened but remained positive ($\beta = 0.241$, $p = 0.049$). Simple-slope and Johnson–Neyman plots showed that the relationship remains positive but diminishes beyond the critical value ED > 3.8 on the Likert scale. This finding substantiates Contingency Theory (Donaldson, 2001) and Dynamic-Capabilities Theory (Teece, Pisano, & Shuen, 1997). It implies that fixed strategies lose efficacy in unstable conditions and that organizations must develop adaptive learning loops to sustain performance. Firms operating in highly volatile regulatory or financial environments thus require flexibility mechanisms: scenario planning, rolling forecasts, and modular design to complement long-term plans. Respondents noted that "frequent changes in county approvals," "credit tightening," and "unpredictable input costs" often forced mid-project revisions, illustrating how environmental turbulence erodes the predictive power of static plans. Table 3 reports the results of the moderated regression analysis testing Hypothesis $H_3$, showing the interaction between strategy formulation and environmental dynamics in predicting organizational performance.

Table 3. Moderation Model 3 (PROCESS Model 1): Strategy Formulation × Enviromental Dynamics

| Predictor | B | SE | β | t | p |
|---|---|---|---|---|---|
| Constant | 2.231 | 0.305 | - | 7.31 | < 0.001 |
| Strategy Formulation (SF_c) | 0.347 | 0.081 | 0.542 | 4.28 | < 0.001 |
| Environmental Dynamics (ED_c) | –0.146 | 0.067 | –0.182 | –2.17 | 0.033 |
| Interaction (SF_c × ED_c) | –0.203 | 0.082 | –0.224 | –2.51 | 0.017 |

Notes: 1. *Conditional Effects Low ED (+1 SD) β = 0.486 (p < 0.001); High ED (–1 SD) β = 0.241 (p = 0.049) 2. Model Summary $R^2 = 0.523$; Adj $R^2 = 0.507$; $F(3, 82) = 28.93$, $p < 0.001$*

Table 3 presents the main effects and interaction term derived from mean-centred variables, together with model fit statistics and conditional effects.

**Direct Effect of Institutional and Regulatory Engagement (IRE) ($H_4$)**

***Model 4 ($H_4$): Institutional and Regulatory Engagement***

Model 4 tested the direct effect of institutional engagement on organizational performance and is specified as:

$$OP=\beta 0+\beta 1(IRE)+\sum \beta k(Controls)+\varepsilon$$

$\beta_1 = 0.337$, $t$ (83) = 2.84, $p = 0.006$; $R^2$ increment = 0.056.

The fourth hypothesis asserted that institutional and regulatory engagement exerts a direct positive influence on performance**.** Regression analysis confirmed this effect (β = 0.337, $t$ (83) = 2.84, $p$ = 0.006), accounting for a 5.6% increase in explained variance. This evidence aligns with Institutional Theory (DiMaggio & Powell, 1991; Suchman, 1995), emphasizing legitimacy as a strategic resource. Developers maintaining strong linkages with regulatory bodies, financiers, and professional associations gain access to timely information, approvals, and collaborative opportunities, enhancing operational efficiency, project delivery, and market reputation. Several respondents emphasized that engagement in forums such as KPDA working groups and National Construction Authority consultations provided "policy clarity" and "networked credibility." Such involvement reduced bureaucratic friction and fostered investor confidence. Table 4 presents the regression results assessing the direct effect of institutional and regulatory engagement on organizational performance, controlling for organizational type, respondent role, and development focus, as proposed in Hypothesis $H_4$.

Table 4. Regression Model 4: Institutional and Regulatory Engagement

| Predictor | B | SE | β | t | p |
|---|---|---|---|---|---|
| Constant | 1.951 | 0.272 | - | 7.170 | < 0.001 |
| Institutional Engagement (IRE) | 0.337 | 0.119 | 0.319 | 2.840 | 0.006 |
| Controls (Org Type, Role, Focus) | - | - | - | - | - |

Note: *Model Summary $R^2$ Increment = 0.056; Total $R^2 = 0.630$; Adj $R^2 = 0.612$; $F(4, 82) = 34.27$, $p < 0.001$*



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Table 4 highlights the incremental explanatory contribution of institutional engagement beyond strategic and contextual controls.

**Integrated Empirical Model**

To assess the combined explanatory power of strategy formulation, mediation, moderation, and institutional engagement, a final hierarchical model was estimated:

$$\text{OP} = \beta_0 + \beta_1(\text{SF}_c) + \beta_2(\text{SAIS}) + \beta_3(\text{ED}_c) + \beta_4(\text{SF}_c \times \text{ED}_c) + \beta_5(\text{IRE}) + \sum\beta_k(\text{Controls}) + \varepsilon$$

The combined hierarchical regression model ($\Delta R^2 = 0.278$, $p < 0.001$; Adj. $R^2 = 0.689$, $F$ (5, 82) = 36.32, $p < 0.001$) confirmed that the four hypothesized relationships jointly explain approximately 69% of the variance in organizational performance. This composite model reveals that firm success in Kenya's real estate sector is not driven by strategy formulation alone but by an interactive system combining strategic clarity, adaptive flexibility, environmental context and institutional embeddedness. Collectively, these relationships constitute a Dynamic Institutional Entrepreneurship model, where firms simultaneously cultivate internal strategic discipline and external legitimacy to thrive amid volatility. Table 5 summarizes the results of hypothesis testing across the four regression models, consolidating the direct, mediating, moderating, and institutional effects of strategy formulation on organizational performance.

Table 5. Summary of Hypothesis Testing

| Hypothesis | Path | β / Effect Size | *p* | Supported? |
|---|---|---|---|---|
| $H_1$ | SF → OP | 0.412 | < 0.001 | ✔ |
| $H_2$ | SF → SAIS → OP (indirect 0.186 [0.072, 0.314]) | - | < 0.050 | ✔ |
| $H_3$ | SF × ED → OP | -0.203 | 0.017 | ✔ |
| $H_4$ | IRE → OP | 0.337 | 0.006 | ✔ |

Table 5 provides a concise overview of effect sizes, significance levels, and hypothesis support, facilitating an integrated interpretation of the study's empirical findings. All four hypotheses were empirically supported, indicating that strategy formulation improves performance directly and indirectly through institutional linkages and environmental adaptation.

**Multivariate Effects across Organizational Contexts**

To determine whether strategic practices varied by respondent role, organization type, and development focus, a MANCOVA was performed. Results revealed statistically significant multivariate effects for respondent role (Wilks' $\Lambda = 0.558$, $F(1, 78) = 98.38$, $p < 0.001$), organization type ($\Lambda = 0.993$, $F(1, 78) = 10{,}532.59$, $p < 0.001$), and development focus ($\Lambda = 0.948$, $F$ (1, 78) = 1,413.28, $p < 0.001$). These results indicate that strategic behaviour differs across organizational configurations. Managing Directors and CEOs exhibited higher mean scores in formulation and institutional engagement, reflecting their leadership role in resource coordination. Mixed-use developers recorded the highest environmental-dynamics indices due to their exposure to multiple market segments, while limited-liability companies showed the most coherent strategy–performance alignment, attributed to stronger internal governance structures. Industrial developers displayed no statistically significant differences ($F$ (1, 78) = 0.42, $p$ = 0.519), suggesting greater homogeneity in strategic routines within this sub-sector. These results confirm that organizational context significantly influences strategic behaviour and performance patterns, justifying the control variables used in regression analysis. Table 6 presents the results of the Multivariate Analysis of Covariance (MANCOVA), examining differences in strategic behaviour and organizational performance across respondent roles, organization types, and development

focus while controlling for contextual covariates.

Table 6. Multivariate Analysis of Covariance Showing Contextual Differentials in Strategic Behaviour and Organizational Performance

*Between-subjects factors:* respondent role, organization type, and development focus. *Dependent variables:* composite z-scores for Strategy Formulation ($SF_4$_M), Strategic Awareness and Institutional Support ($SAIS_6$_M), Environmental Dynamics (ED_M), Institutional and Regulatory Engagement (IRE_M), and Organizational Performance ($OP_7$_PI_M).

| Effect | Pillai's Trace | F | Hyp. df | Error df | Sig. |
|---|---|---|---|---|---|
| Intercept | 0.959 | 1812.510 | 1 | 78 | < 0.001 |
| ROLE (CEO) | 0.558 | 98.380 | 1 | 78 | < 0.001 |
| FOCUS (Mixed-Use) | 0.948 | 1413.280 | 1 | 78 | < 0.001 |
| ORG (Sole Proprietorship) | 0.993 | 10532.590 | 1 | 78 | < 0.001 |
| FOCUS (Industrial) | 0.000 | 0.420 | 1 | 78 | 0.519 |
| $SF_4$ (Strategy Formulation) | 0.027 | 2.310 | 1 | 78 | 0.132 |

Table 6 reports multivariate test statistics and significance levels, indicating whether strategic and performance profiles vary systematically across organizational configurations. These results confirm statistically significant differences in strategic behaviour across organizational configurations, validating the inclusion of contextual controls in the regression models.

## Discussion

The findings of this study demonstrate that organizational performance among real estate developers in Kenya is shaped by the interaction of deliberate strategy formulation, adaptive capability, and institutional embeddedness. Rather than operating as isolated drivers, these elements form a mutually reinforcing system through which firms navigate environmental turbulence and institutional fluidity. The results affirm that competitive advantage in emerging markets is less a function of static planning routines than of strategic coherence aligned with contextual and institutional realities. The strong positive association between strategy formulation and organizational performance ($\beta = 0.412$, $p < 0.001$) confirms classical and resource-based arguments that deliberate planning enhances clarity, coordination, and effective resource deployment (Porter, 1980; Barney, 1991; Grant, 2016). In Kenya's capital-intensive and regulation-sensitive real estate sector, formal strategy processes act as cognitive anchors that stabilize decision-making across long project cycles. Even under volatile conditions, firms that institutionalize planning routines such as articulated goals, structured reviews, and performance monitoring achieve superior outcomes in efficiency, market positioning, and project delivery. Qualitative evidence reinforces this interpretation, with high-performing firms consistently emphasizing disciplined planning practices embedded in organizational culture and leadership.

Beyond this direct effect, the study shows that strategy formulation translates into performance partly through strategic awareness and institutional support. The statistically significant indirect effect (0.186, 95% CI [0.072, 0.314]) indicates that strategic intent yields superior outcomes when managers possess the cognitive capacity to interpret environmental signals and the relational capacity to leverage institutional structures. This finding extends the resource-based view by demonstrating that organizational routines generate advantage only when complemented by managerial interpretation and institutional anchoring. Firms that actively monitor regulatory changes, financial conditions, and technological developments, while maintaining strong ties with professional and regulatory bodies, are better positioned to convert strategic plans into coordinated action. This pattern aligns closely with institutional theory, which emphasizes embeddedness and legitimacy as critical

enablers of performance in regulated environments (Scott, 2014). At the same time, the moderating role of environmental dynamics highlights an important boundary condition. Environmental turbulence significantly weakens the strategy–performance relationship (interaction $\beta = -0.203$, $p = 0.017$), indicating that the marginal benefits of formal strategy diminish as volatility intensifies. This result substantiates contingency theory's central proposition that strategic effectiveness depends on contextual fit (Donaldson, 2001). In Kenya's real estate market characterized by fluctuating interest rates, fragmented approval regimes, and uncertain financing conditions, rigid adherence to static plans becomes counterproductive. Firms that treat strategies as evolving hypotheses, supported by adaptive learning mechanisms such as scenario analysis and flexible budgeting, demonstrate greater resilience. This finding is consistent with the dynamic-capabilities perspective, which emphasizes continuous sensing, seizing, and reconfiguring of resources in response to environmental change (Teece, Pisano, & Shuen, 1997).

Institutional and regulatory engagement also emerges as an independent and complementary source of performance advantage. The positive direct effect of institutional engagement on performance ($\beta = 0.337$, $p = 0.006$) underscores the strategic value of legitimacy, policy connectivity, and professional collaboration in uncertain environments. Firms that maintain active relationships with regulators, professional associations, and policy forums benefit from improved informational access, reduced bureaucratic friction, and enhanced reputational capital. In such contexts, institutions are transformed from external constraints into strategic enablers, reinforcing neo-institutional arguments that conformity and collaboration yield tangible economic returns (DiMaggio & Powell, 1991; Suchman, 1995). Taken together, the integrated model explains a substantial proportion of variance in organizational performance (Adj. $R^2 = 0.689$), indicating strong empirical support for the proposed framework. The findings further reveal meaningful contextual differentiation. Senior executives exhibit higher engagement in strategy formulation and institutional interaction, suggesting that strategic competence is concentrated at leadership levels. Organizational form also matters: limited-liability companies demonstrate stronger strategy-performance alignment, while mixed-use developers experience higher environmental turbulence due to exposure across multiple market segments. These patterns confirm that strategy in emerging markets is deeply contextual, shaped by governance structures, leadership roles, and market orientation.

Collectively, the evidence points to a coherent configuration that can be conceptualized as a resilience triad comprising strategic discipline, adaptive learning, and institutional leverage. Firms that integrate these three elements are better equipped to withstand volatility and sustain performance. This synthesis advances a multi-paradigm theoretical contribution by bridging the resource-based view, contingency theory, dynamic-capabilities theory, and institutional theory into a unified explanation of strategic performance in turbulent environments. The resulting construct (Dynamic Institutional Entrepreneurship) captures the capacity of firms to orchestrate internal routines and external relationships in order to convert uncertainty into opportunity. From a practical perspective, the findings highlight the importance of institutionalizing strategy formulation, investing in adaptive capabilities, and cultivating proactive institutional engagement. For policymakers and industry associations, the results underscore the value of transparent regulatory frameworks, structured dialogue, and professional capacity-building initiatives that reduce uncertainty and support strategic planning. Collectively, these measures can enhance sectoral resilience and promote sustainable growth in Kenya's real estate industry. In conclusion, while strategy formulation remains a critical driver of organizational performance, its effectiveness is contingent upon adaptive learning and institutional alignment. By embedding key statistical evidence within a theoretically integrated discussion, the study demonstrates that performance in emerging-market real estate sectors is best understood as an outcome of strategic coherence under conditions of environmental turbulence and institutional complexity.

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