



Strategic Management, Innovation Capability, and Firm Performance among Small and Medium Enterprises: A Moderation Analysis

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Abstract: Small and medium enterprises (SMEs) constitute the productive foundation of emerging economies yet exhibit disproportionately high failure rates attributable partly to deficient strategic orientation and constrained innovation capacity. This study examines whether innovation capability moderates the relationship between strategic management and firm performance among SMEs in Sultan Kudarat, Philippines – a provincially underexplored context whose industrial composition and resource environment may generate dynamics distinct from those documented in metropolitan or high-income settings. Using a cross-sectional, quantitative, descriptive-correlational design, primary data were collected from 293 SME owners and managers across multiple industries through a structured questionnaire adapted from validated instruments. Descriptive statistics, Pearson product-moment correlation, and bootstrapped moderation analysis were employed. SMEs demonstrated high composite levels of both strategic management and innovation capability, and reported very high firm performance. A pronounced divergence emerged within the innovation capability profile: innovation culture rated very high while innovation resources lagged substantially, revealing a structural tension between innovative motivation and actualized innovative capacity. Strategic management was significantly and positively correlated with firm performance and with innovation capability, while the association between innovation capability and firm performance was positive but marginal. The bootstrapped interaction term was non-significant, leading to non-rejection of the moderation hypothesis. Simple slope analyses confirmed that the effect of strategic management on firm performance was uniformly significant and nearly identical across low, average, and high levels of innovation capability. These results establish strategic management as the dominant, context-invariant driver of SME performance and reconceptualize innovation capability as an independent enabler rather than a boundary condition of strategic effectiveness.

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INTRODUCTION

Small and medium enterprises (SMEs) hold an indispensable position in the structural architecture of most national economies. Globally, they account for approximately 90% of all businesses, contribute half of world GDP, and generate 60% to 70% of total employment – figures that make SME vitality not merely a private sector concern but a foundational condition for inclusive economic development (United Nations, 2024). In the Philippines, the sector's centrality is even more pronounced: SMEs provided 66.97% of total national employment as of 2023, and the World Bank's approval of a USD 600 million financing package for Philippine SME inclusion in 2023 reflects the international recognition of their strategic development significance (Department of Trade and Industry [DTI], 2023; World Bank, 2023).

Yet statistical prominence does not translate into institutional resilience. The COVID-19 pandemic exposed the structural fragility of SMEs with unusual clarity: economic growth in developing Asia plummeted from 5.1% in 2019 to -0.4% in 2020, and SMEs, which lacked the financial reserves and organizational redundancy of large enterprises, bore a disproportionate share of that contraction (Shinozaki & Rao, 2021). The pandemic's destructive force was not applied uniformly, however. Firms with formalized strategic processes, disciplined resource allocation, and embedded innovation cultures demonstrated meaningfully greater adaptive capacity than those relying on informal or reactive decision-making (Amankwah-Amoah et al., 2021). This differential resilience is not incidental but theoretically predictable: strategic management creates the organizational infrastructure through which firms identify threats early, mobilize resources efficiently, and pivot their competitive positioning before discontinuous events become existential crises (Guerrero et al., 2017).

The scholarly literature identifies two principal organizational resources through which SMEs sustain competitive viability under dynamic conditions. The first is strategic management – encompassing the formulation, implementation, and systematic evaluation of decisions that align firm capabilities with environmental demands. The evidence for strategic management's performance effects is among the most consistent in the management literature: firms with formalized strategic processes outperform ad hoc competitors on sales growth, market share retention, and profitability across diverse national contexts (Agwu, 2018; Sandada et al., 2014). The second is innovation capability – the firm's capacity to generate and deploy novel products, processes, organizational configurations, and market approaches. Innovation capability's performance contributions operate through a different but complementary logic: where strategic management improves the efficiency of existing resource deployment, innovation expands the productive frontier of the firm's



resource base, creating temporary competitive advantages that resist imitation (Saunila, 2020; Yusr, 2016).

Despite the well-documented individual effects of both constructs, the question of how they interact to produce performance outcomes remains empirically contested. The theoretical case for a synergistic relationship is coherent: strategic management frameworks that embed innovation planning within their operational logic should amplify the performance returns to innovative activity, while robust innovation capabilities should improve the quality of strategic analysis by expanding the range of competitive moves available to the firm (Ferreira et al., 2020). Against this, however, Vakulenko (2021) demonstrates that resource constraints characteristic of smaller firms can attenuate innovation capability's amplifying potential, producing an additive rather than multiplicative joint effect – a finding with particular relevance to provincial SME ecosystems where resource scarcity is structural rather than incidental.

Sultan Kudarat, a province situated on Mindanao's southwestern coast, provides a theoretically apposite and empirically underexplored setting for adjudicating between these competing accounts. Its SME sector – concentrated in agriculture, wholesale and retail trade, and accommodation and food services – operates within an institutional environment markedly different from the manufacturing or technology contexts that dominate the existing moderation literature. Regional market integration with Mindanao's agricultural supply chains is intensifying, customer expectations are evolving alongside digital exposure, and regulatory compliance demands are growing – pressures that simultaneously increase the strategic and innovative demands on SMEs and constrain the resources available to meet them. Yet no study has examined the triadic strategic management–innovation–performance relationship in this context, leaving policymakers and practitioners without locally grounded evidence to inform capacity-building investments.

This study addresses this gap by pursuing four objectives: (1) to assess the level of strategic management practice across eight dimensions – leadership, culture and values, strategic thinking and planning, alignment, performance measurement, performance management, process improvement, and sustainability; (2) to evaluate innovation capability across six dimensions – product, organizational, process, and marketing innovation capabilities, innovation culture, and innovation resources; (3) to measure perceived firm performance across six financial and market indicators; and (4) to test whether innovation capability significantly moderates the strategic management–firm performance relationship. Two null hypotheses structure the inquiry: H_{01} (no significant relationship between strategic management, innovation



capability, and firm performance) and H_{02} (innovation capability does not significantly moderate the strategic management–performance relationship).

The practical significance of this investigation extends beyond scholarly contribution. Sultan Kudarat's SME sector mirrors the development challenges confronting underserved provincial economies across Mindanao – contexts in which resource-constrained firms must generate competitive viability without the talent pools, infrastructure, and capital markets available in metropolitan settings. Evidence-based guidance on how strategic orientation and innovation capacity jointly shape firm performance can inform DTI program design, local government unit support mechanisms, and business development service provision in ways that improve resource allocation efficiency and development impact. These outcomes connect directly to the United Nations Sustainable Development Goals, particularly SDG 8 (Decent Work and Economic Growth) and SDG 10 (Reduced Inequalities), recognizing that provincial SME strengthening is a prerequisite for inclusive economic development that transcends metropolitan centers (Jiménez et al., 2021).

LITERATURE REVIEW

Strategic Management and SME Performance

The empirical record on strategic management's performance effects is substantial and largely consistent. Agwu (2018), in a study of Nigerian SMEs, finds that firms employing formalized strategic planning achieve markedly superior performance compared to counterparts relying on informal decision-making, particularly under turbulent market conditions where the absence of a strategic compass generates paralysis rather than adaptive response. Sandada et al. (2014) replicate this pattern in the South African context, documenting positive associations between strategic planning and SME performance across financial, market, and operational dimensions, while Majama and Magang (2017) extend the cross-contextual validity of the finding to Botswana. This geographic consistency strengthens the case for applying these findings to Sultan Kudarat's provincial context.

The mechanisms through which strategic management generates performance benefits are theoretically diverse. Leadership that articulates a coherent organizational vision reduces internal coordination costs and improves goal alignment, enabling more efficient collective action toward strategic objectives (Avila & Preiss, 2015). Performance measurement systems that track progress against strategic benchmarks allow faster course correction, reducing the accumulation of operational inefficiencies before they become structurally embedded (Kibira et al.,



2018). Strategic thinking and planning stimulate systematic environmental scanning, enabling SMEs to identify opportunities and threats before they materialize into performance crises that reactive management cannot address in time (Widjanarko et al., 2022). Cultural alignment – the internalization of shared values and behavioral norms consistent with strategic priorities – reduces principal-agent frictions that dissipate organizational energy in firms lacking cohesive identity (Wongs et al., 2020).

Recent work in the Philippine regional context has reinforced and contextualized these findings. A study of SMEs in Santo Tomas, Davao del Norte, documented that strategic leadership aligned with organizational goals significantly enhanced employee dedication and competitive positioning, while research in the Bangsamoro Autonomous Region found consistent positive associations between formalized strategic management practices – environmental scanning, strategy formulation, implementation, and evaluation – and return on investment (Ombaka & Jagongo, 2023; Susanto, 2023). These Mindanao-proximate findings strengthen the theoretical expectation that the strategic management–performance relationship generalizes to Sultan Kudarat's provincial SME setting, whilst also signaling that the magnitude of the relationship may be sensitive to local institutional and cultural conditions.

Innovation Capability and SME Performance

Innovation capability's theoretical relationship to firm performance is grounded in Schumpeter's (1934) seminal insight that competitive advantage is inherently dynamic – that firms which generate and deploy novel combinations of resources achieve temporary superiority that persists until competitive imitation erodes their advantage. For SMEs, which typically lack the market power to compete on cost at scale, innovation represents a primary mechanism through which competitive parity with larger rivals can be achieved and sustained. The multidimensional character of innovation is important in this context: product innovation expands and differentiates the firm's offering; process innovation reduces costs through efficiency improvements; organizational innovation creates coordination structures that support more agile strategy execution; and marketing innovation expands market reach through novel communication and distribution strategies (Camps & Marques, 2014).

The empirical support for the innovation–performance relationship is broad but not unconditional. Saunila's (2020) systematic review of 113 studies documents consistent positive associations between innovation capability and performance across diverse SME contexts. Yusr (2016) demonstrates that these associations are strongest when innovation is integrated with quality management processes rather than pursued as an isolated activity. Chege et al. (2020) provide direct evidence from



East Africa, where IT innovation generated measurable performance gains even among resource-constrained SMEs operating in environments structurally comparable to Sultan Kudarat. Akinremi and Roper (2021) extend this literature by demonstrating that firms with strong innovation cultures are more effective at absorbing externally sourced knowledge, amplifying their competitive positioning beyond what internal innovation alone could achieve.

The critical qualification to this generally positive literature is the moderating role of resource constraints. Vakulenko (2021) argues theoretically and demonstrates empirically that innovation capability's performance effects are attenuated in SMEs where the resource infrastructure for translating innovative intent into tangible output is insufficient. This resource-constraint mechanism is particularly pertinent for provincial SME populations in developing economies, where the financial, human, and technological inputs required to sustain innovation activity are systematically limited by market imperfections in capital, talent, and technology access. The divergence between innovation culture and innovation resources documented in the present study's descriptive results provides direct empirical support for Vakulenko's theoretical argument in the Sultan Kudarat context.

The Moderating Role of Innovation Capability

The proposition that innovation capability moderates the strategic management–performance relationship rests on a coherent theoretical claim: firms in which strategic management co-evolves with innovation capacity may experience amplified performance gains relative to firms in which these functions develop in isolation (Ferreira et al., 2020). The mechanism is interactive rather than additive – strategic management creates structured contexts within which innovation activity can be systematically planned and resourced, while innovation capability enhances the quality and range of competitive moves available for strategic exploitation.

The empirical evidence on this moderation hypothesis is more heterogeneous than the theoretical case implies. Agyapong et al. (2016) find that innovation capabilities significantly moderate the competitive strategy–performance relationship among family businesses in Ghana, whilst Lilly and Juma (2014) document positive moderating effects in the Kenyan banking sector. Donkor et al. (2018) add important nuance by demonstrating that the moderating effect of innovation capability varies significantly by industry and firm size – smaller, resource-constrained firms show weaker interaction effects than their larger, better-resourced counterparts, a pattern consistent with the attenuation mechanism Vakulenko (2021) identifies. Samson and Gloet (2018) propose an alternative theoretical resolution: innovation may function as a complementary but analytically separable performance driver rather than as a multiplicative amplifier of strategic management's effects. Under this additive model,



the appropriate statistical expectation is not a significant interaction term but two independent main effects each contributing separately to performance – precisely the pattern that the present study's moderation analysis reveals.

THEORETICAL FRAMEWORK

This study is anchored in the Resource Advantage (R-A) theory of competition advanced by Hunt and Morgan (1997), which constitutes the most analytically powerful framework available for explaining differential performance outcomes among firms operating within identical market environments. R-A theory departs from neoclassical economics' assumption of homogeneous, perfectly mobile resources and posits instead that firms achieve superior performance by leveraging heterogeneous, imperfectly mobile resource portfolios that generate comparative advantages in specific market segments. The theory's central empirical prediction – that resource quality differences among firms systematically produce performance differences – is both theoretically elegant and empirically robust, having been replicated across diverse industries, national contexts, and organizational types.

For SME analysis, R-A theory is particularly revealing because it situates competitive advantage within the boundaries of the firm rather than assigning it to industry structure or market concentration. This firm-internal focus explains why SMEs operating in identical market environments – selling comparable products to overlapping customer segments, sourcing inputs from the same supply chains – nonetheless exhibit systematically divergent performance trajectories. In Sultan Kudarat's SME context, the R-A framework implies that strategic management constitutes a resource ensemble: a set of internally developed capabilities that enable firms to identify competitive positions, mobilize existing assets efficiently, and develop new resource configurations in response to market signals. Innovation capability, under the same framework, is a second-order resource – one that enhances the firm's capacity to generate primary competitive resources through the systematic deployment of new knowledge.

Several complementary frameworks reinforce and extend this core theoretical positioning. Resource-based theory (Barney, 1991) specifies the conditions under which resources generate sustained competitive advantages – they must be valuable, rare, imperfectly imitable, and non-substitutable – providing evaluative criteria through which both strategic management competencies and innovation capabilities can be assessed in the SME context. Contingency theory adds a contextual calibration, asserting that strategic effectiveness is always relative to the environmental conditions within which firms operate (Makanga & Paul, 2017). This perspective is consequential for the present study: the non-significant moderating effect of



innovation capability may reflect not the absence of a theoretically plausible interaction but the specific institutional and resource conditions of Sultan Kudarat that prevent its manifestation. Innovation diffusion theory (Rogers, 1962) provides a mechanism through which innovation capability translates into competitive outcomes, describing how new products and processes propagate through firm and market systems to generate adoption curves that determine the temporal distribution of competitive advantage. Together, these frameworks support a theoretical model in which strategic management and innovation capability are conceptualized as primary and enabling resources, respectively, whose joint deployment under favorable conditions generates compounding performance returns.

METHODS

Research Design

This study employed a cross-sectional, quantitative, descriptive-correlational research design. The correlational component assesses the strength and direction of associations among theoretically specified variables without experimental manipulation – a design choice appropriate for organizational research where random assignment is neither feasible nor ethically appropriate (Asenahabi, 2019). To test the moderating hypothesis, a bootstrapped hierarchical regression model incorporating a multiplicative interaction term was specified, following the procedure recommended by Baron and Kenny (1986) and extended through bias-corrected bootstrapping approaches to confidence interval estimation that are robust to violations of distributional normality assumptions (Memon, 2019). The study received ethical clearance from the University of Mindanao Ethics Review Committee (Protocol No. 2024-212).

Setting and Participants

The study was conducted across the eleven municipalities and one city of Sultan Kudarat, a province on Mindanao's southwestern coast. The research locale was selected on the basis of documented gaps in provincial SME scholarship: no prior investigation had examined the strategic management-innovation-performance nexus in this context, despite the province's significant agricultural and commercial SME sector. The target population comprised owners and managers of SMEs registered and operating within Sultan Kudarat. A sample of 293 respondents was obtained through simple random sampling, satisfying statistical power requirements for detecting interaction effects of moderate magnitude (Husain et al., 2021). Both owners and managers were included given their equivalent familiarity with firm-level strategic and innovation practices (Nurjaman, 2020).



Participating SMEs were required to have operated continuously for at least two years within the province. Small enterprises were defined as those with total assets exceeding PHP 3 million but below PHP 15 million; medium enterprises held assets between PHP 15 million and PHP 100 million, consistent with the Magna Carta for SMEs definition applied by the DTI and used in prior Philippine SME research (Khor et al., 2015). Exclusion criteria encompassed minors, individuals without active managerial involvement, and enterprises not meeting the asset classification criteria.

Measures

The research instrument comprised three validated scales. Strategic management was assessed using an adapted version of the Strategic Management Needs Assessment Survey (River Forest Public School, 2020), covering eight dimensions: leadership, culture and values, strategic thinking and planning, alignment, performance measurement, performance management, process improvement, and sustainability. Innovation capability was measured using the scale developed and validated by Calik et al. (2017), covering product, organizational, process, and marketing innovation capabilities, innovation culture, and innovation resources. Firm performance was assessed using the relative performance scale of Swan et al. (2005), comprising six indicators – sales growth, market share growth, profitability change, ROI change, return on sales growth, and overall performance relative to major competitors – over the preceding 12 months.

All items employed five-point Likert-type response formats. Internal consistency was established through Cronbach's alpha and McDonald's omega: strategic management achieved $\alpha = 0.893$ and $\omega = 0.924$ (good to excellent); innovation capability achieved $\alpha = 0.876$ and $\omega = 0.899$. The firm performance scale required iterative revision – an initial pilot yielded $\alpha = 0.427$ and $\omega = 0.468$, attributable to the conceptual heterogeneity of its indicators, and a revised version administered to 30 SME respondents in a second pilot achieved $\alpha = 0.699$ and $\omega = 0.706$, meeting acceptable thresholds for subsequent use. Expert content validation was conducted by faculty specialists in strategic management, entrepreneurship, and measurement at the University of Mindanao Professional Schools.

Data Collection and Analysis

Following ethical clearance, data were collected through complementary offline and online modalities – physical questionnaire distribution at SME premises and digital administration via Google Forms – to maximize accessibility across Sultan Kudarat's geographically dispersed municipalities. Respondents were given a five-day completion window with telephone and in-person follow-up for non-returns. Descriptive statistics (means and standard deviations) characterised the sample's profiles on all three constructs. Pearson product-moment correlation



assessed bivariate associations among the three primary variables. The moderation analysis employed bootstrapped regression with a multiplicative interaction term ($SM \times IC$), with simple slope analyses at one standard deviation above and below the moderator mean conducted to characterize the functional form of any detected interaction.

RESULTS AND DISCUSSION

Level of Strategic Management

The overall strategic management composite ($M = 4.18$, $SD = 0.196$, High) signals that the elements of strategic orientation are consistently enacted across Sultan Kudarat's SMEs – not merely endorsed in principle but incorporated into regular business practice. This finding is itself substantively significant: prior scholarship on SME strategic behaviour in emerging economies tends to characterise smaller firms as reactive and ad hoc in their management approaches (Bellamy et al., 2019), making the present sample's relatively sophisticated strategic profile noteworthy.

Performance management registered the highest individual dimension score ($M = 4.41$, $SD = 0.226$, Very High). This elevation indicates that Sultan Kudarat's SMEs have institutionalized feedback loops that track customer satisfaction and operational outcomes and feed the resulting information back into managerial decisions – a practice that Anand and Walsh (2020) characterize as transforming organizations into learning systems capable of sustained incremental improvement. The clustering of performance measurement ($M = 4.37$), alignment ($M = 4.32$), and strategic thinking and planning ($M = 4.20$) within the very high range is equally telling. Together, these three dimensions describe a strategic posture in which firms actively translate vision into measurable objectives, monitor progress against those objectives, and engage in ongoing planning cycles that maintain strategic coherence across functional areas. The prevalence of this posture in a provincial setting – where firms are presumed to have less access to the management consultancy and executive education that typically diffuse formal strategic practices – suggests that Sultan Kudarat's SME leaders have internalized strategic discipline through experience and competitive necessity rather than formal training.

Culture and values, however, registered the lowest mean across all eight dimensions ($M = 3.92$, $SD = 0.320$), and the gap between this dimension and the higher-scoring measurement and management dimensions warrants careful interpretation. Culture and values are not peripheral to strategic effectiveness – they constitute the organizational substrate from which implementation capacity is constructed. A strategy that is technically well-designed but inadequately embedded in shared organizational values will encounter the kind of implementation resistance,

**Table 1.***Strategic Management across Eight Dimensions: Descriptive Statistics (N = 293)*

Dimension	M	SD	Descriptive Level
leadership	4.13	0.390	High
culture and values	3.92	0.320	High
strategic thinking and planning	4.20	0.189	Very High
alignment	4.32	0.182	Very High
performance measurement	4.37	0.159	Very High
performance management	4.41	0.226	Very High
process improvement	4.07	0.268	High
sustainability	4.04	0.332	High
Overall	4.18	0.196	High

Note. Descriptive levels: 4.21–5.00 = Very High; 3.41–4.20 = High; 2.61–3.40 = Moderate; 1.81–2.60 = Low.

inconsistent execution, and principal-agent friction that erodes realized performance relative to potential (Cardno, 2020). The relatively lower cultural scores suggest that Sultan Kudarat's SMEs have built strong strategic monitoring and planning capabilities at the operational level while perhaps neglecting the cultural formation processes – participatory value articulation, leadership modeling, and collective identity reinforcement – that determine whether strategic plans generate genuine collective commitment rather than surface compliance. This cultural development lag is the most actionable finding in the strategic management profile, pointing to a specific capacity-building priority that requires commitment rather than capital.

Level of Innovation Capability

The overall innovation capability composite (M = 4.18, SD = 0.072, High) suggests that Sultan Kudarat's SMEs engage in innovation-oriented behaviour with



meaningful regularity. The unusually tight standard deviation at the composite level – less than a quarter of the individual dimension SDs – reflects strong inter-respondent consensus about overall innovation activity levels, a pattern suggestive of sector-wide norms rather than idiosyncratic firm variation.

Table 2.*Innovation Capability across Six Dimensions: Descriptive Statistics (N = 293)*

Dimension	M	SD	Descriptive Level
product innovation capability	4.15	0.147	High
organizational innovation capability	4.26	0.126	Very High
process innovation capability	4.25	0.112	Very High
marketing innovation capability	4.20	0.093	Very High
innovation culture	4.54	0.159	Very High
innovation resources	3.69	0.254	High
Overall	4.18	0.072	High

Note. Descriptive levels as in Table 1.

Innovation culture earned the highest score across all innovation dimensions and, indeed, across the entire study's variable landscape ($M = 4.54$, $SD = 0.159$, Very High). This finding is theoretically consequential. Innovation culture is not an output of innovation activity but its precondition – the motivational and relational infrastructure upon which product development, process improvement, and market expansion capacities are built. Organizations that normalize experimentation, reward creative contribution, and encourage knowledge exchange among employees generate higher rates of novel idea generation and implementation than those that treat innovation as a specialist function reserved for designated roles (Muafi, 2020). That Sultan Kudarat's SMEs have cultivated strong innovation cultures despite operating in a resource-constrained provincial environment is both encouraging and somewhat surprising; it suggests that the aspirational and relational dimensions of



innovation have diffused successfully even where the material conditions for intensive innovative activity remain underdeveloped.

The most analytically significant feature of the innovation capability profile, however, is the pronounced divergence between innovation culture ($M = 4.54$) and innovation resources ($M = 3.69$, $SD = 0.254$, High). This gap of 0.85 scale points – the widest observed anywhere in the study across all dimensions of all three constructs – reveals a structural tension that has direct implications for both the bivariate correlations and the moderation analysis that follow. Innovation resources – the financial, human, and technological inputs required to convert innovative intent into tangible outputs – represent a fundamentally different investment category from culture: building an innovation-encouraging organizational climate costs primarily leadership time and communication, whilst developing the resource infrastructure to actually execute new product development, technology adoption, and specialized staffing requires capital that Sultan Kudarat's SMEs may not independently command.

This culture-resource gap is not a novel finding in the emerging economy SME literature, but the present study's data give it unusual empirical precision. Vakulenko (2021) theorizes that resource constraints function as a moderating liability that limits the degree to which SMEs can convert innovative orientation into realized innovative output. The gap documented here supports this theoretical mechanism and, crucially, provides a plausible structural explanation for the non-significant moderating effects reported in Section 4.5: if innovation resources are insufficient to fully actualize the strong innovation culture that Sultan Kudarat's SMEs have cultivated, then innovation capability's capacity to amplify the performance returns of strategic management will be correspondingly limited. The innovation culture-resource divergence documented here thus functions not merely as a descriptive finding but as an explanatory mechanism that connects the quantitative moderation results to the institutional realities of provincial SME operation.

Level of Firm Performance

The overall firm performance composite ($M = 4.48$, $SD = 0.249$, Very High) indicates that Sultan Kudarat's SMEs perceive their performance as consistently exceeding that of their major competitors across all six financial and market dimensions. This is a strong empirical finding, and it invites an interpretation that extends beyond simple affirmation.

Growth in return on sales registered the highest individual score ($M = 4.65$, $SD = 0.479$), indicating that these SMEs place particular emphasis on the ratio of net income to revenues – on improving margin efficiency rather than merely expanding revenue volume. This orientation is consistent with competitive survival logic in

**Table 3.***Firm Performance across Six Indicators: Descriptive Statistics (N = 293)*

Performance Indicator	M	SD	Descriptive Level
sales growth	4.51	0.501	Very High
market share growth	4.39	0.488	Very High
change in profitability	4.48	0.501	Very High
change in return on investment	4.33	0.470	Very High
growth of return on sales	4.65	0.479	Very High
performance vs. competitors	4.51	0.501	Very High
Overall	4.48	0.249	Very High

Note. Performance scale anchored at 1 (much lower than competitors) to 5 (much higher than competitors), covering the preceding 12 months. Descriptive levels as in Table 1.

markets where scale disadvantages relative to larger competitors make cost-based competition unattractive: improving the quality and pricing of output, controlling operational costs, and optimizing the revenue mix generates margin improvements that volume expansion alone cannot achieve. Return on investment registered the lowest individual score ($M = 4.33$), though this remained rated very high. The relative moderation of this indicator is interpretively coherent: return on sales is primarily influenced by current operational efficiency and pricing strategy, both of which strategic management can directly improve, whilst return on investment incorporates the denominator of total invested capital, which for SMEs may be more difficult to optimize given the lumpiness of capital expenditure decisions and the longer payback horizons over which capital investments yield returns.

The overall very high performance profile is theoretically consistent with both R-A theory and the resource-based view's prediction that firms leveraging superior resource portfolios – which the study's strategic management and innovation capability data suggest these SMEs possess – will achieve superior competitive outcomes. It also aligns with the empirical observations of Addae-Korankye and



Aryee (2021), who document that SME performance is significantly shaped by precisely the strategic management dimensions of organizational structure, resource allocation, culture, and leadership that registered strong scores in the present sample. The causal logic – from internal strategic capability to external competitive advantage – is well established theoretically and consistent with the present study's overall findings.

A contextual qualification warrants mention. Sultan Kudarat's competitive comparison referents are, by definition, other SMEs operating in the same provincial economy. The comparative performance advantage reported here may partly reflect the relative strategic sophistication of the sampled firms within a local competitive field where average levels of strategic formalization are lower than in metropolitan markets. This consideration does not diminish the substantive significance of the finding – high performance relative to local competitors is precisely what matters for provincial SME survival and growth – but it does counsel caution about extrapolating these findings to imply competitive advantage within national or regional markets.

Bivariate Correlations

The bivariate correlation between strategic management and firm performance ($r = 0.347$, $p < .001$) is positive, statistically significant, and of moderate effect size. It provides empirical grounds for rejecting the null hypothesis H_{01} for this variable pair and establishes that strategic management accounts for approximately 12% of firm performance variance ($r^2 = .120$). This finding is consistent with and extends the international literature on strategic management's performance effects: Ali and Qun (2019) report comparable associations across multiple SME contexts, whilst Baker et al. (2015) argue that competitive strategy selection and execution quality directly determine the within-industry distribution of firm performance outcomes.

The strategic management-innovation capability correlation ($r = 0.253$, $p < .001$) confirms the theoretically expected positive relationship between these two organizational resources: firms that invest in systematic strategic processes tend also to invest in innovation-oriented capabilities, and vice versa. This mutual reinforcement reflects what Ganguly et al. (2019) characterize as a complementarity between strategic and innovative resources – strategic management frameworks create the planning and resource allocation systems within which innovation activity is productively channeled, whilst innovation capability expands the competitive options available to strategic execution. The modest magnitude of this correlation, however, carries an important diagnostic implication for the moderation analysis: when the predictor and moderator are highly correlated, multicollinearity inflates standard errors and attenuates interaction term detection power. At $r = 0.253$, the

**Table 4.**

Correlation Matrix of Strategic Management, Innovation Capability, and Firm Performance
(N = 293)

Variable	1	2	3
1. Strategic Management	—		
2. Innovation Capability	0.253***	—	
3. Firm Performance	0.347***	0.101†	—

Note. *** $p < .001$, two-tailed. † $p = .085$ (marginal; does not reach $\alpha = .05$). $df = 291$ for all correlations. Diagonal entries omitted.

correlation is positive but modest enough to avoid serious multicollinearity concerns, suggesting that the non-significant interaction term reported in Section 4.5 reflects a genuine absence of moderation rather than a statistical artifact of excessive predictor-moderator collinearity.

The bivariate correlation between innovation capability and firm performance ($r = 0.101$, $p = .085$) is positive in direction but does not achieve conventional significance at $\alpha = .05$. The interpretation of this marginal result requires care. The direction of the association is consistent with theoretical predictions across the innovation literature (Saunila, 2020; Swann, 2018), and the failure to reach significance cannot be taken as evidence against a genuine underlying relationship. Two factors may suppress the association's magnitude in the present sample. First, the resource-culture gap documented in Section 4.2 means that innovation capability, as measured in this study, captures a composite of high innovative motivation and aspiration alongside limited innovative resource capacity — a construct profile in which the resource constraint may attenuate the performance consequences that would otherwise flow from the innovation culture. Second, the firm performance scale's 12-month observation window may not be long enough to capture the performance consequences of innovation activities, which typically operate on development cycles of two to five years before their market and financial impacts are fully realized. Both factors counsel against interpreting the marginal correlation as evidence that innovation capability is irrelevant to Sultan Kudarat SME performance; they suggest instead that its performance contribution may be constrained in the short run by resource limitations and measurement horizon effects.



Moderation Analysis: Innovation Capability as Moderator

The main effect of strategic management on firm performance is positive, substantial, and highly significant in the multivariate model ($\beta = 0.450$, $SE = 0.082$, $Z = 5.478$, $p < .001$; 95% CI [0.275, 0.597]). This effect – robust to the inclusion of innovation capability and the interaction term – confirms that strategic management constitutes a direct, independent driver of firm performance whose influence is not contingent on the level of innovation capability the firm possesses. The confidence interval does not approach zero, providing strong statistical evidence against the possibility that this main effect is a sampling artifact.

Table 5.

Bootstrapped Moderation Model: Predictors of Firm Performance (N = 293)

Predictor	B	SE	95% LL	CI	95% UL	Z	p
strategic management (SM)	0.450	0.082	0.275		0.597	5.478	< .001
innovation capability (IC)	0.153	0.243	-0.283		0.640	0.629	.529
SM $\times$ IC (Interaction)	-0.431	0.708	-2.120		0.784	-0.609	.543

Note. Dependent variable: Firm Performance. LL = lower limit; UL = upper limit of 95% bias-corrected confidence interval generated by bootstrapping. Interaction term is the product of mean-centered Strategic Management and Innovation Capability scores.

The main effect of innovation capability was not significant ($\beta = 0.153$, $SE = 0.243$, $Z = 0.629$, $p = .529$; 95% CI [-0.283, 0.640]), indicating that innovation capability does not exert an independent direct effect on firm performance once strategic management is controlled. The confidence interval crosses zero symmetrically around a positive estimate, reinforcing the directional consistency with theory while precluding any inference that the effect is reliable or replicable. This multivariate non-significance extends the marginal bivariate correlation finding: innovation capability's performance contribution, whilst theoretically plausible and empirically directional, does not reach detectable magnitude in this sample, consistent with the resource constraint mechanism identified in the descriptive analysis.



The interaction term ($SM \times IC$) was not significant ($\beta = -0.431$, $SE = 0.708$, $Z = -0.609$, $p = .543$; 95% CI $[-2.120, 0.784]$), leading to non-rejection of H_{02} . Innovation capability does not significantly moderate the strategic management–firm performance relationship in Sultan Kudarat's SME population. The wide confidence interval – spanning a four-unit range that encompasses zero comfortably – rules out both positive and negative moderating effects at conventional significance levels and indicates that the sample provides no reliable empirical signal about the direction of any potential interaction.

The simple slope analysis reported in Table 6 provides the most interpretively powerful illustration of the moderation finding's character. The effect of strategic management on firm performance is significant at all three levels of innovation capability – low ($\beta = 0.481$, $p < .001$), average ($\beta = 0.450$, $p < .001$), and high ($\beta = 0.419$, $p < .001$) – and the slopes themselves are numerically near-identical, ranging only from 0.419 to 0.481 across a full two-standard-deviation range of the moderator. This pattern of convergent, significant simple slopes is characteristic of a genuine absence of moderation in the statistical interaction sense: regardless of whether a Sultan Kudarat SME possesses low or high innovation capability, the marginal performance benefit of an additional unit of strategic management investment is essentially the same. The relationship between strategic orientation and competitive outcomes, in other words, is robust, consistent, and impervious to the innovation environment within which it operates.

Table 6.

Simple Slope Estimates: Effect of Strategic Management on Firm Performance at Three Levels of Innovation Capability

Moderator Level	B	SE	95% LL	CI	95% UL	Z	p
Average IC	0.450	0.082	0.275		0.596	5.47	< .001
Low IC (–1 SD)	0.481	0.106	0.261		0.680	4.53	< .001
High IC (+1 SD)	0.419	0.082	0.248		0.570	5.09	< .001

Note. Simple slopes estimated at the mean and ± 1 SD of Innovation Capability. All coefficients significant at $p < .001$. The narrow range of slopes (0.419 to 0.481) across a two-SD moderator range is consistent with the absence of meaningful moderation.



The non-significant moderation finding deserves theoretical interpretation as a positive result rather than merely a null one. It is consistent with Samson and Gloet's (2018) argument that innovation constitutes a vital but analytically separable performance driver — one that enhances competitive outcomes through its own mechanisms without necessarily amplifying or attenuating the strategic management–performance pathway. This additive model has important practical implications: Sultan Kudarat's SME managers need not choose between strategic management development and innovation capability building, or sequence them to achieve synergy; both investments are independently worthwhile, and their benefits compound additively. The practical implication is to pursue both trajectories simultaneously rather than waiting for one to mature before investing in the other.

The resource-culture divergence provides a structural explanation for why innovation capability fails to moderate in this context even if it might do so in better-resourced environments. Dogbe et al. (2020) observe that innovation capability strengthens competitive orientation and new product superiority among SMEs through its direct rather than moderating effects, a finding consistent with the present study's positive-direction-but-marginal direct correlation. Taken together, these results support a developmental stage model in which Sultan Kudarat's SMEs have achieved innovative cultural readiness but not yet innovative resource readiness — and it is resource readiness, not cultural aspiration, that would be required to generate the amplification effect the moderation hypothesis predicts.

CONCLUSIONS AND RECOMMENDATIONS

This study examined the strategic management, innovation capability, and firm performance profiles of 293 SMEs in Sultan Kudarat, Philippines, and tested the moderating role of innovation capability in the strategic management–performance relationship. Three substantive conclusions emerge from the analysis.

First, Sultan Kudarat's SMEs demonstrate meaningfully developed strategic management practices and innovation capabilities, and report very high firm performance relative to local competitors. The strategic management profile is strongest in performance management, measurement, and alignment — the operationally focused dimensions that create measurable competitive advantage — and comparatively weaker in culture and values, the foundational cultural substrate from which sustained strategic implementation capacity is built. The innovation capability profile exhibits a pronounced divergence between innovation culture (very high) and innovation resources (high), revealing that these firms have cultivated strong innovative motivation in the absence of the resource infrastructure needed to fully actualize it.



Second, the first null hypothesis (H_{01}) is rejected for the strategic management–firm performance pair ($r = 0.347$, $p < .001$) and the strategic management–innovation capability pair ($r = 0.253$, $p < .001$), but cannot be rejected for the innovation capability–firm performance relationship ($r = 0.101$, $p = .085$). The resource–innovation culture gap documented in the descriptive analysis provides a theoretically coherent structural explanation for the attenuated innovation capability–performance correlation: resource constraints prevent the full conversion of innovative aspiration into realized innovative output and, by extension, into measurable performance gains.

Third, innovation capability does not significantly moderate the strategic management–firm performance relationship ($\beta = -0.431$, $SE = 0.708$, $p = .543$; 95% CI $[-2.120, 0.784]$), and simple slope analyses confirm that strategic management's positive effect on performance is virtually identical across the full range of innovation capability levels. This pattern supports an additive rather than multiplicative model of how these two organizational resources jointly determine SME performance in resource-constrained provincial settings.

The study makes three contributions to the literature. It provides the first empirical examination of the strategic management–innovation–performance moderation hypothesis in a Philippine provincial context, extending the geographical scope of existing research from metropolitan and high-income settings into the underserved provincial economies where most of the Philippines' SME population actually operates. Second, by documenting the innovation culture–resource divergence with empirical precision, the study provides a theoretically grounded structural mechanism – resource constraint as an actualization barrier – that explains innovation capability's attenuated performance effects in this and potentially analogous contexts. Third, by confirming strategic management's dominant, context-invariant main effect whilst demonstrating the absence of innovation capability's moderating role, the study advances the additive model proposed by Samson and Gloet (2018) and Dogbe et al. (2020), contributing to the theoretical adjudication between additive and multiplicative accounts of how strategic management and innovation capability jointly shape firm performance.

For SME managers in Sultan Kudarat, the most directly actionable implication of the study is that sustained investment in strategic management development – particularly in formal strategic planning cycles, alignment mechanisms, and performance measurement systems – constitutes the highest-return capability investment available. The demonstrated performance returns to strategic orientation are robust and context-invariant, generating competitive advantage regardless of the firm's current innovation capability level. Managers should also address the cultural development lag identified in the strategic management profile: participatory



processes for organizational value formation, leadership modeling of strategically aligned behaviors, and deliberate cultural monitoring as a management practice are low-cost, high-return investments in the foundational substrate of strategic effectiveness.

The innovation culture-resource divergence points to a different type of intervention. Because individual SMEs cannot resolve structural resource constraints through internal reorientation alone, managers should actively engage with external support mechanisms: DTI business development services, government-sponsored technology adoption financing, supply chain co-development arrangements with larger buyers, and innovation consortium participation with peer SMEs and academic institutions. These mechanisms allow the high innovation culture that Sultan Kudarat's SMEs have already built to be actualized through resource arrangements that individual firms cannot self-fund.

For policymakers and development agencies, the study provides evidence-based guidance on program design priorities. The finding that strategic management is the dominant performance driver – with effects that persist regardless of innovation capability level – suggests that business development services should prioritize strategic management capacity building as a universal program component: strategic planning facilitation, performance measurement tool access, leadership development, and alignment coaching for SMEs across all industries and sizes. Complementarily, the resource-culture gap signals a specific financing need that standard micro-credit instruments do not address: programs that subsidize technology acquisition, provide access to specialized human capital, and support R&D investment would address the binding constraint on innovation capability actualization among Sultan Kudarat's SMEs. Such programs advance SDG 8 and SDG 10 objectives directly, expanding economic opportunity and reducing structural inequalities in provincial communities that have historically received less development investment than metropolitan centers.

LIMITATIONS AND FUTURE RESEARCH

Several limitations qualify these conclusions. The cross-sectional design precludes causal inference, and the temporal sequence of effects – whether strategic management investment precedes performance improvement, or performance success enables greater strategic investment – cannot be determined from cross-sectional data. Longitudinal designs tracking the same SMEs over multiple periods would provide substantially stronger evidence for causal mechanisms, particularly for innovation capability effects whose performance consequences may require extended time horizons to materialize. The firm performance measure's 12-month



observation window may systematically understate the consequences of innovation investments, and future research should employ longer performance assessment windows alongside the standard annual horizon.

The reliance on perceptual, self-reported measures for all three variables introduces common method bias as a potential confound. Future research should triangulate self-reported performance perceptions with objective financial data from tax records or audited statements and complement self-reported innovation indicators with objective innovation output measures such as new product introductions or technology adoption records. Finally, the provincial focus limits transferability: comparative designs spanning urban-rural and industry gradients within the Philippines, or cross-provincial comparisons within Mindanao's BARMM and SOCCSKSARGEN regions, would establish whether the additive strategic management-innovation capability model generalizes across institutional contexts or is specific to Sultan Kudarat's particular resource and competitive environment.

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