



Strategic Agility and Innovation Capabilities in Small and Medium-Sized Enterprises: A Study of the Local Manufacturing and Handicraft Sector in East Gilan

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Abstract: *The contemporary business environment necessitates rapid adaptation and continuous innovation, particularly within Small and Medium-Sized Enterprises (SMEs). This study empirically investigates the intricate relationship between strategic agility and innovation capabilities within the highly specialized local manufacturing and handicraft sector of East Gilan. Operating amidst fluctuating market demands and resource constraints, these regional enterprises require robust dynamic capabilities to ensure survival and competitive advantage. Utilizing a quantitative methodology, this research analyzed primary data collected in 2025 from a strategically selected sample of managers and artisans across East Gilan. The core structural model hypothesizes that strategic agility acts as a foundational architecture, significantly amplifying the proactive innovation capabilities of SMEs. Furthermore, the research explores how this synergistic relationship fundamentally drives sustainable organizational performance in culturally embedded industries. Preliminary findings suggest that enterprises exhibiting high strategic flexibility are markedly more adept at business model innovation and product adaptation. By contextualizing dynamic capabilities theory within an emerging market framework, this paper addresses existing literature gaps regarding traditional manufacturing resilience. The derived empirical insights provide profound theoretical depth and highly actionable practical frameworks for policymakers aiming to fortify regional economic ecosystems. Ultimately, the comprehensive study statistically confirms that strategic agility is not merely a corporate luxury but an absolute, urgent necessity for the sustained success of East Gilan's handicraft sector.*

Keywords: *Strategic Agility, Innovation Capabilities, Organizational Performance, Handicraft Sector*

I. Introduction

The architecture of modern global commerce is fundamentally characterized by unprecedented volatility, rapid technological disruptions, and shifting consumer paradigms, necessitating a radical departure from rigid, traditional management frameworks. Within

this dynamic ecosystem, the concept of strategic agility has evolved from a theoretical construct into an absolute imperative for organizational survival and sustained competitive advantage. Strategic agility refers to an enterprise's profound capacity to proactively sense environmental changes, swiftly reallocate resources, and continuously reinvent its core operational and strategic paradigms without losing momentum or internal cohesion (Weber & Tarba, 2014). This dynamic capability is particularly critical in mitigating risks and navigating uncertainties intrinsic to the modern innovation economy (Teece, Peteraf, & Leih, 2016). Unlike operational flexibility, which focuses on short-term tactical adjustments, strategic agility demands a holistic, top-down architectural fluidity that permeates every level of the organization. Recent scholarly discourse emphatically positions this agility not merely as a defensive mechanism to weather economic shocks, but as an urgent, proactive capability absolutely essential for successful business model innovation and long-term value creation (Mueller-Saegebrecht & Walter, 2025). By fostering a culture that rapidly identifies and capitalizes on emerging market opportunities, strategically agile firms are uniquely positioned to outmaneuver competitors, redefine consumer expectations, and establish entirely new industry standards in an era defined by hyper-competition.

The intersection of strategic agility and innovation capabilities represents a critical nexus in contemporary business administration research, particularly concerning Small and Medium-Sized Enterprises (SMEs). Innovation capability, rigorously defined as a firm's comprehensive and embedded ability to continuously transform acquired knowledge and abstract ideas into tangible new products, optimized services, and streamlined operational processes, acts as the primary macroeconomic engine for regional and global growth. Empirical investigations consistently demonstrate that strategic agility serves as the foundational architectural enabler for these precise innovation capabilities, effectively and powerfully mediating the relationship between an organization's strategic posture and its ultimate performance outcomes across diverse operational landscapes (AlTaweel & Al-Hawary, 2021). For SMEs, which typically operate under severe resource constraints, limited economies of scale, and constrained capital access compared to multinational conglomerates, the synergistic coupling of agile frameworks and continuous innovation is exponentially more vital. Rigorous quantitative research indicates that the detrimental impact of turbulent business environmental factors on firm performance is heavily mitigated by the organization's dynamic capabilities to radically innovate its business model swiftly and efficiently (Dayioglu, Küskü, & Cetindamar, 2024). Consequently, SMEs that successfully cultivate and institutionalize an agile organizational infrastructure are mathematically and empirically proven to exhibit superior collaborative open innovation, exponentially enhanced absorptive capacity, and a significantly marked resilience against severe, unforeseen market shocks (Mata, Moleiro Martins, & Inácio, 2024; Olaleye, Anifowose, Efuntade, & Arije, 2021). This establishes a clear mandate for organizational leaders to prioritize cognitive and structural flexibility above rigid hierarchical planning.

Despite the highly robust theoretical advancements in macro-level dynamic capabilities theory, a profound and significant empirical void exists concerning the precise operational mechanics of strategic agility and innovation within highly localized, culturally

embedded micro-economies, specifically focusing on the traditional manufacturing and handicraft sectors of emerging markets. The East Gilan region, distinguished globally by its incredibly rich historical tapestry and unique ecological and demographic profile, harbors a complex, deeply interconnected network of manufacturing and artisan SMEs. These local enterprises are not merely isolated economic engines; they function as crucial custodians of regional cultural heritage and indigenous knowledge systems. However, they continuously face compounding, existential pressures from hyper-competitive global supply chains, rapid technological obsolescence, and drastically shifting domestic consumer preferences. The highly traditional operational models currently prevalent in East Gilan's localized handicraft sector frequently lack the structural fluidity and cognitive readiness required to effectively leverage modern digital capabilities or integrate environmental innovations, thereby severely stifling their sustainable institutional performance (Purwanto, Kusumaningtyas, & Halik, 2025). Furthermore, while the critical role of technological innovative capabilities is extensively documented in high-tech and software industries, the moderating effect of strategic agility on the survival, scaling, and growth metrics of traditional manufacturing SMEs remains severely under-researched in contemporary academia (Khraim, 2022). This comprehensive academic study, therefore, is explicitly designed to bridge this critical literature gap by systematically modeling the deep impact of strategic agility on organizational performance through the sophisticated mediating lens of innovation capabilities strictly within the localized context of East Gilan. By completely transitioning away from generalized Western assumptions and relying explicitly on robust quantitative data collected directly from regional artisans and managers in 2025, this research rigorously aims to provide a definitive, localized framework. This framework will explicitly elucidate how traditional SMEs can effectively harness dynamic strategic agility to not only survive the modern economic landscape but to fundamentally thrive and achieve sustainable dominance in a rapidly evolving global marketplace.

II. Literature Review

The theoretical foundation of strategic agility is deeply anchored in the dynamic capabilities perspective, which explicitly addresses how organizations build, integrate, and continually reconfigure internal and external competencies to address rapidly changing macro-economic environments. Teece, Peteraf, & Leih (2016) postulate that in the contemporary innovation economy—characterized by profound uncertainty and risk—traditional, static operational efficiencies are fundamentally insufficient for long-term survival. Instead, organizational agility acts as a higher-order dynamic capability, empowering firms to sense deep-rooted environmental shifts, seize fleeting market opportunities, and profoundly transform their foundational resource base. This conceptualization is heavily expanded upon by Weber & Tarba (2014), who argue that strategic agility represents the state-of-the-art mechanism for executing continuous, fluid structural adaptations without compromising the firm's overarching strategic vision or operational stability. In highly volatile contexts, strategic agility transcends mere operational flexibility; it becomes the vital architectural conduit through which competitive capabilities are actualized and sus-

tained. Amini & Rahmani (2023) demonstrate empirically that strategic agility deeply and positively affects the competitive capabilities of institutions operating in highly pressured environments, allowing them to outmaneuver more rigid competitors. Furthermore, Clauss, Abebe, Tangpong, & Hock (2019) provide robust evidence that strategic agility directly dictates the efficacy of business model innovation, establishing that firms capable of agile strategic pivots are statistically significantly more likely to achieve superior firm performance and sustainable market dominance. This foundational agility is heavily dependent on specific technological and informational antecedents. Cepeda & Arias-Pérez (2019) articulate that information technology capabilities fundamentally drive organizational agility, with this relationship powerfully mediated by the firm's capacity for open innovation. Similarly, Shahhosseini, Nosratpanah, & Atashi (2025) confirm that advanced business analytics competencies are absolute prerequisites for stabilizing a firm's absorptive capacity and strategic agility, thereby radically improving digital innovation outputs within knowledge-based enterprises. Therefore, strategic agility functions as the indispensable theoretical and empirical bedrock upon which all subsequent proactive firm behaviors and innovation mechanisms are built.

Within this agile framework, innovation capabilities emerge as the primary operational engine driving organizational resilience and market expansion. Innovation capability is broadly defined as the comprehensive, embedded organizational proficiency to continuously absorb novel knowledge, synthesize complex market data, and successfully commercialize these insights into disruptive new products, advanced services, or radically optimized internal processes. Modern literature establishes an inextricable, synergistic link between a firm's strategic agility and its capacity to innovate. Mueller-Saegebrecht & Walter (2025) propose a conceptual process model highlighting that strategic agility is an incredibly urgent, absolute prerequisite for successful business model innovation, arguing that without agile structural flexibilities, innovative ideas inevitably stagnate within rigid bureaucratic silos. This is further validated by Kohtamäki, Heimonen, Sjödin, & Heikkilä (2020), who unpack the complex interaction between entrepreneurial orientation and absorptive capacity, concluding that strategic agility in innovation processes is what actually allows firms to practically convert entrepreneurial intentions into tangible market disruptions. In contemporary, interconnected markets, this innovation often transcends internal organizational boundaries. Mohamed & Zouaoui (2026) extensively model the critical impact of open innovation coupled with strategic agility on ultimate business performance, demonstrating that firms capable of seamlessly integrating external knowledge streams exhibit vastly superior economic returns. The directionality of this relationship is often reciprocal and highly complex; while agility fosters innovation, rigorous innovative practices also reinforce the firm's agile posture. Abdulkhalik, Abdullah, & Yousif (2024) provide empirical confirmation that specialized organizational innovative capabilities are fundamentally instrumental in actively achieving and sustaining strategic agility itself. Consequently, this dynamic interplay serves as the ultimate determinant of a firm's survivability. Olaleye, Anifowose, Efuntade, & Arije (2021) rigorously demonstrate the combined role of continuous innovation and strategic agility in fortifying a firm's resilience against severe exogenous shocks.

The translation of these dynamic capabilities into tangible, sustainable organizational performance is frequently modeled through complex mediating structures, where innovation capabilities act as the crucial bridging mechanism. AlTaweel & Al-Hawary (2021) explicitly establish the powerful mediating role of innovation capability on the relationship between strategic agility and overarching organizational performance, mathematically proving that agility alone is insufficient unless systematically converted into innovative outputs. This triadic relationship is continuously corroborated across diverse industrial contexts. Alkandi & Helmi (2024) expand upon this by confirming that the impact of strategic agility on organizational performance in emerging industrial sectors is heavily and simultaneously mediated by both market orientation and innovation capabilities. Similarly, Yildiz & Aykanat (2021) empirically validate the mediating role of organizational innovation on the impact of strategic agility on firm performance, emphasizing that structural flexibility dictates the volume and quality of innovations, which in turn dictate market share and profitability. The human and leadership dimensions of this equation are equally paramount. Saputra & Nasution (2023) identify that the synergistic combination of strategic agility, entrepreneurial leadership, and innovation capability profoundly dictates SME performance, highlighting the necessity of agile mindsets at the executive level. Furthermore, Manurung & Sudhartio (2024) analyze the direct influence of these capabilities alongside organizational readiness, concluding that performance is optimized exclusively when agile strategies are perfectly synchronized with the firm's innovative capacity. The moderating dynamics of the business environment also heavily influence these outcomes. Dayioglu, Küskü, & Cetindamar (2024) reveal that the detrimental impact of turbulent business environmental factors on performance is significantly mitigated by the firm's reliance on strategic agility and subsequent business model innovation. Conversely, Khraim (2022) illustrates that strategic agility can actually serve as a powerful moderating variable, significantly amplifying the positive influence of technological innovative capabilities on definitive firm performance. In Persian localized contexts, these intricate mediating models hold true; Mehrjou (2023) mathematically confirms the profound effect of innovation capabilities on business performance while explicitly considering the mediating role of strategic agility, and Rashnavadi, Sadeghvaziri, & Nosrat Panah (2021) demonstrate how strategic flexibility and knowledge management enhance company performance precisely through the critical mediating mechanism of business model innovation.

Applying this advanced macro-theoretical framework to the highly specialized, culturally embedded context of Small and Medium-Sized Enterprises (SMEs) operating within local manufacturing and handicraft sectors necessitates significant contextual nuance. SMEs face inherently unique challenges, primarily characterized by severe resource limitations, restricted access to advanced technological infrastructures, and high vulnerability to localized economic fluctuations. However, literature suggests that these inherent limitations can be effectively offset by cultivating superior relational and dynamic capabilities. Mata, Moleiro Martins, & Inácio (2024) prove that collaborative innovation and the strategic adoption of absorptive capacity in SMEs are massively enhanced by customer knowledge management capabilities, allowing smaller firms to punch above their

weight. In traditional sectors, the integration of environmental and digital innovations is becoming an absolute mandate for survival. Purwanto, Kusumaningtyas, & Halik (2025) explicitly identify strategic agility, coupled with environmental innovation and digital capability, as the primary drivers of sustainable performance for village-owned enterprises and localized manufacturing units. The survival of these culturally significant businesses is entirely dependent on their ability to dynamically adapt. Shojaeian, Ansari, & Mohammadshafiei (2025) provide a robust business survival model mathematically predicated on the firm's dynamic capabilities and their agile utilization of contemporary communication platforms. The role of leadership in navigating this transition cannot be overstated. Nowrouzi, Nosratpanah, & Barani (2022) comprehensively detail the profound impact of digital leadership on firm performance within dynamic environments, explicitly emphasizing the crucial roles of dynamic capabilities and business model innovation in securing a sustainable competitive advantage. For micro-enterprises and traditional artisans, agility often relies heavily on localized network integration. Hooshmand Chajani (2025) specifically investigates the achievement of strategic agility in small retail and manufacturing operations, highlighting the vital impact of relational capabilities and stakeholder pressure. Furthermore, Malek Akhlagh, Vashkai Nejad, & Hatami Nejad (2022) prove the significant impact of entrepreneurial orientation and strategic agility on the performance of such firms, driven by continuous learning capabilities and business model innovation. Finally, Kolabi (2023) presents a comprehensive business resilience model that strictly relies on open innovation and organizational agility, and Nosratpanah, Barani, Ashrafzadeh, & Atashi (2024) confirm that dynamic service innovation capabilities act as the definitive mechanism for SMEs to translate perceived environmental dynamism into a sustained, competitive market advantage.

Based on the exhaustive synthesis of the presented academic literature and the specific operational realities of the East Gilan handicraft and manufacturing sector, the following research hypotheses are formally proposed for empirical validation:

Hypothesis 1: Strategic agility has a significant and positive direct impact on the overall organizational performance of manufacturing and handicraft SMEs in East Gilan.

Hypothesis 2: Strategic agility significantly and positively influences the comprehensive innovation capabilities (encompassing product, process, and business model innovation) of traditional SMEs in the studied region.

Hypothesis 3: Innovation capabilities exhibit a direct, significant, and positive effect on the organizational performance and market resilience of the local manufacturing enterprises.

Hypothesis 4: Innovation capabilities profoundly and significantly mediate the structural relationship between strategic agility and the sustainable organizational performance of East Gilan's localized handicraft sector.

III. Methodology

The methodological framework of this comprehensive study is strategically anchored within a quantitative, deductive, and positivist research paradigm, explicitly designed

to objectively measure, analyze, and structurally model the highly complex interrelationships between strategic agility, innovation capabilities, and organizational performance. Given the core objective of establishing rigorous causal inferences within the unique, culturally embedded context of traditional manufacturing and handicraft SMEs, a descriptive-correlational and cross-sectional survey design was meticulously implemented. The spatial and temporal boundaries of this empirical investigation are strictly localized to the historically and economically significant region of East Gilan, specifically focusing on registered and actively operating handicraft workshops, artisan collectives, and small-scale traditional manufacturing units located in the counties of Lahijan, Langarud, Rudsar, and Amlash. All primary data collection protocols were systematically executed during the first and second quarters of the year 2025. The fundamental philosophical premise guiding this methodological architecture is that the cognitive flexibility of management, the institutionalized capacity for continuous innovation, and the subsequent financial and operational performance of these culturally significant enterprises can be accurately quantified and subjected to rigorous multivariate statistical scrutiny. To effectively capture the comprehensive operational realities of these SMEs, the target population consisted of the primary decision-makers—specifically the owner-managers, master artisans, and senior operational directors—who possess the holistic strategic overview necessary to accurately evaluate both internal capabilities and external market performance. Given the highly fragmented and often semi-formal nature of the traditional handicraft sector in Northern Iran, obtaining a completely exhaustive census was statistically unfeasible. Consequently, a highly rigorous multi-stage stratified random sampling technique was deployed. The strata were meticulously defined based on the specific type of handicraft or manufacturing sub-sector (e.g., traditional textiles, woodwork, pottery, and localized food processing) and the geographical county, ensuring an absolutely proportional and highly representative distribution across the diverse East Gilan regional economy.

To guarantee the mathematical robustness, statistical power, and ultimate generalizability of the proposed structural equation model, the absolute minimum required sample size was rigorously determined utilizing the standard Cochran mathematical formula for infinite and unknown populations, strictly calculated at a 95% confidence interval with a highly conservative 5% margin of error. The application of this foundational statistical equation established a baseline requirement of 384 active respondents.

$$n = \frac{Z^2 pq}{e^2} \quad (1)$$

In this standard formulation, n represents the target sample size, Z is the standard normal deviate set at 1.96 (corresponding strictly to the 95% confidence level), p is the estimated proportion of the population maximizing variance at 0.5, q is the alternate proportion, and e represents the strict 0.05 margin of error. To proactively aggressively counteract standard methodological risks such as non-response bias, partially completed submissions, and mathematically unengaged survey responses, the research team strategically oversampled by distributing a total of 550 meticulously translated and structurally

validated psychometric questionnaires across 110 distinct artisan clusters and SME networks in East Gilan. The primary data acquisition instrument was a highly structured, self-administered questionnaire, entirely anchored on a conventional five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The exogenous construct of Strategic Agility was comprehensively operationalized utilizing a 12-item scale deeply adapted from the foundational frameworks of Weber & Tarba (2014) and contemporary refinements by Clauss et al. (2019), meticulously measuring strategic sensitivity, leadership unity, and resource fluidity. The mediating variable, Innovation Capabilities, was quantified using an advanced 14-item iteration heavily influenced by Teece, Peteraf, & Leih (2016) and adapted for SME contexts by Mata, Moleiro Martins, & Inácio (2024), capturing the distinct dimensions of product, process, and business model innovation. Finally, the endogenous dependent variable, Organizational Performance, was evaluated through a robust 9-item scale explicitly designed to measure both financial metrics (revenue growth, profitability margins) and non-financial metrics (market share preservation, cultural sustainability, and customer retention) relative to primary regional competitors. Prior to the definitive 2025 field deployment, a rigorous pilot study involving 40 highly experienced local artisans was executed to absolutely ascertain the preliminary internal consistency and semantic face validity of the Persian-translated instruments, ensuring perfect cultural resonance and minimizing cognitive friction for the final respondent pool.

IV. Data Analysis and Results

The empirical validation of the theoretical hypotheses and the rigorous evaluation of the proposed conceptual framework were executed utilizing Variance-Based Structural Equation Modeling (PLS-SEM), facilitated by the advanced computational algorithms of the SmartPLS 4.0 software suite. This highly sophisticated analytical methodology was explicitly prioritized due to its unparalleled statistical efficacy in processing complex multivariate models with multiple mediating pathways, its strict non-reliance on the assumption of absolute multivariate normal distribution, and its profound capability to simultaneously assess the precise measurement components and the complex inner structural pathways. Following an exhaustive and meticulous data cleaning protocol designed to systematically identify and permanently eliminate severe statistical outliers, unengaged straight-lining responses, and critically incomplete datasets, 395 highly valid and completely robust questionnaires were successfully retained for the definitive statistical analysis. This yielded an exceptionally strong effective response rate of 71.8%, profoundly fortifying the external validity and generalizability of the findings across the East Gilan handicraft sector. A preliminary descriptive demographic analysis of the finalized management and artisan sample revealed that 62.5% of the respondents were male, and 37.5% were female, accurately reflecting the traditional gender distribution within senior management of local manufacturing units in the region. The predominant organizational tenure of the respondents was notably high, with 58.2% possessing over 15 years of direct experience in their specific handicraft sector, mathematically confirming that the gathered data is sourced from highly experienced, deeply knowledgeable industry

veterans capable of providing exceptionally accurate strategic evaluations. Furthermore, 74.5% of the analyzed enterprises were classified as micro-enterprises employing fewer than 10 individuals, perfectly aligning with the structural realities of the traditional East Gilan economy.

In strict, unyielding adherence to the contemporary methodological protocols required for rigorous PLS-SEM analysis, the statistical evaluation was systematically bifurcated into two highly sequential phases: the exhaustive assessment of the outer measurement model to mathematically prove reliability and validity, followed by the rigorous scrutiny of the inner structural model to definitively test the proposed directional hypotheses. The evaluation of the measurement model is fundamentally engineered to ascertain construct reliability, convergent validity, and absolute discriminant validity. Construct reliability, which mathematically dictates the internal consistency of the measurement items, was rigorously evaluated utilizing both Cronbach's Alpha and the more advanced Composite Reliability (CR) metrics. As clearly detailed in the statistical outputs presented below, all latent conceptual variables demonstrated Cronbach's Alpha and CR coefficients that significantly and comfortably surpassed the universally mandated academic threshold of 0.70. This unassailable statistical outcome unequivocally confirms that the selected survey items consistently, accurately, and reliably reflect their heavily theorized underlying constructs. Subsequently, convergent validity—defined strictly as the degree to which multiple distinct items designed to measure a single theoretical concept actually correlate—was systematically assessed by analyzing the standardized outer factor loadings and the Average Variance Extracted (AVE). The computational results conclusively confirmed that all individual item loadings comfortably exceeded the strict 0.70 benchmark. Concurrently, the AVE values for the core constructs of Strategic Agility, Innovation Capabilities, and Organizational Performance were uniformly recorded well above the critical 0.50 minimum threshold. This specific mathematical metric definitively proves that the latent constructs perfectly explain more than 50% of the inherent variance in their respective measurement indicators, thereby establishing an unassailable foundation of convergent validity for the specialized 2025 dataset collected from East Gilan's local manufacturing sector.

Table 1: Construct Reliability and Convergent Validity Assessment (2025 Data)

Constructs and Dimensions	Cronbach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)
Strategic Agility	0.885	0.912	0.634
Innovation Capabilities	0.871	0.905	0.592
Organizational Performance	0.864	0.898	0.611

Following the absolute empirical confirmation of construct reliability and convergent validity, the complex analytical focus transitioned to strictly establishing discriminant

validity, ensuring that each formulated latent construct was mathematically distinct and measured a truly unique operational phenomenon within the handicraft SME framework. This was executed utilizing the highly rigorous and universally accepted Fornell-Larcker criterion, which mathematically dictates that the square root of the Average Variance Extracted (AVE) for any specific construct must be strictly and significantly greater than its highest squared correlation with any other latent construct residing within the structural model. The computational matrix absolutely satisfied this stringent academic requirement. Furthermore, the Heterotrait-Monotrait (HTMT) ratio of correlations was subsequently deployed as a contemporary, highly sensitive secondary diagnostic tool for discriminant validity. All resulting HTMT mathematical values were situated significantly below the highly conservative maximum ceiling of 0.85, completely and definitively eliminating any statistical concerns regarding multicollinearity or conceptual blurring among the core variables.

With the absolute integrity, precision, and validity of the measurement model unequivocally established, the critical second phase of the PLS-SEM methodology—the comprehensive evaluation of the inner structural model—was initiated to formally test the proposed hypotheses. The explicit testing of the complex directional relationships was meticulously conducted by scrutinizing the standardized path coefficients (β), the corresponding T -statistics generated via a highly rigorous bootstrapping procedure utilizing 5,000 completely randomized subsamples, and their associated exact P -values. Hypothesis 1 posited that Strategic Agility significantly impacts Organizational Performance. The structural analysis yielded a positive path coefficient ($\beta = 0.315$) paired with a high statistical significance ($T = 4.821$, $P < 0.001$), providing definitive empirical evidence supporting Hypothesis 1. Hypothesis 2, theorizing a direct positive relationship between Strategic Agility and Innovation Capabilities, was overwhelmingly supported by the data ($\beta = 0.682$, $T = 11.432$, $P < 0.001$), mathematically proving that agility is the absolute primary architectural driver of innovative output in traditional SMEs. Hypothesis 3 explored the direct influence of Innovation Capabilities on Organizational Performance and was similarly confirmed as highly significant ($\beta = 0.458$, $T = 7.115$, $P < 0.001$). This critical sequence logically transitions to the evaluation of Hypothesis 4, which proposed that Innovation Capabilities profoundly mediate the relationship between Strategic Agility and Organizational Performance. The specific indirect effect was calculated using the exact product of coefficients approach ($\beta_{indirect} = 0.682 \times 0.458 = 0.312$). The robust bootstrapping analysis mathematically confirmed that this complex indirect pathway was highly significant ($T = 5.998$, $P < 0.001$). Furthermore, calculating the Variance Accounted For (VAF) metric yielded a value of 49.7%, precisely indicating a very strong complementary partial mediation. This crucial, definitive finding solidly confirms Hypothesis 4, mathematically proving that while strategic flexibility offers a direct performance benefit, nearly half of its total positive impact on the survival and growth of East Gilan's handicraft sector is strictly operationalized and fundamentally channeled through the aggressive, continuous enhancement of the firm's innovation capabilities.

Table 2: Table 2: Structural Model Path Coefficients and Hypothesis Testing Results

Structural Path (Hypothesized Relationship)	Path Coefficient (β)	T-Statistics	P-Values	Empirical Decision
H1: Strategic Agility $\rightarrow$ Organizational Performance (Direct Effect)	0.315	4.821	0.000	Supported
H2: Strategic Agility $\rightarrow$ Innovation Capabilities	0.682	11.432	0.000	Strongly Supported
H3: Innovation Capabilities $\rightarrow$ Organizational Performance	0.458	7.115	0.000	Strongly Supported
H4: Strategic Agility $\rightarrow$ Innovation Capabilities $\rightarrow$ Organizational Performance (Indirect Effect)	0.312	5.998	0.000	Supported (Partial Mediation)

V. Discussion

The primary objective of this rigorous empirical investigation was to systematically map, analyze, and structurally validate the complex interplay between strategic agility, innovation capabilities, and organizational performance within the highly specialized, culturally embedded context of Small and Medium-Sized Enterprises (SMEs) operating in the local manufacturing and handicraft sector of East Gilan. The culmination of the advanced multivariate PLS-SEM analysis yields profound, multi-layered insights that seamlessly corroborate foundational dynamic capabilities theories while offering critical, highly localized nuances previously absent from mainstream business administration literature. The empirical validation of Hypothesis 1 ($\beta = 0.315$, $P < 0.001$) definitively confirms that strategic agility exerts a direct, significant, and positive impact on the overall organizational performance of traditional SMEs. This statistical outcome strongly aligns with the macroeconomic assertions proposed by Weber & Tarba (2014) and explicitly mirrors the contemporary findings of Amini & Rahmani (2023) within the context of emerging markets. In the uniquely volatile environment of East Gilan's handicraft sector—which continuously grapples with fluctuating tourist footfall, rising raw material costs, and aggressive competition from mass-produced foreign alternatives—rigidity is an existential threat. The data unequivocally demonstrates that artisan enterprises possessing the cognitive flexibility to rapidly reconfigure their production lines, proactively alter their supply chain logistics, and quickly pivot their marketing narratives inherently experience superior financial resilience and market share retention. This agility acts as a structural buffer, allowing these culturally significant enterprises to absorb exogenous economic shocks without suffering catastrophic operational failures.

Furthermore, the exceptionally robust statistical support for Hypothesis 2 ($\beta = 0.682$, $P < 0.001$) mathematically validates the critical theoretical premise that strategic agility is the absolute, indispensable architectural prerequisite for cultivating profound innovation capabilities. This finding deeply resonates with the conceptual frameworks articulated by Teece, Peteraf, & Leih (2016) and Mueller-Saegebrecht & Walter (2025), proving that innovative outputs do not manifest in a vacuum; they are the direct byproduct of a flexible organizational structure. Within the East Gilan context, this means that when master artisans and SME managers dismantle rigid, purely traditionalist hierarchies and foster a culture of rapid experimentation, the enterprise's capacity for product, process, and business model innovation exponentially increases. Strategically agile traditional workshops are statistically much more likely to adopt sustainable, eco-friendly materials, integrate modern digital fabrication tools alongside traditional handcrafting techniques, and pioneer entirely novel product lines that appeal to contemporary consumer aesthetics while preserving indigenous cultural motifs. The confirmation of Hypothesis 3 ($\beta = 0.458$, $P < 0.001$) logically completes this progression, empirically verifying that these precise innovation capabilities are what directly drive tangible organizational performance. This perfectly corroborates the assertions of Khraim (2022) and Shojaeian, Ansari, & Mohammadshafiei (2025), emphasizing that in modern saturated markets, merely preserving traditional practices is economically insufficient. SMEs that successfully leverage their innovative capacity to establish robust e-commerce platforms, engage in collaborative open innovation with local tourism boards, and continuously refine their product quality inherently command premium pricing, secure stronger customer loyalty, and achieve fundamentally superior long-term financial viability.

However, the most profound theoretical and practical contribution of this empirical study resides in the definitive confirmation of Hypothesis 4, which establishes that innovation capabilities powerfully and significantly mediate the relationship between strategic agility and organizational performance ($\beta_{indirect} = 0.312$, $P < 0.001$, $VAf = 49.7\%$). This highly significant partial mediation statistically proves that the immense power of strategic flexibility to generate sustainable competitive advantage is not entirely automatic or purely defensive. Instead, nearly half of agility's positive impact is strictly operationalized, channeled, and actualized through the firm's aggressive execution of innovative practices. In essence, strategic agility provides the critical organizational readiness, the necessary cognitive vision, and the structural fluidity (the potential energy), but innovation capabilities represent the actual kinetic execution of that potential into new products, optimized processes, and disruptive business models. This complex triadic dynamic perfectly mirrors the contemporary findings of Alkandi & Helmi (2024) and Rashnavadi, Sadeghvaziri, & Nosrat Panah (2021), confirming that agility without subsequent innovation leads to chaotic, unmonetized flexibility, while attempting to innovate without underlying structural agility leads to bureaucratic stagnation. For the traditional manufacturing and handicraft sector of East Gilan, this dictates a mandatory paradigm shift: managers and artisans cannot merely react to market changes; they must utilize their inherent flexibility to proactively, continuously, and aggressively innovate their offerings, thereby ensuring both their economic prosperity and the preservation of their invaluable

regional heritage.

VI. Conclusion and Practical Implications

In conclusion, this comprehensive, quantitative investigation successfully elucidates the critical, interlocking roles of strategic agility and innovation capabilities in driving the sustainable organizational performance of SMEs within the localized manufacturing and handicraft sector of East Gilan. By transitioning away from theoretical assumptions and relying strictly on robust empirical data collected in 2025, the research mathematically maps a highly complex structural equation model that addresses significant gaps in contemporary literature regarding traditional enterprise resilience. The findings definitively prove that strategic agility is not an optional management luxury reserved for high-tech conglomerates; it is an absolute, urgent necessity for the survival of culturally embedded micro-economies. The study statistically confirms that the ability to swiftly reconfigure resources and rapidly adapt to volatile market conditions serves as the fundamental architectural enabler for business model and product innovation. Furthermore, it explicitly demonstrates that these dynamic innovation capabilities act as the crucial mediating mechanism, directly translating strategic flexibility into tangible, superior financial and operational performance. Consequently, the long-term viability and competitive dominance of East Gilan's traditional artisan sector are fundamentally tethered to the proactive institutionalization of these dynamic capabilities, ensuring that ancient crafts can successfully navigate, adapt to, and ultimately thrive within the ruthless hyper-competitiveness of the modern globalized innovation economy.

Based on these robust empirical findings, several highly critical and immediately actionable practical implications are extended to SME owners, master artisans, regional economic policymakers, and local tourism boards in East Gilan. Primarily, enterprise managers must actively cultivate a culture of strategic agility by decentralizing decision-making processes, maintaining fluid resource allocation pools, and continuously scanning the macro-environment for emerging technological and consumer trends. Rigid adherence to purely traditional business models must be replaced with a dynamic, entrepreneurial orientation. Secondly, significant, targeted investments must be channeled into fostering innovation capabilities. Artisans should be encouraged to participate in collaborative, open innovation networks, integrating contemporary digital marketing tools, e-commerce platforms, and advanced, sustainable material sciences into their traditional workflows without compromising their core cultural authenticity. Thirdly, regional policymakers and governmental bodies must recognize the profound economic vulnerability of these traditional sectors. It is imperative to design and deploy specialized training programs focused on digital literacy, modern business analytics, and strategic management specifically tailored for rural and semi-urban artisans. Furthermore, providing accessible micro-financing specifically earmarked for R&D, technological adoption, and business model innovation will provide the necessary capital for these highly agile SMEs to execute their innovative visions, thereby securing the economic prosperity of East Gilan while simultaneously safeguarding its rich, irreplaceable cultural heritage for future generations.

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