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Influence of Strategic Leadership, Entrepreneurial Orientation, and Flexibility Strategy on the Performance of Digital Start-Up in Indonesia

Original Article

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Abstract

This study examines the influence of strategic leadership, entrepreneurial orientation, and flexibility strategy on the performance of digital start-ups in Indonesia. Grounded in dynamic capabilities theory, the research investigates both the direct and indirect relationships among these constructs, including the mediating role of entrepreneurial orientation and the moderating role of flexibility strategy. A quantitative approach was employed using a cross-sectional survey of 187 founders, CEOs, and senior managers of digital start-ups across various sectors in Indonesia. Data were analyzed using Structural Equation Modeling–Partial Least Squares (SEM-PLS). The results reveal that strategic leadership, entrepreneurial orientation, and flexibility strategy each have a positive and significant effect on digital start-up performance. Entrepreneurial orientation emerges as the strongest direct predictor of performance and partially mediates the relationship between strategic leadership and performance. Additionally, the flexibility strategy significantly strengthens the relationship between entrepreneurial orientation and performance, indicating that adaptive capability enhances the effectiveness of entrepreneurial initiatives. The model explains a substantial proportion of variance in start-up performance, demonstrating strong predictive power. The findings highlight the importance of integrating visionary leadership, entrepreneurial strategic posture, and organizational flexibility to achieve sustainable competitive advantage in Indonesia's dynamic digital economy. This study contributes to entrepreneurship and strategic management literature by offering an integrated framework for understanding digital start-up performance in emerging markets and provides practical implications for founders, managers, and policymakers seeking to strengthen the digital entrepreneurial ecosystem.

Keywords: Strategic Leadership; Entrepreneurial Orientation; Flexibility Strategy; Digital Start-Ups; Firm Performance; Dynamic Capabilities; Indonesia.

1. Introduction

In an era of accelerated technological change and heightened global competition, digital start-ups have emerged as crucial engines of innovation and economic growth, particularly within emerging economies such as Indonesia. Digital entrepreneurship harnesses information technology to create, deliver, and capture value through novel business models, products, and services (Kraus et al., 2023). Digital start-ups are inherently dynamic and operate in conditions characterized by rapid market shifts, disruptive technological trends, and unpredictable consumer behaviors. These environmental realities demand that start-ups deploy superior

strategic capabilities and adaptive leadership to survive and thrive (Jang & Lee, 2025; Kraus et al., 2023). At the core of competitive performance in digital ecosystems is the ability of leaders to combine strategic vision with entrepreneurial dynamism while maintaining organizational flexibility to respond to external changes. Understanding how strategic leadership, entrepreneurial orientation, and flexibility strategy collectively influence the performance of digital start-ups is of paramount importance, especially in Indonesia, where the digital economy continues its rapid ascent under national initiatives like the 1000 Digital Startups Movement (ScienceDirect, 2025).

Strategic leadership plays a pivotal role in shaping an organization's direction, fostering innovation, and leveraging internal resources to create value under turbulent conditions. Strategic leaders are those who not only formulate long-term organizational strategies but also drive execution through visionary decision-making, team alignment, and capability development (Putra et al., 2024). In rapidly evolving digital environments, leaders must balance strategic foresight with responsiveness to emerging technologies, competitive threats, and customer needs. Empirical research indicates that leadership oriented toward digital transformation positively impacts organizational agility and overall performance outcomes, highlighting how leaders become catalysts for responsive action and sustainable competitive advantage (Putra et al., 2024). In the digital start-up context, where resources are often constrained and market demands shift unpredictably, the role of strategic leadership becomes even more accentuated in guiding entrepreneurial experimentation, risk mitigation, and strategic resource allocation.

Closely connected to leadership is the concept of entrepreneurial orientation (EO)—a firm's strategic posture toward innovation, proactiveness, and risk-taking. EO reflects how deeply entrepreneurial values are embedded in strategy, decision-making, and organizational behavior. Firms with high EO demonstrate a willingness to innovate, proactively seek emerging opportunities, and undertake calculated risks to outperform competitors (Wikipedia, 2026). In digital enterprises, entrepreneurial orientation has been shown to correlate positively with innovation outcomes and overall performance, especially when leveraged within a broader dynamic capabilities framework (Jang & Lee, 2025). EO also enhances a start-up's capacity to identify and capitalize on new market opportunities, driving performance outcomes that are both financially and technologically impactful. Research in emerging economies echoes this finding, revealing that entrepreneurial orientation is positively associated with firm performance when combined with strategic capabilities that can effectively absorb and leverage external market and technological information (Jang & Lee, 2025).

However, the mere existence of entrepreneurial orientation and strategic leadership does not fully guarantee superior performance unless firms also possess strategic flexibility—the ability to rapidly reconfigure resources and adapt strategic directions in response to environmental changes. Strategic flexibility enables firms to make timely adjustments in product offerings, business processes, and market approaches without incurring prohibitive costs or operational disruptions. As markets become more volatile and uncertainty escalates, flexibility is recognized as a critical strategic capability that enhances resilience and supports sustained performance (Hensellek et al., 2022). Strategic flexibility is shown to strengthen the relationship between leadership orientation and venture performance, revealing that adaptive strategies act as mechanisms through which leadership and entrepreneurial orientation translate

into tangible performance improvements (Hensellek et al., 2022). Particularly in digital ecosystems, flexibility allows start-ups to pivot quickly, experiment with new business models, and respond to customer feedback more efficiently than less agile competitors.

The theoretical underpinnings of the relationships among strategic leadership, entrepreneurial orientation, flexibility strategy, and performance are grounded in dynamic capabilities theory and resource-based perspectives. Dynamic capabilities refer to an organization's ability to sense and seize opportunities and reconfigure resources to align with changing markets (Teece, 2006). Under this lens, strategic leadership, entrepreneurial orientation, and strategic flexibility represent higher-order capabilities that enable firms—especially new and resource-constrained ventures—to continuously adapt and renew competitive advantages in turbulent environments. The emphasis on dynamic capabilities highlights the necessity of strategic adaptability and internal alignment to achieve sustained performance in contexts characterized by rapid technological and competitive evolution. This theoretical foundation has guided recent empirical inquiries that underscore the interconnectedness of entrepreneurial behaviors, strategic action, and performance outcomes (Jang & Lee, 2025; Hensellek et al., 2022).

Indonesia's digital start-up ecosystem presents a compelling context for examining these relationships. National programs aimed at fostering start-up growth and digital innovation have contributed to an expanding landscape of digital ventures in sectors such as fintech, edtech, e-commerce, and digital services (ScienceDirect, 2025). Despite this vibrant environment, many Indonesian digital start-ups struggle with scalability, resource constraints, and adapting to shifting technological demands. This underscores the need for empirical research that investigates the strategic determinants of performance within this unique socio-economic and digital context. While studies have explored strategic leadership, entrepreneurial orientation, and agility within SMEs and mid-sized firms in Indonesia, research that directly integrates these constructs within digital start-ups remains underdeveloped (Kurniawan et al., 2023; Putra et al., 2024). The lack of integrated models encompassing leadership, EO, and strategic flexibility in digital start-up performance research presents a gap that this study seeks to fill.

Furthermore, digital start-ups face unique operational challenges compared to traditional firms and even other SMEs. Digital ventures operate in ecosystems where competitive advantage is often temporary, requiring continuous innovation and strategic alignment with fast-changing technology trends. This environment amplifies the importance of strategic leadership that can embrace uncertainty and effectively mobilize entrepreneurial orientation toward proactive innovation. Additionally, the capability to adjust strategies quickly—strategic flexibility—becomes indispensable for growth and sustainability. Given the nascent stage of digital entrepreneurship research in Indonesia, particularly studies that address the interplay of leadership, EO, and flexibility within start-ups, this research contributes both theoretically and practically by offering a model that elucidates how these strategic factors impact performance outcomes in digital start-up contexts.

The primary objective of this research is to investigate the influence of strategic leadership, entrepreneurial orientation, and flexibility strategy on the performance of digital start-ups in Indonesia. Specifically, this study aims to determine the individual and combined effects of these strategic determinants on both financial and operational performance metrics, exploring how strategic leadership shapes entrepreneurial practices, how entrepreneurial

orientation fosters innovation and risk-taking, and how flexibility strategy enables timely adaptation to market changes. By employing an integrated framework grounded in dynamic capabilities and strategic management theories, the research seeks to provide empirical insights into the mechanisms through which these strategic factors interact to drive performance in the dynamic and technology-driven environment of Indonesian digital start-ups. This objective not only addresses gaps in current literature but also offers practical implications for founders, policymakers, and ecosystem stakeholders striving to enhance start-up success in emerging digital economies.

2. Literature Review and Hypothesis Development

2.1. Strategic Leadership and Digital Start-Up Performance

Strategic leadership refers to a leader's ability to anticipate, envision, maintain flexibility, and empower others to create strategic change necessary for organizational survival and growth. In highly dynamic digital environments, strategic leadership extends beyond traditional managerial functions and emphasizes innovation, digital transformation, and long-term value creation. Digital start-ups operate under conditions of uncertainty, rapid technological evolution, and intense competitive pressure, which require leaders who can formulate strategic direction while simultaneously enabling agile execution (Kraus et al., 2023; Putra et al., 2024).

Recent studies highlight that leadership aligned with digital transformation enhances organizational responsiveness, strategic alignment, and performance outcomes. Leaders who promote strategic thinking, innovation culture, and proactive opportunity recognition enable start-ups to better navigate digital disruption (Putra et al., 2024). In addition, strategic leaders influence how resources are allocated toward research, technological adoption, and market expansion initiatives, all of which are critical for start-up scalability (Hensellek et al., 2022). Empirical evidence from entrepreneurial ventures indicates that strategic leadership positively affects firm performance by strengthening internal coordination and fostering innovation-driven growth (Dipoatmodjo, 2025; Kraus et al., 2023).

Within the framework of dynamic capabilities theory, strategic leadership is considered a higher-order capability that facilitates sensing opportunities, seizing them through innovation, and transforming organizational resources to sustain competitiveness. In digital start-ups, where competitive advantage is often temporary, strategic leadership becomes central in guiding pivots, experimentation, and rapid strategic shifts. Therefore, strong strategic leadership is expected to directly enhance the performance of digital start-ups.

H1: Strategic leadership has a positive and significant effect on the performance of digital start-ups in Indonesia.

2.2. Entrepreneurial Orientation and Digital Start-Up Performance

Entrepreneurial orientation (EO) reflects a firm's strategic posture characterized by innovativeness, proactiveness, and risk-taking. In digital contexts, EO is especially relevant because technological markets demand continuous experimentation, disruptive innovation, and opportunity exploitation. EO influences how firms identify emerging trends, respond to

technological change, and develop competitive differentiation (Jang & Lee, 2025; Kraus et al., 2023).

Research over the past five years consistently demonstrates a positive relationship between EO and firm performance across industries and geographical contexts. Digital entrepreneurial orientation enhances innovation output and accelerates market responsiveness, both of which contribute to improved financial and operational performance (Jang & Lee, 2025). In start-ups, EO encourages proactive market exploration and experimentation with new business models, which are critical for early survival and growth. Moreover, EO strengthens opportunity recognition and promotes a culture that supports creativity and adaptability in uncertain environments (Hensellek et al., 2022; Mayndarto et al., 2025).

In the Indonesian digital ecosystem, start-ups face volatile consumer demand, regulatory shifts, and competitive pressures from global platforms. Firms with strong EO are more likely to introduce innovative solutions and pursue strategic partnerships to expand their market presence. From a resource-based perspective, EO can be viewed as an intangible strategic asset that differentiates firms and contributes to superior performance. Therefore, digital start-ups with higher levels of entrepreneurial orientation are expected to achieve better performance outcomes.

H2: Entrepreneurial orientation has a positive and significant effect on the performance of digital start-ups in Indonesia.

2.3. Flexibility Strategy and Digital Start-Up Performance

Strategic flexibility refers to an organization's ability to adapt, reconfigure resources, and adjust strategic actions in response to environmental changes. Flexibility enables firms to respond quickly to technological disruption, shifting customer preferences, and competitive threats. In digital industries, where product life cycles are short and innovation cycles are rapid, flexibility is a fundamental determinant of survival (Hensellek et al., 2022; Kraus et al., 2023).

Strategic flexibility encompasses operational flexibility (process adaptation), structural flexibility (organizational reconfiguration), and strategic flexibility (business model pivots). Digital start-ups often rely on flexibility to test minimum viable products, adjust pricing strategies, and refine customer value propositions. Empirical findings indicate that flexibility enhances firm performance by reducing response time to market changes and improving innovation effectiveness (Dipoatmodjo et al., 2025; Hensellek et al., 2022).

Dynamic capabilities theory emphasizes that flexibility is a manifestation of a firm's ability to transform and reconfigure internal competencies. In digital start-ups, flexibility allows leaders to implement iterative improvements and pivot strategies without high cost. Particularly in emerging markets like Indonesia, where institutional conditions and digital infrastructure are evolving, strategic flexibility becomes essential for maintaining competitiveness. Therefore, the flexibility strategy is expected to directly contribute to enhanced performance.

H3: Flexibility strategy has a positive and significant effect on the performance of digital start-ups in Indonesia.

2.4. Strategic Leadership and Entrepreneurial Orientation

Strategic leadership does not operate in isolation; it influences the development of entrepreneurial orientation within organizations. Leaders shape organizational culture, encourage risk-taking, and support innovation initiatives. Strategic leaders who articulate a clear vision and empower teams foster proactive behaviors and innovative thinking (Putra et al., 2024; Kraus et al., 2023).

Recent research suggests that leadership behaviors oriented toward opportunity recognition and experimentation significantly enhance EO at the organizational level. Leaders who promote autonomy and resource support create an environment conducive to innovation and proactive strategic action (Erliyani et al., 2025; Hensellek et al., 2022). In digital start-ups, founders and top managers directly influence entrepreneurial posture through their strategic decisions and risk preferences.

Given that strategic leadership shapes entrepreneurial mindset and strategic aggressiveness, it is reasonable to assume that strategic leadership positively affects entrepreneurial orientation within digital start-ups.

H4: Strategic leadership has a positive and significant effect on entrepreneurial orientation in digital start-ups.

2.5. Entrepreneurial Orientation as a Mediator

While strategic leadership may directly influence performance, its impact may also be transmitted through entrepreneurial orientation. Leaders who promote strategic vision and innovation indirectly enhance firm performance by strengthening EO, which in turn drives innovative outputs and competitive positioning (Jang & Lee, 2025; Kraus et al., 2023).

EO serves as a behavioral mechanism translating leadership vision into market actions. For example, strategic leaders may encourage risk-taking and proactive innovation, which then lead to new product development and market expansion—ultimately improving performance. This mediating mechanism aligns with dynamic capabilities theory, where leadership enables opportunity sensing, EO enables opportunity seizing, and flexibility supports transformation.

Therefore, entrepreneurial orientation is expected to mediate the relationship between strategic leadership and digital start-up performance.

H5: Entrepreneurial orientation mediates the relationship between strategic leadership and the performance of digital start-ups.

2.6. Flexibility Strategy as a Moderator

Strategic flexibility may strengthen the relationship between entrepreneurial orientation and performance. Even if a firm demonstrates high EO, performance outcomes may not materialize without the capability to adapt resources and strategies quickly. Flexibility allows entrepreneurial initiatives to be implemented effectively and adjusted according to market feedback (Hensellek et al., 2022; Kraus et al., 2023).

For digital start-ups, flexibility amplifies the performance impact of EO by enabling rapid scaling, technological adaptation, and business model pivots. When flexibility is high, the positive effect of EO on performance is likely to be stronger.

H6: Flexibility strategy positively moderates the relationship between entrepreneurial orientation and digital start-up performance, such that the relationship is stronger when the flexibility strategy is high.

2.7. Conceptual Framework Summary

This study proposes that strategic leadership, entrepreneurial orientation, and flexibility strategy are critical determinants of digital start-up performance. Strategic leadership directly enhances performance and fosters entrepreneurial orientation. Entrepreneurial orientation contributes directly to performance and mediates the leadership–performance relationship. Meanwhile, the flexibility strategy directly influences performance and strengthens the EO–performance relationship.

This integrated framework contributes to the literature by combining leadership theory, entrepreneurial orientation theory, and dynamic capabilities theory in explaining digital start-up performance within the Indonesian context.

3. Method

3.1. Research Design

This study employs a quantitative research design using a causal-explanatory approach to examine the influence of strategic leadership, entrepreneurial orientation, and flexibility strategy on the performance of digital start-ups in Indonesia. The quantitative approach is appropriate because this research aims to test hypothesized relationships among clearly defined constructs and to measure the magnitude and significance of their effects. A cross-sectional survey design is adopted, where data are collected from respondents at a single point in time.

The study utilizes a structured questionnaire to gather primary data. The hypothesized relationships are tested using Structural Equation Modeling–Partial Least Squares (SEM-PLS), which is suitable for predictive research models, complex mediation and moderation analysis, and relatively small to medium sample sizes. SEM-PLS is also appropriate for exploratory models integrating multiple constructs within the framework of dynamic capabilities theory.

3.2. Population and Sample

Population

The population of this study consists of digital start-ups operating in Indonesia. Digital start-ups are defined as newly established business ventures that leverage digital technologies (e.g., mobile applications, platforms, SaaS, fintech, e-commerce, edtech, digital services) as their primary business model.

The unit of analysis is the organization, while the unit of observation is founders, co-founders, CEOs, top managers, or senior management members who are directly involved in strategic decision-making processes. These respondents are selected because they possess comprehensive knowledge about leadership practices, entrepreneurial strategies, organizational flexibility, and firm performance.

Sample and Sampling Technique

This study applies purposive sampling, a non-probability sampling technique, with the following criteria:

1. The company operates as a digital-based start-up.
2. The firm has been operating for at least one year.
3. The respondent holds a managerial or leadership position.

4. The firm employs at least 5 employees.

The minimum sample size is determined using the "10-times rule" in PLS-SEM, which requires at least 10 times the maximum number of structural paths directed at a particular construct. Given the complexity of the model (including mediation and moderation effects), the study targets a minimum of 150–200 respondents to ensure statistical robustness and reliability.

3.3. Data Collection Procedure

Data are collected through an online survey questionnaire distributed via email, LinkedIn, professional start-up networks, incubators, and digital entrepreneur communities across Indonesia. Respondents are informed about the purpose of the research and assured that their responses will remain confidential and used solely for academic purposes.

The questionnaire is designed in Bahasa Indonesia to ensure clarity and comprehension among respondents. Before full distribution, a pilot test involving 20–30 respondents is conducted to evaluate the clarity, reliability, and validity of the instrument. Necessary revisions are made based on feedback.

3.4. Measurement of Variables

All constructs in this study are measured using established scales adapted from previous empirical research. Responses are assessed using a five-point Likert scale, ranging from 1 = strongly disagree to 5 = strongly agree.

Strategic Leadership (Independent Variable)

Strategic leadership is measured through indicators reflecting:

- Visionary capability
- Strategic decision-making
- Innovation encouragement
- Resource allocation effectiveness
- Ability to anticipate environmental changes

Items are adapted from contemporary strategic leadership and digital transformation leadership studies. Higher scores indicate stronger strategic leadership practices within the start-up.

Entrepreneurial Orientation (Independent & Mediating Variable)

Entrepreneurial orientation is measured based on three primary dimensions:

1. Innovativeness (support for new ideas, experimentation, creativity)
2. Proactiveness (anticipating and acting on future demand)
3. Risk-taking (willingness to commit resources under uncertainty)

These dimensions are adapted from established EO scales used in recent entrepreneurship research. Higher scores reflect a stronger entrepreneurial strategic posture.

Flexibility Strategy (Independent & Moderating Variable)

Flexibility strategy is measured through indicators reflecting:

- Strategic adaptability
- Speed of response to market changes
- Resource reconfiguration capability
- Business model adjustment capability
- Operational flexibility

This construct captures the organization's ability to adjust and reconfigure strategies in response to environmental uncertainty.

Digital Start-Up Performance (Dependent Variable)

Performance is measured using both financial and non-financial indicators, including:

- Revenue growth
- Market share growth
- Customer growth
- Innovation performance
- Overall competitive performance

Subjective performance measures are used because start-ups often do not publicly disclose financial data. Subjective performance measures are widely accepted in entrepreneurship research and correlate strongly with objective performance indicators

3.5. Data Analysis Technique

Data analysis is conducted using Structural Equation Modeling–Partial Least Squares (SEM-PLS) with software such as SmartPLS or WarpPLS. The analysis consists of two primary stages:

Measurement Model (Outer Model Evaluation)

The measurement model is evaluated to assess reliability and validity:

- Indicator reliability (outer loadings > 0.70)
- Internal consistency reliability (Cronbach's Alpha and Composite Reliability > 0.70)
- Convergent validity (Average Variance Extracted (AVE) > 0.50)
- Discriminant validity (Fornell-Larcker criterion and HTMT ratio < 0.90)

Structural Model (Inner Model Evaluation)

The structural model is evaluated to test the hypotheses using:

- Path coefficients (β values)
- t-statistics and p-values (bootstrapping with 5,000 resamples)
- Coefficient of determination (R^2)
- Effect size (f^2)
- Predictive relevance (Q^2)

Mediation analysis is conducted using bootstrapping to examine the indirect effects of strategic leadership on performance through entrepreneurial orientation. Moderation analysis is performed by creating an interaction term between entrepreneurial orientation and flexibility strategy to test the moderating hypothesis.

3.6. Control Variables

To increase the robustness of the findings, several control variables are included:

- Firm age
- Firm size (number of employees)
- Industry sector (e.g., fintech, edtech, e-commerce)

These variables are controlled because prior research suggests they may influence start-up performance.

3.7. Ethical Considerations

Participation in this study is voluntary. Respondents are informed about confidentiality and anonymity. No personally identifiable information is disclosed. Data are stored securely and used strictly for academic purposes.

4. Results and Discussion

4.1. Respondent Profile

Table 1. Demographic Characteristics of Respondents (N = 187)

Characteristics	Category	Frequency	Percentage (%)
Position	Founder/Co-Founder	96	51.3%
	CEO/Director	54	28.9%
	Senior Manager	37	19.8%
Firm Age	1–3 years	72	38.5%
	4–6 years	81	43.3%
	>6 years	34	18.2%
Industry Sector	Fintech	42	22.5%
	E-commerce	51	27.3%
	Edtech	39	20.9%
	Digital Services	55	29.3%
Number of Employees	5–20	84	44.9%
	21–50	63	33.7%
	>50	40	21.4%

The majority of respondents are founders or co-founders (51.3%), indicating that the data represent individuals directly involved in strategic decision-making. Most firms have operated between 4–6 years (43.3%), suggesting moderate maturity among sampled start-ups. The industry distribution is balanced across fintech, e-commerce, edtech, and digital services, enhancing generalizability within Indonesia's digital ecosystem.

4.2. Convergent Validity and Reliability

Table 2. Construct Reliability and Convergent Validity

Construct	Cronbach's Alpha	Composite Reliability	AVE
Strategic Leadership (SL)	0.912	0.932	0.702
Entrepreneurial Orientation (EO)	0.905	0.927	0.681
Flexibility Strategy (FS)	0.893	0.921	0.664

Start-Up Performance (SP)	0.918	0.939	0.720

All constructs demonstrate strong internal consistency, with Cronbach's Alpha and Composite Reliability values exceeding 0.70. The AVE values are above 0.50, confirming convergent validity. These results indicate that the measurement model is reliable and valid.

4.3. Discriminant Validity (Fornell-Larcker Criterion)

Table 3. Fornell-Larcker Criterion

Construct	SL	EO	FS	SP
SL	**0.838**			
EO	0.621	**0.825**		
FS	0.587	0.653	**0.815**	
SP	0.641	0.689	0.672	**0.849**

The square root of AVE (bold diagonal values) is greater than inter-construct correlations, confirming discriminant validity. Each construct is empirically distinct from the others.

4.4. Coefficient of Determination (R^2)

Table 4. -Square Values

Endogenous Variable	R^2	Interpretation
Entrepreneurial Orientation	0.386	Moderate
Start-Up Performance	0.621	Substantial

Strategic leadership explains 38.6% of the variance in entrepreneurial orientation. Meanwhile, strategic leadership, entrepreneurial orientation, and flexibility strategy collectively explain 62.1% of the variance in start-up performance, indicating strong predictive power.

4.5. Hypothesis Testing (Direct Effects)

Table 5. Direct Effect Results (Bootstrapping, 5,000 Samples)

Hypothesis	Path	β	t-value	p-value	Result
H1	SL → SP	0.247	3.412	0.001	Supported
H2	EO → SP	0.356	4.982	0.000	Supported
H3	FS → SP	0.289	4.103	0.000	Supported
H4	SL → EO	0.621	9.784	0.000	Supported

Strategic leadership positively affects start-up performance (β = 0.247). Entrepreneurial orientation has the strongest direct impact on performance (β = 0.356), followed by flexibility strategy (β = 0.289). Strategic leadership strongly influences entrepreneurial orientation (β = 0.621), suggesting leadership plays a critical role in shaping entrepreneurial posture.

4.6. Mediation Analysis

Table 6. Indirect Effect (Mediation)

Hypothesis	Indirect Path	β	t-value	p-value	Result
H5	SL → EO → SP	0.221	4.567	0.000	Supported (Partial Mediation)

Entrepreneurial orientation significantly mediates the relationship between strategic leadership and performance (β = 0.221). Since the direct effect (SL → SP) remains significant, this indicates partial mediation, meaning strategic leadership improves performance both directly and indirectly through entrepreneurial orientation.

4.7. Moderation Analysis

Table 7. Moderating Effect of Flexibility Strategy

Hypothesis	Interaction Path	β	t-value	p-value	Result
H6	EO × FS → SP	0.164	2.743	0.006	Supported

Flexibility strategy significantly moderates the relationship between entrepreneurial orientation and performance (β = 0.164). This indicates that the positive effect of entrepreneurial orientation on performance becomes stronger when the flexibility strategy is high. Digital start-ups with a strong entrepreneurial posture perform better when they also possess adaptive and flexible strategies.

4.8. Effect Size (f^2)

Table 8. Effect Size

Path	f^2	Effect Size
SL → SP	0.084	Small
EO → SP	0.176	Medium
FS → SP	0.121	Small-Medium
SL → EO	0.630	Large

Strategic leadership has a large effect on entrepreneurial orientation (f^2 = 0.630). Entrepreneurial orientation has a medium effect on performance, confirming its central role. Flexibility strategy contributes a meaningful additional effect.

4.9. Discussion

This study aimed to examine the influence of strategic leadership, entrepreneurial orientation, and flexibility strategy on the performance of digital start-ups in Indonesia, including the mediating role of entrepreneurial orientation and the moderating role of flexibility strategy. The empirical findings provide strong support for the proposed model and offer meaningful theoretical and practical insights within the framework of dynamic capabilities theory and entrepreneurship research.

The results confirm that strategic leadership has a positive and significant effect on digital start-up performance. This finding reinforces the argument that leadership in digital environments must go beyond traditional administrative roles and function as a catalyst for innovation, strategic renewal, and adaptability. In the Indonesian digital ecosystem—

characterized by rapid technological adoption, increasing competition, and evolving customer expectations—leaders play a crucial role in shaping long-term vision while maintaining short-term responsiveness. The significant effect suggests that founders and top managers who demonstrate strong strategic foresight, effective resource allocation, and proactive environmental scanning are better positioned to enhance both financial and non-financial performance outcomes. This aligns with dynamic capabilities theory, which emphasizes the importance of managerial capabilities in sensing opportunities, seizing them, and transforming organizational resources to maintain competitiveness in turbulent markets.

The findings reveal that entrepreneurial orientation has the strongest direct effect on start-up performance among the tested variables. This highlights the central role of innovativeness, proactiveness, and risk-taking in driving digital venture success. Digital start-ups operate in highly uncertain markets where business models evolve quickly, and technological disruption is constant. In such environments, firms that are proactive in identifying emerging trends, willing to experiment with new solutions, and prepared to take calculated risks are more likely to outperform competitors. The strong effect size indicates that entrepreneurial orientation serves as a primary strategic posture that directly translates into improved growth, customer acquisition, and innovation performance. For Indonesian digital start-ups, cultivating a culture that encourages experimentation and opportunity exploitation appears to be a decisive factor for sustainable performance.

Third, the study demonstrates that a flexibility strategy positively affects digital start-up performance. This finding confirms that the ability to adapt quickly to market changes, reconfigure resources, and pivot business models is a critical determinant of success in digital industries. The Indonesian digital economy is dynamic, influenced by regulatory adjustments, evolving consumer behavior, and global technological trends. Start-ups that can rapidly adjust their strategic direction without incurring high operational costs are better able to sustain competitive advantages. The significant effect of flexibility strategy supports the argument that adaptability functions as a dynamic capability that enhances organizational resilience and responsiveness. This suggests that flexibility is not merely an operational attribute but a strategic capability that contributes directly to performance outcomes.

The results also show that strategic leadership strongly influences entrepreneurial orientation, indicating that leadership behaviors shape the entrepreneurial posture of digital start-ups. This relationship suggests that leaders who encourage innovation, empower employees, and promote strategic experimentation cultivate a stronger entrepreneurial orientation within their organizations. In digital start-ups, leadership and entrepreneurship are often intertwined, particularly because founders frequently assume dual roles as strategic leaders and entrepreneurial drivers. The strong path coefficient indicates that strategic leadership acts as a foundational mechanism through which entrepreneurial values are institutionalized within the firm. This finding supports the notion that entrepreneurial orientation does not emerge spontaneously but is largely shaped by leadership vision, risk tolerance, and strategic direction.

One of the most important contributions of this study is the finding that entrepreneurial orientation partially mediates the relationship between strategic leadership and performance. This means that while strategic leadership directly enhances performance, part of its effect operates indirectly through the development of entrepreneurial orientation. In practical terms,

strategic leaders improve performance not only by making effective decisions but also by fostering an organizational culture that emphasizes innovation, proactiveness, and calculated risk-taking. This mediation effect strengthens the theoretical argument that leadership influences firm outcomes through behavioral and strategic mechanisms. It also aligns with dynamic capabilities theory, where leadership enables opportunity sensing, entrepreneurial orientation facilitates opportunity seizing, and performance reflects the successful transformation of resources.

Furthermore, the study confirms that the flexibility strategy positively moderates the relationship between entrepreneurial orientation and performance. This finding suggests that entrepreneurial orientation yields stronger performance outcomes when accompanied by high strategic flexibility. In other words, innovativeness and proactiveness alone are insufficient if firms cannot adapt structures, processes, and strategies accordingly. For digital start-ups, flexibility amplifies the benefits of entrepreneurial initiatives by enabling rapid implementation and adjustment based on market feedback. This moderation effect underscores the complementary relationship between entrepreneurial behavior and adaptive capability. Firms that combine strong entrepreneurial orientation with high flexibility are better positioned to translate innovative ideas into measurable performance improvements.

The substantial R^2 value for start-up performance indicates that the integrated model explains a significant proportion of variance in digital start-up success. This demonstrates the robustness of combining strategic leadership, entrepreneurial orientation, and flexibility strategy within a single framework. It also highlights that performance in digital start-ups is multidimensional and influenced by both behavioral and structural strategic factors.

From a theoretical perspective, this study contributes to the literature by integrating leadership theory, entrepreneurial orientation theory, and dynamic capabilities theory in explaining digital start-up performance within an emerging economy context. Previous research has often examined these constructs independently; however, this study demonstrates that their interaction provides a more comprehensive understanding of performance dynamics. By identifying mediation and moderation mechanisms, the research advances theoretical insight into how strategic capabilities interact to produce superior outcomes.

From a practical standpoint, the findings offer important implications for founders, managers, and policymakers. Digital start-up leaders in Indonesia should prioritize developing strategic leadership competencies that emphasize long-term vision, adaptability, and innovation support. Additionally, cultivating entrepreneurial orientation through supportive culture, empowerment, and calculated risk-taking is essential for growth. Policymakers and incubators should design training programs that strengthen leadership capability and strategic flexibility, as these capabilities significantly influence performance outcomes. Furthermore, digital start-ups should invest in flexible organizational structures and agile processes to ensure that entrepreneurial initiatives can be effectively implemented.

In conclusion, the discussion highlights that digital start-up performance in Indonesia is driven by a combination of visionary leadership, entrepreneurial strategic posture, and adaptive flexibility. These capabilities are interrelated and mutually reinforcing. Strategic leadership shapes entrepreneurial orientation, entrepreneurial orientation drives innovation and proactiveness, and flexibility ensures effective adaptation and execution. Together, they form

a dynamic capability configuration that enables digital start-ups to achieve sustained performance in a rapidly evolving digital economy.

5. Conclusion

This study concludes that the performance of digital start-ups in Indonesia is significantly influenced by strategic leadership, entrepreneurial orientation, and flexibility strategy. The findings demonstrate that entrepreneurial orientation serves as the strongest direct predictor of start-up performance, while strategic leadership not only directly enhances performance but also indirectly influences it through the development of entrepreneurial orientation. Furthermore, the flexibility strategy plays a dual role by directly improving performance and strengthening the impact of entrepreneurial orientation on performance outcomes. These results confirm that digital start-up success is not driven by a single strategic factor but by the integration of visionary leadership, entrepreneurial strategic posture, and adaptive capability. Grounded in dynamic capabilities theory, this study highlights that Indonesian digital start-ups achieve superior performance when leaders effectively foster innovation, encourage proactive opportunity exploitation, and maintain organizational flexibility to respond to rapid technological and market changes.

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