

Green entrepreneurial orientation in Indonesia's creative industries: A new adaptive strategic management model for sustainability

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Abstract

Purpose – This study examines the relationship between Green Entrepreneurship Orientation (GEO) and financial performance in the Indonesian creative industry sector. It aims to explore how adaptive strategic management mediates this relationship, focusing on strategic agility, flexibility, and innovation.

Design/Methodology/Approach – Data were collected from 531 business owners in the creative industry and analyzed using Structural Equation Modeling–Partial Least Squares (SEM-PLS). The study tested the mediating effects of strategic agility, flexibility, innovation, and digitalization.

Findings – The results revealed that GEO positively influences adaptive strategic management but has a statistically insignificant direct effect on financial performance. Strategic agility, flexibility, and innovation emerged as significant mediators, whereas digitalization exhibited only a relatively weak mediating effect.

Originality/Value – This research introduces a novel adaptive strategic management model that incorporates sustainability principles into entrepreneurial practices. It aligns with the Sustainable Development Goals (SDGs) and extends current knowledge of GEO's role in enhancing organizational performance in creative industries.

Research Limitations/Implications – The study is limited to Indonesia's creative industry sector, which may restrict the generalizability of its findings. Future research should examine these relationships across different contexts and employ longitudinal designs to assess causal dynamics.

Practical Implications – The study recommends that businesses in the creative sector adopt a green entrepreneurial mindset and implement adaptive strategic management practices, particularly agility, flexibility, and innovation, to improve long-term financial performance and sustainability.

Keywords – Adaptive Strategic Management, Strategic Agility, Strategic Flexibility, Strategic Innovation, Strategic Digitalization

1. Introduction

In today's dynamic business environment, organizations must continuously adapt to market shifts, technological advancements, and regulatory changes ([Olabode et al., 2023](#)). Strategic innovation and digital transformation are critical drivers of corporate success

([Vărzaru & Bocean, 2024](#)), particularly in Indonesia's creative industry, where rapid technological change and evolving consumer preferences intensify competitive pressures ([Ratnawati & Darmanto, 2023](#)).

Strategic innovation, defined as the development of novel products, processes, or business models, enables firms to sustain competitive advantage and achieve long-term performance ([Alaskar et al., 2024](#)). Adaptive strategic management strengthens organizational flexibility and responsiveness to external disruptions ([Zinchenko et al., 2022](#)), which is crucial for Indonesia's creative sector as it confronts globalization and digital disruption ([Dellyana et al., 2023](#)). Core dimensions of adaptive strategic management include strategic digitalization ([Leão & da Silva, 2021](#)) as well as strategic agility and flexibility ([Ahammad et al., 2021](#); [Han & Zhang, 2021](#)). Prior studies highlight the interconnectedness of these dimensions in improving organizational performance ([Xu et al., 2024](#)). Within this context, Green Entrepreneurial Orientation (GEO) integrates environmental sustainability with entrepreneurial practices, thereby playing a pivotal role in strategic decision-making ([Ameer & Khan, 2023](#)). The increasing adoption of GEO in Indonesia's creative industries underscores its importance in balancing innovation and environmental responsibility ([Mahrinasari et al., 2024](#)).

Despite considerable attention to strategic innovation and digital transformation, limited research has examined how GEO interacts with strategic digitalization, agility, flexibility, and innovation to influence corporate performance ([Aloulou et al., 2024](#); [Hensellek et al., 2023](#); [Kraus et al., 2023](#)). Empirical evidence on how these factors collectively shape organizational adaptability and long-term success remains scarce, particularly in Indonesia's creative sector ([Mahrinasari et al., 2024](#)). In response to the identified gap, this study formulates and validates an adaptive strategic management model mediating the linkage between GEO and firm performance. The findings shed light on the ways creative industry enterprises can capitalize on adaptability to achieve superior outcomes. Moreover, this research advances the scholarly discourse on strategic management, innovation, and sustainability, and concludes with implications, constraints, and recommendations for future studies.

2. Literature review

2.1. Adaptive strategic management

Adaptive Strategic Management is a dynamic approach emphasizing flexibility and responsiveness in an ever-changing business environment ([Zinchenko et al., 2022](#)). Traditional rigid strategic planning methods are increasingly ineffective in fast-paced markets ([Lim et al., 2022](#)). Instead, adaptive strategic management encourages continuous monitoring of external environments, strategic adjustments, and iterative planning, execution, and review processes ([Moyo, 2023](#)).

Several adaptive strategies are crucial for sustained success. Strategic digitalization enhances business processes and competitive advantage using digital technologies ([Hussein et al., 2024](#); [Shehadeh et al., 2023](#)). This is complemented by strategic agility, which enables firms to pivot effectively in response to disruptions ([Aityassine et al., 2024](#); [Aloulou et al., 2024](#)). Strategic innovation drives novel solutions that transform markets and boost performance, while strategic flexibility allows firms to respond to market changes while creating value proactively ([Miroshnychenko et al., 2021](#)).

2.2. Green entrepreneurial orientation (GEO) and strategic digitalization

GEO is a strategic framework integrating environmental sustainability with entrepreneurial practices, emphasizing an organization's commitment to sustainable development and environmentally friendly business opportunities ([Ameer & Khan, 2023](#)). Its relevance has grown as businesses enhance their sustainability credentials ([Manigandan &](#)

[Raghuram, 2024](#)). GEO practices include developing eco-friendly activities ([Momayez et al., 2023](#)), implementing energy-saving technologies ([Mehta et al., 2025](#)).

GEO is characterized by several key dimensions, namely proactiveness, opportunity orientation, innovativeness, resource utilization, calculated risk-taking, customer focus, and the pursuit of value creation ([Tolossa et al., 2024](#)). A strong GEO can improve corporate performance ([Momayez et al., 2023](#)). However, Le and Zhang, ([2024](#)) noted a theoretical gap in GEO concerning corporate performance, suggesting four strategic adaptations as intervening factors. Le and Zhang ([2024](#)) note that firms integrating sustainability often adopt digital technologies to enhance operational efficiency. Suder et al. ([2024](#)) reveal that digitalization mediates the relationship between entrepreneurial behaviors like proactiveness and market performance.

Kraus et al. ([2023](#)) argue that while a strong entrepreneurial orientation fosters disruptive innovation, digitalization may sometimes constrain innovative capabilities. Further studies indicate that risk-taking and entrepreneurial passion positively influence SME digital transformation, whereas proactiveness and innovativeness have no significant effect ([Oubdi & EL Mekkaoui, 2023](#)). These findings suggest that firms with robust GEO are better positioned to implement strategic digitalization efforts, leveraging sustainability-driven innovation to enhance performance. Based on these discussions, this study proposes:

H₁: GEO positively influences strategic digitalization.

2.3. *GEO and strategic agility*

The relationship between GEO and strategic agility is increasingly recognized. Verma and Kumar ([2022](#)) indicate that organizations with strong GEO exhibit strategic agility. GEO integrates environmental sustainability with entrepreneurial practices, allowing firms to respond proactively to market changes ([Mehta et al., 2025](#)). The concept of strategic agility refers to an organization's capacity to foresee and promptly adjust to unforeseen environmental changes, which involves maintaining strategic awareness, unified leadership, and fluid resource allocation ([Aloulou et al., 2024](#), [AlTaweel & Al-Hawary, 2021](#)).

Rocha et al. ([2025](#)) found that EO positively influences sustained competitive advantage through strategic agility and corporate social responsibility. Rofiaty et al. ([2022](#)) highlighted that EO impacts company performance directly and indirectly through strategic agility. Aloulou et al. ([2024](#)) confirmed that strategic agility serves as a crucial mediator in the relationship between EO and competitive advantage. Aswan ([2023](#)) revealed that strategic agility plays a crucial role in enhancing green entrepreneurship, suggesting a complex interplay between the two constructs. Based on these discussions, this study proposes:

H₂: GEO positively influences strategic agility.

2.4. *GEO and strategic innovation*

GEO fosters sustainable business models across industries like renewable energy, manufacturing, and agriculture ([Adiguzel & Sonmez Cakir, 2025](#); [Guo et al., 2024](#); [Hu & Tresirichod, 2024](#)). Strategic innovation integrates novel ideas to create lasting competitive advantages and stakeholder value ([Alshukri et al., 2024](#)). Recent research shows that GEO enhances innovation capabilities, improves market performance, and bolsters resilience to regulatory and market pressures through strategic innovation in areas such as digital transformation, circular economy practices, and cross-industry collaborations ([Song & Wang, 2024](#)).

A study in manufacturing sector found that GEO enhances environmental performance, with environmental innovation acting as a crucial mediator, reinforced by stakeholder pressure ([Anwar et al., 2024](#)). Research on Thai SMEs highlights green innovations as key drivers of economic and environmental performance, facilitated by GEO ([Muangmee et al., 2021](#)). In

Saudi Arabia, small enterprises demonstrate a positive relationship between GEO, green innovation, and economic performance ([Alshebami, 2023](#)). Based on these discussions, this study proposes:

H₃: GEO positively influences strategic innovation.

2.5. *GEO and strategic flexibility*

Strategic flexibility enables firms to dynamically manage resources for effective decision-making amidst high competition ([Gorondutse et al., 2021](#); [Miroshnychenko et al., 2021](#)). It allows firms to remain effective in competitive environments ([Clauss et al., 2021](#)). Entrepreneurial Orientation (EO) plays a significant role in fostering strategic flexibility ([Costa et al., 2023](#)). Organizations with strong EO adapt more quickly to environmental dynamics, influencing the speed of strategic change ([Ameer & Khan, 2023](#)).

Research demonstrates that EO positively impacts strategic flexibility. A study of Chinese firms revealed that EO stimulates product innovation by enhancing learning orientation and coordination flexibility, with resource flexibility moderating this effect ([Han & Zhang, 2021](#)). Research on family-owned SMEs in Pakistan indicated that strategic flexibility mediates the relationship between entrepreneurial and market orientations and sustainable competitive performance ([Khan et al., 2022](#)). A study involving Jordanian commercial banks illustrated that strategic flexibility partially mediates the impact of EO on achieving organizational excellence ([AlHalaseh & Ayoub, 2021](#)). Based on these discussions, this study proposes:

H₄: GEO positively influences strategic flexibility

2.6. *Strategic digitalization and corporate performance*

Strategic digitalization integrates digital technologies across all organizational operations, transforming traditional methods into a digital-first approach ([Bouncken & Schmitt, 2022](#); [Strange et al., 2022](#)). It requires a cultural shift toward continuous learning and adaptation ([Ruel et al., 2021](#)). Successful digital transformation involves internal enhancements in operations and external redefinition of customer value propositions ([Tagscherer & Carbon, 2023](#)). Rozak et al. (2023) emphasize key dimensions such as digital strategy, processes, governance, technology, and skills. A well-structured digital strategic plan can significantly enhance SME performance ([Rozak et al., 2023](#)). In the public sector, digital strategy enhances organizational performance by improving agility ([Atobishi et al., 2024](#)).

Zhao et al. (2023) highlight that digital transformation strategies positively influence ESG performance in large manufacturing enterprises, with green innovation acting as a key mediator. Teng et al. (2022) found that digital transformation in SMEs directly improves financial performance and fosters sustainable development. Jiatong Yu and Taesoo Moon (2021) emphasize that digital strategic orientation enhances organizational performance through digital competence. Based on these discussions, this study proposes:

H₅: Strategic digitalization positively influences corporate performance.

2.7. *Strategic agility and corporate performance*

Strategic agility, defined as an organization's ability to rapidly adapt to changes in the business environment ([Al Shawabkeh, 2024](#)). It involves understanding business opportunities and maintaining competitive advantage proactively ([Ahammad et al., 2021](#)). By fostering strategic agility, organizations can effectively navigate change and transform it into a sustainable competitive edge ([Aswan, 2023](#)). Strategic agility is a multidimensional construct with various conceptualizations. de Diego Ruiz et al. (2024) identify three core dimensions: strategic sensitivity, collective commitment, and resource fluidity. Christofi et al. (2024) propose additional dimensions like knowledge management, digitalization, and dynamic talent management.

Alkandi and Helmi (2024) show that strategic agility influences market orientation, which positively affects organizational performance. AlTaweel and Al-Hawary (2021) emphasize that strategic agility enhances performance, with innovation capability acting as a key mediator. Jun et al. (2024) corroborate these findings, showing strategic agility contributes significantly to performance. Khayer et al. (2023) reveal that organizational agility mediates the relationship between technological adaptability and firm performance. Fangqi et al. (2023) demonstrate that organizational agility mediates the impact of digitalization on performance. Based on these discussions, this study proposes the following hypothesis:

H₆: Strategic agility positively influences corporate performance.

2.8. Strategic innovation and corporate performance.

Strategic innovation is a critical driver of firm performance, enabling business growth, value generation, and competitive advantage (AlTaweel & Al-Hawary, 2021). Broadly, innovation transforms ideas into new or improved products, processes, or practices (Vărzaru & Bocean, 2024). Strategic innovation specifically refers to developing novel products, processes, or business practices that can transform markets and industries (Hussain et al., 2024). Research indicates that strategic innovation is distinct from concepts like designing, creating, changing, development, competitiveness, and performance (Kalati et al., 2024).

Empirical studies highlight its pivotal role in driving corporate performance across various industries. Thatrak (2021) found a strong direct positive effect of strategic innovation on firm performance. Liu (2023) demonstrated that ESG performance influences both substantial and strategic innovation, contributing to long-term success. Igbonaju et al. (2024) found that while strategic innovation positively affects product innovation, it has a negative direct impact on overall firm innovation performance. Based on these discussions, this study proposes the following hypothesis:

H₇: Strategic innovation positively influences corporate performance.

2.9. Strategic flexibility and corporate performance

Strategic flexibility refers to an organization's ability to dynamically allocate internal resources and adapt to external environmental changes (Jian et al., 2024). It underscores timely responses to external developments, contingent upon adaptable internal resources and organizational capability (Hossain et al., 2024). Strategic flexibility encompasses capabilities agility and competitive agility dimensions (Majali, 2024). Ibrahim and Marzouk (2024) identified four dimensions: flexibility of capacities, resources, information, and coordination. Other studies examine strategic flexibility as institutions' ability to quickly adapt to external changes (Ali et al., 2024).

Strategic flexibility enables firms to achieve and sustain competitive advantage and superior performance in dynamic environments (Miroshnychenko et al., 2021). It empowers organizations to revise and adapt strategic plans in response to evolving conditions (Yu et al., 2022). High-performance work systems correlate with organizational performance, with strategic flexibility partially mediating this relationship (Wang et al., 2021). The flexibility of the strategic planning process is positively associated with firm performance (Saeed et al., 2021). Strategic flexibility also enhances firm performance by fostering innovativeness and improving financial outcomes (Kafetzopoulos, 2023).

The impact of strategic flexibility on corporate performance is significant. Research on SMEs highlights that strategic flexibility positively influences sustainable performance (Alzoraiki et al., 2024). Studies indicate that strategic flexibility, alongside innovation capability, positively affects SME performance, with competitive advantage mediating this relationship. Based on these discussions, this study proposes the following hypothesis:

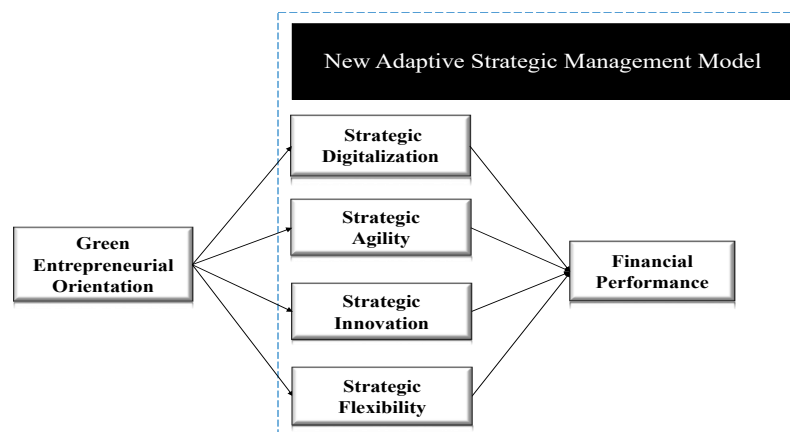
H₈: Strategic flexibility positively influences corporate performance

2.10. Indirect effect GEO toward corporate performance through adaptive strategic management

Adaptive strategic management is crucial for firms aiming to sustain competitive advantage and enhance corporate performance. It combines strategic digitalization, agility, innovation, and flexibility to help organizations adapt, seize opportunities, and mitigate risks (Zinchenko et al., 2022). Green entrepreneurial orientation, which emphasizes environmental sustainability, enhances performance through these adaptive mediators.

Research shows that strategic agility mediates GEO's impact by enabling rapid adaptation to market changes, fostering competitive advantage (Aloulou et al., 2024). Strategic flexibility allows firms to reconfigure resources in dynamic environments, driving sustainable performance (Hensellek et al., 2023; Khan et al., 2022). Strategic digitalization enhances innovation, though its effect varies by context (Kraus et al., 2023). Lastly, strategic innovation mediates GEO's influence by fostering environmentally focused innovations that boost performance (Ibrahim, 2021). These mediators emphasize the need to align green initiatives with adaptive strategies to optimize corporate outcomes. Based on the discussions and findings presented in the study, the following four indirect hypotheses are proposed (see Figure 1):

- H₉: GEO positively influences corporate performance, mediated by strategic digitalization.
- H₁₀: GEO positively influences corporate performance, mediated by strategic agility.
- H₁₁: GEO positively influences corporate performance, mediated by strategic innovation.
- H₁₂: GEO positively influences corporate performance, mediated by strategic flexibility.



Source: Author's own

Figure 1. Conceptual framework

3. Methodology

This study examines the relationships between GEO, adaptive strategic management, and Corporate Performance in Indonesian creative SMEs using Structural Equation Modeling in SmartPLS. SEM is suitable for handling multiple relationships and measurement errors simultaneously (Hair et al., 2011). Data was collected from business owners in Indonesia's creative industry. A non-probability purposive sampling technique was employed, targeting SMEs operating in the fashion, food, and crafts sub-sectors of the creative economy. Respondents were recruited primarily through professional associations, industry networks, and local chambers of commerce. The online survey was conducted between March and June 2024, covering major cities across Java.

To measure the constructs, multi-item scales adapted from established literature were used. Each construct was assessed with a six-point Likert scale, ranging from "Strongly Disagree" to "Strongly Agree." The questionnaire contained 25 items, with scales for GEO (Jiang et al., 2018), strategic digitalization (Suder et al., 2024), strategic agility (Atobishi et al., 2024),

strategic innovation ([AlQershi, 2021](#)), strategic flexibility ([Bashir, 2023](#)), and corporate performance ([Ahsan, 2024](#)). Prior to analysis, the data were screened for missing values and outliers. The measurement model was evaluated for reliability and validity ([Sürücü & Maslakci, 2020](#)), followed by an assessment of the structural model to test hypothesized relationships.

A total of 531 valid responses were obtained from SMEs across major cities in Java. The sample comprised 53.7% male and 46.3% female respondents. In terms of education, 52.5% had a high school qualification, and 36% held a bachelor's degree. Business sectors were distributed across fashion (48.2%), food (20.3%), and crafts (31.5%). The majority of firms (51.4%) were small businesses employing between one and ten workers. This sampling approach ensured that the study captured perspectives from SMEs that represent a significant share of Indonesia's creative economy and contribute substantially to national GDP.

4. Results

4.1. Reliability and validity of the measures

[Table 1](#) indicates that each construct within the SEM framework exhibits satisfactory validity and reliability. With Cronbach's alpha coefficients exceeding 0.7, the results confirm that the measurement items maintain robust internal consistency. Specifically, GEO has an alpha of 0.879, Strategic Digitalization (DIG) at 0.890, Strategic Agility (SAG) at 0.865, Strategic Innovation (SIN) at 0.910, Strategic Flexibility (SF) at 0.869, and Financial Performance (FP) at 0.857.

The composite reliability (CR) scores indicate satisfactory internal consistency, ranging from 0.908 to 0.933, thereby confirming the reliability of the constructs. Likewise, the average variance extracted (AVE) values, reflecting the proportion of variance explained by each construct, all exceed the recommended minimum of 0.5, with results spanning from 0.674 to 0.793. The outer loadings, which capture the correlation between individual indicators and their corresponding constructs, are predominantly high, with most surpassing 0.8, demonstrating strong indicator reliability. Collectively, these findings affirm that the constructs possess solid reliability and validity, forming a robust basis for subsequent analyses. The applied cut-off criteria follow established SEM guidelines, which consider Cronbach's alpha ≥ 0.7 , CR ≥ 0.7 , AVE ≥ 0.5 , and outer loadings ≥ 0.7 as acceptable thresholds ([Risher & Hair, 2017](#)).

Table 1. Measurement Model Evaluation

Items	Indicators	Outer loadings
<i>GEO. $\alpha = 0.879$; CR = 0.912; AVE = 0.674</i>		
GEO1	Environmental Practices Priority	0.800
GEO2	Proactive Eco-Conscious Opportunities	0.874
GEO3	Competitive Sustainability Initiatives	0.786
GEO4	Leadership in Environmental Practices	0.801
GEO5	Sustainability Competitive Strategy	0.842
<i>Strategic digitalization. $\alpha = 0.890$; CR = 0.919; AVE = 0.695</i>		
DIG1	Digital Solutions Utilization	0.864
DIG2	Digital Advancement Relative to Competitors	0.835
DIG3	Performance Improvement through Digitalization	0.832
DIG4	Enhanced Efficiency and Customer Experience	0.812
DIG5	Frontier of Digitalization	0.825
<i>Strategic agility. $\alpha = 0.865$; CR = 0.908; AVE = 0.712</i>		
SAG1	Timely Action Plan Implementation	0.829
SAG2	Resource Reconfiguration for Regulations	0.859
SAG3	Adaptation to Emerging Trends	0.863

Items	Indicators	Outer loadings
SAG4	Quick Response to Policy Changes	0.824
<i>Strategic innovation. $\alpha = 0.910$; $CR = 0.933$; $AVE = 0.736$</i>		
SIN1	Development of Sustainable Services	0.835
SIN2	Innovative Eco-Friendly Designs	0.846
SIN3	Sustainable Financial Management System	0.857
SIN4	Improvement in Sustainable Materials Quality	0.882
SIN5	New Methods for Sustainable Service Delivery	0.869
<i>Strategic flexibility. $\alpha = 0.869$; $CR = 0.920$; $AVE = 0.793$</i>		
SF1	Flexibility in Redefining Strategies	0.888
SF2	Supply Chain Reconfiguration Flexibility	0.904
SF3	Effective Resource Redeployment	0.879
<i>Financial performance. $\alpha = 0.857$; $CR = 0.913$; $AVE = 0.778$</i>		
FP1	Competitive Advantage through Sustainability	0.897
FP2	Cost Savings and Efficiency	0.897
FP3	Brand Value Enhancement	0.851

Source: Processed Data 2025

To assess the explanatory power of the model, R^2 values were examined for all endogenous constructs. The results indicate that Strategic Digitalization ($R^2 = 0.575$), Strategic Agility ($R^2 = 0.827$), Strategic Innovation ($R^2 = 0.434$), Strategic Flexibility ($R^2 = 0.429$), and Financial Performance ($R^2 = 0.559$) demonstrate acceptable to substantial explanatory power according to guidelines by Hair et al. (2011), where R^2 values of 0.25, 0.50, and 0.75 are considered weak, moderate, and substantial, respectively. These results suggest that the proposed model adequately explains the variance in key outcome variables.

The AVE for each construct (See Table 2) exceeds the squared correlations among constructs, confirming discriminant validity (Fornell & Larcker, 1981). This ensures distinct and unique dimensions within the research model. Collinearity statistics, indicated by Variance Inflation Factor (VIF) values, show all variables are significant predictors, with VIF values exceeding 1 (Jia et al., 2009). Strategic Innovation has the highest VIF value of 4.458, highlighting its importance as the most influential predictor. GEO, despite having the lowest VIF value of 2.812, still makes a substantial contribution. Regarding model fit, the SRMR value of 0.053 is well below the recommended threshold of 0.08, indicating a good fit (Shi et al., 2022). Additionally, the d_{ULS} value of 0.920 suggests a relatively small discrepancy between observed and predicted values, further supporting a good model fit (Rasoolimanesh & Ali, 2018).

Table 2. Discriminant validity

	FP	GEO	SAG	DIG	SF	SIN
Financial performance	0.882					
GEO	0.669	0.821				
Strategic agility	0.793	0.748	0.844			
Strategic digitalization	0.718	0.758	0.773	0.834		
Strategic flexibility	0.873	0.660	0.771	0.696	0.890	
Strategic innovation	0.871	0.663	0.804	0.731	0.842	0.858

Source: Processed Data 2025

4.2. Testing hypotheses

The path coefficients in Table 3 reveal significant relationships among various constructs, supporting several hypotheses. Green Entrepreneurship shows a strong positive influence on Strategic Agility (0.748), Strategic Digitalization (0.758), Strategic Flexibility (0.660), and Strategic Innovation (0.663), all with highly significant p-values (<0.001). This indicates that

green entrepreneurial practices significantly enhance strategic capabilities. However, its impact on Financial Performance is minimal (0.022) and non-significant ($p = 0.543$), suggesting that while GEO fosters strategic agility and innovation, it may not directly translate into financial gains.

Strategic Agility and Strategic Innovation both have substantial direct effects on Financial Performance (0.113 and 0.379, respectively, with $p < 0.05$), underscoring their critical roles in driving financial success. Strategic Flexibility also demonstrates a significant positive relationship with Financial Performance (0.423, $p < 0.001$). In contrast, Strategic Digitalization's effect on Financial Performance is weak and non-significant (0.043, $p = 0.366$), possibly due to contextual differences or varying levels of digital adoption.

Table 3. Path coefficients

	Original sample (O)	t-statistics	p-values
GEO → FP	0.022	0.609	0.543
GEO → SAG	0.748	22.681	0.000
GEO → DIG	0.758	21.305	0.000
GEO → SF	0.660	11.827	0.000
GEO → SIN	0.663	11.688	0.000
SAG → FP	0.113	2.196	0.028
DIG → FP	0.043	0.904	0.366
SF → FP	0.423	6.357	0.000
SIN → FP	0.379	6.558	0.000

Source: Processed Data 2025

The specific indirect effects in [Table 4](#) reveal pathways through which GEO influences financial performance via strategic intermediaries. GEO positively impacts financial performance through strategic agility, with an indirect effect of 0.084 ($T = 2.168$, $p = 0.030$), indicating a statistically significant relationship. However, the indirect effect through strategic digitalization is minimal and non-significant (0.032, $T = 0.899$, $p = 0.369$), suggesting that digitalization may not be a strong mediator. In contrast, strategic flexibility and strategic innovation serve as robust mediators, with substantial indirect effects on Financial Performance (0.279 and 0.251, respectively), both highly significant ($T = 5.726$, $p < 0.001$; $T = 5.878$, $p < 0.001$).

Table 4. Specific indirect effects

	Original sample (O)	t-statistics	p-values
GEO → SAG → FP	0.084	2.168	0.030
GEO → DIG → FP	0.032	0.899	0.369
GEO → SF → FP	0.279	5.726	0.000
GEO → SIN → FP	0.251	5.878	0.000

Source: Processed Data 2025

5. Discussion

The findings of this study reveal an important dynamic in the relationship between Green Entrepreneurial Orientation (GEO), adaptive strategic management, and financial performance in Indonesia's creative industries. The analysis shows that GEO exerts a strong positive influence on strategic digitalization, agility, flexibility, and innovation, confirming that sustainability-oriented entrepreneurial behavior enhances firms' adaptive capacities. These results resonate with earlier research suggesting that GEO encourages proactive engagement with eco-conscious opportunities and environmental practices, which in turn foster strategic readiness in volatile markets ([Ameer & Khan, 2023](#); [Verma & Kumar, 2022](#)). In the Indonesian creative sector, where technological disruption and consumer preference shifts are particularly

acute, GEO enables firms to reconfigure resources, explore new ideas, and incorporate sustainability into their decision-making processes.

Despite these strengths, the results also demonstrate that GEO's direct effect on financial performance is weak and statistically insignificant. This finding supports the argument that adopting a green orientation alone may not be sufficient to generate short-term financial benefits ([Zhang & Li, 2021](#)). Instead, the impact of GEO appears to be contingent on its integration with adaptive strategic management practices. This outcome reflects what has been termed the "performance paradox" of sustainability: while environmental orientation enhances legitimacy and long-term competitiveness, it does not automatically translate into immediate financial returns ([Öztürk et al., 2024](#)). Firms in emerging economies such as Indonesia may require more time and resources before green-oriented strategies yield measurable financial outcomes.

The study further confirms that adaptive capabilities, particularly strategic agility, flexibility, and innovation, are significant drivers of financial performance. Strategic agility allows firms to respond rapidly to policy changes, emerging trends, and external shocks, enabling them to sustain competitive advantage in uncertain environments ([AlTaweel & Al-Hawary, 2021](#)). Strategic flexibility, meanwhile, strengthens performance by permitting the redeployment of resources and reconfiguration of supply chains to maintain efficiency and resilience ([Khan et al., 2022](#)). Strategic innovation emerged as another strong predictor of financial success, affirming that eco-oriented creativity in design, processes, and service delivery contributes directly to performance gains ([Herrera & Trujillo-Díaz, 2022](#)). These results collectively suggest that the pathway to financial performance in the creative industries lies not in GEO alone, but in the ability of firms to channel green orientation into adaptive strategies that generate tangible economic outcomes.

By contrast, the relationship between strategic digitalization and financial performance was weak and non-significant, even though GEO positively influenced digitalization. This discrepancy reflects broader challenges in developing economies where technological infrastructure, digital literacy, and adoption remain uneven ([Amelda et al., 2021](#)). While digitalization is often celebrated as a universal performance driver, its benefits may not fully materialize in contexts where firms lack the capacity to exploit digital tools effectively. Consequently, the mediating effect of digitalization between GEO and financial performance was minimal, highlighting the need for supportive institutional and technological ecosystems in Indonesia's creative industries.

The mediation analysis underscores the crucial role of adaptive strategic management in translating GEO into financial outcomes. Specifically, strategic agility, flexibility, and innovation strongly mediate the GEO–performance relationship, confirming findings from prior research that adaptive practices are the mechanisms through which sustainability-oriented entrepreneurship produces competitive advantage ([Hensellek et al., 2023](#)). The strength of these mediating effects highlights that GEO is most effective when embedded in organizational routines that prioritize responsiveness, creativity, and adaptability. Conversely, the weak mediating role of digitalization indicates that technology alone does not guarantee performance improvement unless complemented by organizational capabilities and contextual readiness.

Theoretically, these findings make three key contributions. First, they extend the literature on GEO by clarifying its indirect pathways to financial performance, addressing calls by Le and Zhang ([2024](#)) for greater understanding of mediating mechanisms. Second, the results integrate adaptive strategic management into the GEO–performance nexus, offering a novel model that emphasizes agility, flexibility, innovation, and digitalization as distinct yet interconnected mediators. Third, the study advances dynamic capability theory by demonstrating that green-oriented entrepreneurship enhances performance not directly but through the adaptive reconfiguration of resources and strategies.

Taken together, this study illustrates that GEO strengthens the adaptive foundation of firms in Indonesia's creative industries, but its economic benefits depend on the effective deployment of strategic agility, flexibility, and innovation. For practitioners, the findings suggest that green orientation should be pursued alongside investments in adaptive management practices to ensure that sustainability commitments generate tangible financial results.

6. Conclusion

This study investigated the relationship between Green Entrepreneurial Orientation (GEO), adaptive strategic management, and financial performance in Indonesia's creative industries. Using SEM-PLS analysis on survey data from 531 SMEs, the findings demonstrate that while GEO does not directly improve financial performance, it significantly enhances firms' adaptive capabilities, namely strategic agility, flexibility, innovation, and digitalization. Among these, agility, flexibility, and innovation serve as strong mediators that convert GEO into tangible financial gains, whereas digitalization exerts only a weak mediating effect. These results suggest that the financial benefits of GEO depend on the development and integration of adaptive strategies rather than on sustainability orientation alone.

The study contributes to theory by extending the literature on GEO and its performance implications in three ways. First, it clarifies the indirect mechanisms through which GEO affects performance, thereby addressing calls in prior research for a deeper understanding of mediating pathways. Second, it develops and validates an adaptive strategic management model that integrates sustainability with dynamic capabilities, providing a more comprehensive framework for explaining organizational adaptability in turbulent markets. Third, it advances dynamic capability theory by showing that environmental entrepreneurship strengthens firm performance only when accompanied by agility, flexibility, and innovation.

From a managerial perspective, the findings highlight the importance of embedding GEO into adaptive practices. Business leaders in the creative industries should not assume that adopting green orientation will immediately yield financial returns. Instead, they must invest in enhancing strategic agility to respond swiftly to market changes, develop flexibility to reconfigure resources, and foster innovation to sustain competitiveness. Digitalization remains an important capability, but its effectiveness depends on contextual factors such as infrastructure, digital literacy, and readiness of the supporting ecosystem. Policymakers and industry associations can therefore play a crucial role by providing training, digital infrastructure, and policy support that enable SMEs to translate sustainability orientation into economic value.

Despite these contributions, the study has several limitations. The data are limited to creative industry SMEs in Indonesia, which may restrict the generalizability of the findings to other sectors or regions. The use of cross-sectional data also prevents definitive conclusions about causality. Future research should therefore adopt longitudinal designs, comparative studies across different industries or countries, and mixed-method approaches to explore how context and time shape the GEO–performance relationship. Further investigation into additional mediators, such as organizational culture or stakeholder engagement, could also enrich understanding of how sustainability-oriented entrepreneurship translates into superior performance.

In sum, this study emphasizes that GEO enhances organizational sustainability by strengthening adaptive capabilities, which in turn drive financial outcomes. The proposed adaptive strategic management model contributes both theoretically and practically by offering a pathway through which sustainability-oriented entrepreneurship can align with competitiveness and long-term growth.

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Declaration of competing interest

The authors declare that there are no conflicts of interest related to this research.

Acknowledgement

The authors extend their sincere gratitude to the Editor and the reviewers for their insightful comments, constructive feedback, and valuable suggestions, which have significantly strengthened the quality and clarity of this manuscript.

Ethical Statement

This study adhered strictly to ethical guidelines to protect the rights, dignity, and welfare of all participants.

Data availability

The data supporting this study are available from the corresponding author upon reasonable request via email.

AI assistance statement

AI was used only to improve the language clarity and grammar of the manuscript. All ideas, analyses, and interpretations were entirely developed and verified by the authors.