

When Do Organizational Capability Foster Sustainable Entrepreneurship? Evidence from Artificial Intelligence Effects Among Smes in an Emerging Economy

Obasi Nneka Peace¹; Kuye Owolabi Lateef²; Alaneme Gloria Chinyere³

^{1,2}Department of Business Administration, Univeristy of Lagos, Akoka, Lagos

³Management Sciences, Distance Learning Institute, University of Lagos.

DOI: <https://doi.org/10.51584/IJRIAS.2026.11060057>

Received: 25 May 2026; Accepted: 30 May 2026; Published: 20 June 2026

ABSTRACT

Purpose: The study examined the technology-contingent effects of organizational capability on Sustainable Entrepreneurship (SE) among small and medium-sized enterprises (SMEs). Specifically, it investigated how strategic agility and adaptive capability influence SE and how artificial intelligence (AI) adoption plays a mediating role in this relationship.

Design/Methodology: The study adopted a cross-sectional survey research design and was grounded in the Resource-Based View (RBV) and Dynamic Capabilities Theory (DCT). Using Taro Yamane's formula, a sample size of 382 was determined from a population of 8,395 registered SMEs in Lagos State, Nigeria; 311 valid responses were analyzed using a structured questionnaire. Structural Equation Modeling (SEM) with AMOS 23 was employed for data analysis. Four hypotheses were formulated and tested.

Findings: The results revealed that both strategic agility and adaptive capability significantly influence SE, and their combined effect strengthens sustainable entrepreneurial outcomes. Notably, artificial intelligence adoption partially mediated the relationship between organizational capabilities and SE, indicating that AI serves as a technological enabler that enhances the translation of internal capabilities into sustainable outcomes.

Originality/Value: This study advances sustainable entrepreneurship literature by introducing a technology-contingent capability perspective, demonstrating that artificial intelligence functions as a mediating mechanism linking organizational capabilities to sustainability outcomes. In response to recent calls for more process-oriented and digitally grounded explanations of sustainability in entrepreneurship, the study extends RBV and DCT by positioning AI not merely as a technological tool but as a strategic transformation mechanism in SMEs.

Keywords: Artificial intelligence, Dynamic capabilities, SMEs, Sustainable entrepreneurship

INTRODUCTION

Sustainable entrepreneurship (SE) has emerged as a strategic approach through which small and medium-sized enterprises (SMEs) address pressing social and environmental challenges while fostering long-term economic success. SE combines economic viability with social responsibility and environmental care, in contrast to traditional entrepreneurship, which frequently places a higher priority on short-term profitability (Schaltegger et al., 2016). This approach is especially important in situations where there are sustainability issues including food hunger, water scarcity, energy inefficiency, and environmental deterioration. Sustainable entrepreneurship, according to Shepherd and Patzelt (2017), is the ongoing process of finding, seizing, and institutionalizing possibilities that produce economic value while also lessening environmental damage and improving social well-being.

The ability of SMEs to maintain growth through resource efficiency, ecologically conscious production, socially inclusive employment practices, and innovation in line with sustainability goals is reflected in SE (Kraus et al., 2020). However, achieving this require more than good intentions, it depends largely on the firm's internal capacity for innovation, learning and adaptation. Organizational capability, which refers to a company's capacity to deploy, integrate, and restructure resources in response to changes in the environment and new opportunities, is crucial in this respect (Teece, 2018). Organizational resilience and strategic agility are closely related. While organizational resilience refers to the ability to tolerate disruptions, bounce back from setbacks, and continue operations in the face of uncertainty, strategic agility allows businesses to detect and react quickly to environmental changes, such as changes in regulations and technological advancements (Duchek, 2020). Together, these capabilities form critical drivers of sustainable entrepreneurial outcomes.

According to recent research, SE adoption and success are influenced by both internal competencies and external technology factors (Gast et al., 2017). Digital technologies, especially artificial intelligence (AI), are becoming more widely acknowledged as transformative enablers among them. AI includes technologies that improve decision-making, optimize resource allocation, and boost operational efficiency, including machine learning, predictive analytics, and intelligent automation (Raisch and Krakowski, 2021). Demand forecasting, waste reduction, energy optimization, and the creation of ecologically sustainable supply chains are all aided by AI in sustainability contexts (Bocken and Geradts, 2020). Despite these opportunities, SMEs frequently encounter limitations linked to scarce resources, technological infrastructure, and digital capabilities, which may impede the successful implementation of AI, particularly in expanding metropolitan economies like Lagos Metropolis.

While earlier studies recognize the role of digital technology and organizational capability in promoting sustainable entrepreneurship, less focus has been placed on how AI specifically improves the dynamic capacity of SMEs to achieve sustainable outcomes. Artificial intelligence, organizational resilience, and strategic agility are not sufficiently integrated into a single analytical framework in existing studies, which often look at these components separately (Raisch and Krakowski, 2021; Vial, 2021). This disparity is especially noticeable in developing economy environments, where there is still a dearth of empirical data.

This study fills this gap by investigating how organizational resilience and strategic agility, made possible by artificial intelligence, affect sustainable entrepreneurship among SMEs in Lagos Metropolis. It does this by drawing on the Resource-Based View (RBV) and Dynamic Capability Theory (DCT). While DCT emphasizes the firm's capacity to rearrange these resources in response to external changes, RBV stresses the strategic significance of valuable, scarce, and unique resources like AI capabilities. The study offers a more thorough grasp of how digitally enabled capabilities propel sustainability-oriented entrepreneurship by combining various viewpoints. By integrating artificial intelligence as a crucial enabler of dynamic capacities in sustainability contexts, it theoretically expands RBV and DCT. Practically, it offers actionable insights for policymakers and SME managers on leveraging AI-driven capabilities to promote sustainable entrepreneurial practices in resource-constrained, rapidly evolving urban economies.

LITERATURE REVIEW

Theoretical Review

Resource-Based View (RBV)

Wernerfelt (1984) and Barney (1991) developed the Resource-Based View (RBV), which holds that a firm's resources that are valuable, rare, inimitable, and non-substitutable (VRIN) are the source of its sustained competitive advantage. The resource endowments of different firms account for variances in long-term sustainability and performance. Both tangible assets and intangibles like organizational procedures, management abilities, technological know-how, and firm-specific experience are considered resources.

RBV has been used to describe how internal resources propel sustainable entrepreneurship in sustainability research (Kraus et al., 2020; Barney et al., 2021). Critical intangible resources that help SMEs respond to market and environmental uncertainty and spot sustainability-oriented opportunities are organizational resilience and

strategic agility. While resilience incorporates procedures that assist continuity and recovery during interruptions, strategic agility enables quick reconfiguration of resources under sustainability challenges.

Artificial intelligence (AI) is viewed in this study as a strategic tool that complements current capabilities. By enhancing decision-making and resource efficiency, AI-driven analytics, automation, and predictive technologies increase strategic agility and resilience (Raisch and Krakowski, 2021). Therefore, RBV offers a strong paradigm for comprehending how SMEs use organizational capability enhanced by AI to accomplish sustainable entrepreneurship and preserve long-term competitive advantage, particularly in settings with limited resources.

Dynamic Capability Theory (DCT)

The DCT developed by Teece et al. (1997) and expanded by Teece (2007, 2018) to address static limitations of resource-based explanations for dynamic environments enhances the RBV. DCT postulates that a firm's capacity to integrate, build, and reconfigure internal and external competencies is fundamental to respond to turbulent environments and market uncertainty. According to Teece (2007), dynamic capability relies on three related activities: sensing, seizing, and reconfiguring. Sensing is "the process by which a firm scan and probes the future environment to detect, in a broad sense, external changes. Seizing pertains to resource mobilization, strategically, tactically, and organisationally; to exploit the newly perceived market opportunity. Reconfiguring is defined as the renewal and realignment of the firm's resource base; organisational structure and processes; to keep fit in the changing competitive environment" (Teece, 2007, p. 132). Since the environment changes dynamically and uncertainty is prevalent, firms have to continuously combine sensing, seizing, and reconfiguring actions (Teece, 2007; Teece, 2018).

In the context of the present study, strategic agility captures sensing and seizing capabilities as agile SMEs perceive opportunities, particularly sustainability-driven opportunities, react to changing business environments, and pursue them by implementing business strategies effectively and efficiently with minimum delays. The sensing activity of DCT is supported by organizational learning, enabling SMEs to gain new knowledge from external sources and interpret it to feed decision-making processes. The reconfiguring process is facilitated by adaptive capability, allowing organizations to redefine operational strategies and resource allocation within unpredictable business environments. Furthermore, organizational resilience allows SMEs to recover from unexpected disruptions and sustain long-run performance and competitiveness (Duchek, 2020). Therefore, these capabilities are interwoven within the sensing-seizing-reconfiguring process of DCT.

The study also views AI as a technology that enhances dynamic capability process effectiveness. AI supports sensing activities through real-time data analysis, environmental scanning, trend analysis, prediction of consumer behaviour, and customer intelligence. Therefore, DCT provides a coherent theoretical framework for understanding how SMEs can develop organizational capabilities and effectively combine them with AI technological tools to promote sustainable entrepreneurship practices in volatile and resource-constrained environments.

Integration and Unionization of Resource-Based View and Dynamic Capability Theory

A thorough framework for investigating how organizational capability and artificial intelligence (AI) propel sustainable entrepreneurship (SED) is provided by the combination of the Resource-Based View (RBV) and Dynamic Capability Theory (DCT). According to RBV (Wernerfelt, 1984; Barney, 1991), persistent competitive advantage is supported by resources that are uncommon, valued, unique, and non-substitutable. This viewpoint is expanded by DCT (Teece et al., 1997), which describes how these resources are constantly rearranged in dynamic situations.

In this study, organizational capabilities—resilience and strategic agility—are viewed as higher-order dynamic capabilities under DCT and as crucial intangible resources under RBV. While DCT describes how strategic agility helps identifying and grabbing such chances, RBV emphasizes their role in empowering SMEs to seek

sustainability-oriented opportunities, and resilience enables transformation and resource reconfiguration for long-term continuity.

Through real-time analytics, predictive decision-making, and adaptive process optimization, AI serves as a unifying mechanism that strengthens dynamic capabilities (DCT) and increases the value of organizational resources (RBV) (Teece, 2020; Vial, 2021). The degree to which organizational capability translates into SED is influenced by AI as a moderating variable. This framework, which combines RBV and DCT, captures the strategic competencies that SMEs possess as well as the adaptive processes that they use to use AI to accomplish sustainable entrepreneurship in environments that are complicated and resource-constrained.

Conceptual Review

Sustainable entrepreneurship

By integrating the development of economic, environmental, and social value into business operations, sustainable entrepreneurship has become a paradigm that goes beyond traditional profit-focused entrepreneurship (Schaltegger et al., 2016). SE incorporates social welfare and ecological stewardship into opportunity identification, venture formation, and value capture, in contrast to traditional entrepreneurship, which places a higher priority on financial results. This all-encompassing strategy tackles global issues like food security, energy inefficiency, water shortage, and environmental degradation and is in line with the Sustainable Development Goals (SDGs) of the UN (Rosário et al., 2022).

From a conceptual standpoint, SE entails taking advantage of business possibilities that improve ecosystem health and community well-being while producing market value. In order to balance the "triple bottom line" of profit, earth, and people, sustainable entrepreneurs proactively incorporate sustainability into their basic strategy (Schaltegger and Wagner, 2011). Thus, ventures support social justice, environmental preservation, employment creation, and economic progress.

In light of changing sustainability demands, recent research emphasizes that SE is a dynamic process that necessitates ongoing innovation, adaptation, and stakeholder participation (Albérico Travassos Rosário et al., 2022). By encouraging sustainable business models that can adapt to regulatory obstacles and natural resource limits, it also improves long-term resilience and competitiveness (Ametepe et al., 2025; Schaltegger, 2016). Understanding how SMEs can provide economic value while promoting sustainability goals requires examining the causes and effects of SE, particularly in environments with limited resources like Lagos Metropolis.

Organisational capability

The ability of a company to deploy, integrate, and rearrange resources in order to accomplish strategic goals and maintain performance is referred to as organizational capability. These capabilities, which are based on the Dynamic Capability Theory (Teece et al., 1997; Teece, 2018), allow businesses to recognize opportunities and risks, take advantage of strategic options, and adjust resources in response to changing conditions. While organizational resilience enables businesses to absorb shocks, recover, and retain continuity amid disruptions (Joulal and Messaoudi, 2024; Mokline and Ben Abdallah, 2021), strategic agility enables SMEs to swiftly modify operations, reallocate resources, and adapt to sustainability imperatives (Corrales-Estrada et al., 2021). These capabilities are different yet connected in SMEs, with resilience guaranteeing stability under pressure and agility enabling proactive adaptation. Dynamic capabilities improve resilience and agility, increasing a firm's ability to adjust in the face of uncertainty, according to empirical studies.

This study conceptualizes organizational capability as a multifaceted driver of sustainable entrepreneurship. Dynamic Capability Theory offers a theoretical framework for comprehending how SMEs use strategic agility and resilience, enhanced by artificial intelligence, to reorganize their capabilities. This allows for sustainable innovation and flexible reactions to intricate institutional, economic, and environmental demands.

Strategic Agility and Sustainable entrepreneurship

The ability of a company to quickly detect changes in the external environment, make strategic decisions in a timely manner, and reorganize resources to sustain competitive adaptability is known as strategic agility (Ametepe et al., 2023). It represents a proactive and adaptable approach to decision-making, enabling businesses to react to changes in regulations, technology, and the needs of sustainability. Strategic agility allows SMEs to adapt toward opportunity spaces that support sustainable entrepreneurship in dynamic and complicated environments, such as those marked by rapid innovation, environmental limits, and changing legislation (Terchila, 2025).

The significance of strategic agility for sustainability outcomes is emphasized by empirical research. Agile companies more successfully adapt business models to incorporate greener practices, environmentally friendly products, and resource-efficient operations (Osiyevskyy and Dewald, 2015; Al-Dhaafri and Alosani, 2026). According to Renzl et al. (2021), agility enhances internal coordination, speeds up sustainability innovation, and makes it easier to quickly adjust to market signals pertaining to environmental performance. Additionally, digital technologies like artificial intelligence, which improve resource utilization, environmental risk forecasting, and sustainability opportunity discovery, are more likely to be used by agile organizations (Vial, 2021; Ghobakhloo, 2020).

Strategic agility in sustainable entrepreneurship boosts environmental adaptability and resilience, allowing SMEs to take advantage of sustainability-focused market opportunities before rivals do (Fan et al., 2026). Agile SMEs improve long-term competitiveness and support ongoing environmental, social, and economic value creation by reorienting their strategies and incorporating sustainable practices. According to earlier studies, strategic agility is positively correlated with sustainability outcomes like as environmental performance, innovation, and adaptation (Lu and Ramamurthy, 2011; Al-Dhaafri and Alosani, 2022; Teece, 2020). Accordingly, the study hypothesizes that:

H1: Strategic agility has a significant positive effect on sustainable entrepreneurship.

Organisational Resilience and Sustainable entrepreneurship

The ability of a company to withstand shocks, adjust to disruptions, and bounce back while preserving or improving performance in uncertain times is known as organizational resilience (Duchek, 2020). Due to the increasing frequency of institutional, environmental, and economic shocks that businesses, especially SMEs, must deal with, resilience—which was first created to explain organizational survival amid adversity—has acquired relevance in sustainability research (He and Harris, 2020). In the context of sustainability, resilience allows organizations to continue operations, maintain strategic continuity, and work toward sustainability goals in the face of disruption.

Organizational resilience is viewed in contemporary research as a dynamic skill that includes adaptive learning processes, coping mechanisms, and anticipating (Lengnick-Hall et al., 2011; Duchek, 2020). The ability of resilient businesses to sustain environmental performance, social value creation, and long-term competitiveness is strengthened by the routines they set up for early danger detection, adaptable responses, and learning from disturbances. According to empirical data, resilience improves a company's capacity to endure supply chain interruptions, legislative modifications, and climate-related shocks that jeopardize long-term operations (Hejazi, 2021).

Organizational resilience and long-term viability and sustainability outcomes are tightly related for SMEs. Despite resource limitations, resilient SMEs are better able to maintain cash flows, maintain client connections, and keep funding sustainable innovations (Beliaeva et al., 2020). Furthermore, by encouraging adaptability and recovery capacity, resilience lessens the negative consequences of external shocks on innovation and sustainability performance.

All things considered, organizational resilience promotes sustainable entrepreneurship by allowing businesses to maintain operational stability, make strategic adjustments to environmental threats, and continue on innovative paths that produce ecological, social, and economic value.

Therefore, the following hypothesis is proposed:

H2: Organisational resilience has a significant positive effect on sustainable entrepreneurship.

Organisational capability and Sustainable entrepreneurship

For SMEs, long-term profitability and sustainability outcomes are closely linked to organizational resilience. Resilient SMEs are better equipped to sustain cash flows, customer relationships, and funding sustainable innovations in spite of resource constraints (Beliaeva et al., 2020). Furthermore, resilience reduces the detrimental effects of external shocks on innovation and sustainability performance by promoting adaptation and recovery capacity. All things considered, organizational resilience encourages sustainable entrepreneurship by enabling companies to continue on creative routes that generate ecological, social, and economic value while maintaining operational stability and making strategic changes to environmental risks.

Businesses with innovation capability can create new goods, procedures, and business plans that promote sustainability over the long run. Research shows that by meeting stakeholder expectations while maintaining cost effectiveness, SMEs that use innovative capabilities in sustainability projects perform better (Reuther et al., 2023; Tessema and Birhane, 2024). Integrating sustainability techniques also requires absorptive capacity, or the capability to take in, process, and apply outside knowledge. It enhances the results of sustainable entrepreneurship by enabling SMEs to embrace sustainable technology, learn from industry best practices, and successfully adapt to regulatory demands (Jabbour et al., 2019; Xiong et al., 2025). All things considered, SMEs with strong organizational capabilities are better equipped to handle sustainability issues, seize new possibilities, and maintain a competitive edge in markets that are becoming more ecologically conscious.

H3: Organisational capability has a significant positive effect on sustainable entrepreneurship.

Artificial Intelligence as a Mediating Variable

Digital Artificial Intelligence (AI) technology has the potential to significantly impact the environmental performance, business operations and organisational decision making (Raisch and Krakowski, 2021 and Dwivedi et al., 2021). Specifically, Raisch and Krakowski (2021, pp. 418) defined artificial intelligence (AI) as “system of the able of recognize patterns, to learn from the data and give rise to autonomous or semiautonomous decisions in managerial and operational processes”. Application of artificial intelligence (AI) is relevant for energy optimisation, reduction of waste, maintenance, sustainable supply chains and management of natural resources, particularly in contexts that value sustainability (Bocken and Geradts, 2020; Akter et al., 2022). For example, SMEs currently employ AI-based inventory systems to manage consumer demand and decrease the excess stock and product wastage; AI chatbots are increasingly used by SMEs to address customers' queries and lower operation costs; SMEs use AI-based accounting applications for monitoring of the transactions, thus minimizing resources' wastage; and AI's facilitated payment platforms enable SMEs to efficiently track and report on financial issues, ensuring that financial sustainability is met. In SMEs of the retail and logistic industries, the AI-driven route optimisation enables the delivery-driven SMEs to lower the fuel usage, the transport costs and consequently to minimize the environmental footprint, and marketing driven tools empower SMEs to reach the correct customer segments and cut down resources being allocated to the wasted marketing actions.

In recent studies AI is interpreted as a mechanism that enables organizational capability to have influence on the sustainability performance and it not seen as the antecedent directly driving sustainable entrepreneurship (SE) (Vial, 2021 and Teece, 2020). With its support in driving decision-making using the data-driven methods, generating analytical outputs in real-time and provide foresight on potential impacts, artificial intelligence (AI) can function as mediator that facilitates organizational capabilities to be leveraged into sustainable entrepreneurship performance. Without digital support from AI, it can be difficult for the SMEs to transfer effectively its organisational resources and organisational capabilities into sustainable outcomes, due to lack of information and fractured information processes (Warner and Wger, 2019; Ghobakhloo, 2020).

From the perspective of dynamic capabilities perspective, AI makes business capabilities in sensing, seizing and reconfiguring, stronger and more effective in terms of scanning the environment, acting fast to capture opportunities and reconfiguring resource dynamically to adapt to changes (Teece, 2018; Ciarli et al., 2021). Empirical evidences also support that, with AI, firms' ability in mobilizing their organizational capability toward sustainability and entrepreneurship could be significantly boosted especially in a state of resources constraints and environmental uncertainties (Duong, 2025 and Fatma, 2025). Given this rationale, this study posits that AI mediates the link between organizational capability and sustainable entrepreneurship via a process through which organizational resources and capabilities can be effectively transferred into sustainable entrepreneurial performance of SMEs.

H4: Artificial intelligence mediates the relationship between organisational capability and sustainable entrepreneurship.

In addition, numerous studies have been carried out on organizational capability, AI and sustainable entrepreneurship without consensus. For instance, Terchila (2025) investigated how agile business models, digital transformation, and strategic innovation help entrepreneurs adjust to global instability. Digitalization, strategic flexibility, and proactive risk management greatly improve business resilience and facilitate sustainable growth, according to the study, which used a mixed-method approach including bibliometric analysis and interviews with 40 entrepreneurs in the US and Europe. Similarly, Arroyabe et al. (2024) used regression-based machine learning algorithms and data from the Flash Eurobarometer to analyze the deployment of AI across 12,108 EU SMEs. The results highlight the importance of organizational capability above outside assistance, demonstrating that digital capabilities are the main forces behind AI adoption while innovation capabilities have synergistic impacts.

Using a mixed-method design, Dwivedi and Paul (2022) investigated the adoption of digital supply chains from the standpoint of the circular economy. The study found that financial and regulatory backing were important facilitators, while insufficient digital capabilities and infrastructure were the most significant obstacles. Through a conceptual literature-based study, Jabbour et al. (2019) investigated how Industry 4.0 technologies might be integrated with ecologically sustainable production, proposing an integrated framework and highlighting essential success elements. Using strategic entrepreneurship as a mediating variable, Lyver and Lu (2018) examined the link between product innovation performance and IT capabilities in 164 Canadian ICT-based SMEs. Strategic entrepreneurship partially mediates this relationship, suggesting that IT resources must be strategically deployed. Lastly, Lu and Ramamurthy (2011) showed a significant positive association between IT capability and organizational agility, concluding that firm-wide IT capability is essential.

There are still significant gaps in the literature. Few studies examine organizational resilience and strategic agility in SMEs in Lagos Metropolis. Research is biased toward advanced economies, limiting applicability to developing environments. Little is known about combining Resource-Based View and Dynamic Capability Theory for AI-enabled SE, and environmental and social aspects remain underexplored.

METHODS

Research Design

This study uses a cross-sectional survey approach and a quantitative research design. The design is suitable for assessing moderation effects within a theoretically based framework and investigating causal links among latent dimensions. Additionally, a quantitative approach enables statistical validation of relationships through the use of Structural Equation Modeling (SEM) and the generalization of findings.

Population

Lagos State has the largest concentration of Nigeria's 73,081 registered SMEs, with 8,395 of them located there, according to SMEDAN and the National Bureau of Statistics (2019). The study population is made up of these SMEs. Medium-sized businesses employ 50–199 people with assets between ₦50 million and less than ₦500

million, while small businesses employ 10–49 people with assets around ₦5–50 million. SMEs were chosen because of their important contributions to employment, economic growth, innovation, and sustainable development. Lagos State was selected due to its position as the commercial center of Nigeria. To maintain data integrity and concentrate on formal, organized businesses, micro-enterprises were not included.

Sampling Technique and Sample Size

A sampling strategy with multiple stages was used. Lagos State was divided into three senatorial districts: Lagos East, Lagos West, and Lagos Central. Major SME-dense commercial districts within each stratum were chosen using cluster sampling, and SME owners who were knowledgeable about the study variables were found using purposive sampling (Rahi, 2017). The sample size was chosen using the Taro Yamane's (1967) formula:

$$n_o = N / (1 + N e^2); \text{ where}$$

n_o = Sample size,

N = Population = 8395,

e^2 = Acceptable sampling error (e.g., 0.05).

$$n_o = 8395 / (1 + 8395 * .0025),$$

$$n_o = 8395 / (21.99) = 381.76 \text{ This was approximated to } 382.$$

Assessment and Validation of Research Instruments

A systematic questionnaire with two sections was used to gather data. While Section B had items assessing the research variables, Section A recorded the demographic information of the respondents, such as gender, level of education, and job experience. A six-item scale modified from Whitman et al. (2013), who reported a reliability coefficient of 0.92, was used to measure adaptive capability. A six-item scale created by Gurbuz and Hatunoglu (2022) was used to test strategic agility; it also produced a Cronbach's alpha of 0.92. A six-item scale that included economic, social, and environmental aspects was used to quantify sustainable entrepreneurial development; it was modified from Sarango-Lalanguí et al. (2018) and had a reliability coefficient of 0.78.

A five-item scale that was modified from earlier empirical research on AI adoption and use in organizations—specifically, Kanti et al. (2022) and associated SME innovation literature—was used to measure artificial intelligence (AI). The scale measures how much businesses incorporate AI into their operations, decision-making, and innovation processes. A five-point Likert scale, with 1 denoting "strongly disagree" and 5 denoting "strongly agree," was used to score each item. Expert evaluation verified content, concept, and face validity, and Cronbach's Alpha was used to evaluate internal consistency reliability; values more than 0.70 were deemed satisfactory (Pallant, 2020).

Data Analysis

AMOS version 23 for Structural Equation Modeling (SEM) was used to evaluate the data. The Maximum Likelihood Estimation (MLE) approach was used to get parameter estimates, and Confirmatory Factor Analysis (CFA) was used to assess the measurement model's validity and reliability. Several indices, including χ^2/df , CFI, TLI, RMSEA, and SRMR, were used to evaluate model fit. When CFI and TLI were at or above 0.90 and RMSEA and SRMR were less than 0.08, the fit was deemed adequate (Hu and Bentler, 1999). Composite Reliability (CR) and Average Variance Extracted (AVE) were used to evaluate construct reliability and convergent validity.

Validity and Reliability of the Study Instrument

A group of management science specialists from the Department of Business Administration examined the validity of the questionnaire. Some items were somewhat modified to better fit the goals of the study. Reliability

was further evaluated in a pilot study with 40 participants; a Cronbach's alpha of 0.70 or more was deemed satisfactory (Nunnally and Bernstein, 1994). This threshold was reached by all scales. Statistical indicators such as Composite Reliability (CR), Average Variance Extracted (AVE), Maximum Shared Variance (MSV), and Maximum Reliability (MaxR(H)) were used to assess the measurement model.

Assessment of Construct Validity and Reliability

Several statistical indices were employed to examine the reliability and validity of the constructs used in this study, including composite reliability (CR), average variance extracted (AVE), maximum shared variance (MSV), maximum reliability (MaxR(H)), and the Fornell-Larcker criterion for discriminant validity. The results are presented in Table I.

The findings indicate that all constructs demonstrated adequate internal consistency, with CR values ranging from 0.807 to 0.848, exceeding the recommended threshold of 0.70 (Hair et al., 2020). This suggests that the measurement items for Strategic Agility (STR), Adaptive Capability (ACAP), Artificial Intelligence (AI), and Sustainable Entrepreneurship (SE) are reliable.

However, the AVE values ranged from 0.412 to 0.483, which are slightly below the recommended benchmark of 0.50 (Fornell and Larcker, 1981). Despite this, the constructs can still be considered acceptable due to their satisfactory CR values, indicating adequate convergent validity, particularly in exploratory research contexts.

Discriminant validity was assessed using the Fornell-Larcker criterion, where the square root of AVE (diagonal values) is compared with inter-construct correlations (off-diagonal values). The results show that the square root of AVE for each construct—STR (0.729), ACAP (0.720), AI (0.736), and SE (0.716)—is greater than the corresponding inter-construct correlations. This confirms that each construct is distinct from the others, thereby establishing discriminant validity.

Furthermore, the MSV values for all constructs were lower than their respective AVE values, providing additional support for discriminant validity. The MaxR(H) values, which ranged from 0.847 to 0.884, are consistent with the CR values, further confirming the reliability and stability of the measurement model. Overall, the results indicate that the constructs exhibit satisfactory reliability and acceptable levels of convergent and discriminant validity, and are therefore suitable for further analysis.

Table I. Construct Reliability and Validity Assessment (CR, AVE, MSV, MaxR(H), and Discriminant Validity via Fornell-Larcker Criterion)

| | CR | AVE | MSV | MaxR(H) | STR | ACAP | AI | SE |
|------|------|------|------|---------|-------------|-------------|-------------|-------------|
| STR | .872 | .532 | .325 | .884 | .729 | | | |
| ACAP | .861 | .518 | .260 | .873 | .372 | .720 | | |
| AI | .854 | .541 | .370 | .866 | .545 | .504 | .736 | |
| SE | .839 | .513 | .370 | .847 | .570 | .510 | .608 | .716 |

Note: SE: Sustainable entrepreneurship; STR: Strategic agility; ACAP: Adaptive capability; AI: Artificial intelligence.

Ethical Considerations

The study was conducted with full adherence to ethical norms. All respondents gave their informed consent, and participation was entirely voluntary. Responses were guaranteed to remain anonymous and confidential, and the data was only utilized for scholarly research. At any point during the study, participants were made aware of their right to withdraw, and no personally identifiable information was gathered.

RESULT

The study distributed 382 copies of the questionnaire. 311 of the 382 questionnaires were correctly completed and returned, representing an 81.4% response rate. These 311 responses were considered adequate and valid for further data analysis. The final sample comprised 177 (56.9%) male respondents and 134 (43.1%) female respondents, with a mean age of 1.49 (SD = .496). Regarding educational qualifications, 20 respondents (6.4%) held ND/NCE certificates, 195 (62.7%) had B.Sc./B.A./HND degrees, 58 (18.6%) possessed M.Sc./MBA degrees, and 38 (12.2%) reported other academic qualifications. In terms of work experience, 71 respondents (22.8%) had worked for 0–5 years, 91 (29.3%) for 6–10 years, 136 (43.7%) for 11–15 years, and 13 respondents (4.2%) had 16 years or more experience.

Table II. Model Fit Indices and Acceptability Thresholds

| Model fit Indices | Value | Threshold/Comment |
|-------------------|---------|----------------------------|
| χ^2 (df) | 255.785 | Model fit tested |
| CFI | .988 | ≥ 0.90 acceptable fit |
| GFI | .934 | ≥ 0.90 acceptable fit |
| NFI | .913 | ≥ 0.90 acceptable fit |
| TLI | .987 | ≥ 0.90 acceptable fit |
| RMSEA | .021 | ≤ 0.08 acceptable fit |
| SRMR | .038 | ≤ 0.08 acceptable fit |

Source: Model fit output from SEM, AMOS, 2026.

According to the fit indices shown in Table II, the measurement model fits the data quite well. The chi-square statistic ($\chi^2 = 255.785$) indicated that the model was sufficiently tested. The comparative fit index (CFI = 0.988), goodness-of-fit index (GFI = 0.934), normed fit index (NFI = 0.913), and Tucker-Lewis’s index (TLI = 0.987) all surpass the suggested cutoff of 0.90, further demonstrating excellent model fit. The standardized root means square residual (SRMR = 0.038) and the root mean square error of approximation (RMSEA = 0.021), both of which are much below the permissible upper limit of 0.08, further support the measurement model's sufficiency. All things considered, these findings offer compelling proof of a reliable and accurate measuring approach that is appropriate for more research.

Path Analysis

Table III Path Analysis Results of Direct and Joint Effects

| Path | R ² | (β) | p-value | Remark |
|-----------|----------------|-------------|---------|----------------------------|
| STR → SE | | .475 | < 0.01 | Direct effect, Significant |
| ACAP → SE | | .383 | < 0.01 | Direct effect; Significant |
| ORC → SE | .373 | | < 0.01 | Joint effect; Significant |

Note: STR: Strategic agility; ACAP: Adaptive capability; ORC: Organisational capability; SE: Sustainable entrepreneurship.

Numerous studies have examined organizational capability, AI and sustainable entrepreneurship without consensus. Terchila (2025) found that digitalization, strategic flexibility, and proactive risk management improve resilience and sustainable growth. Arroyabe et al. (2024) showed that digital capabilities drive AI adoption among EU SMEs. Dwivedi and Paul (2022) identified financial support as a facilitator, while insufficient digital capabilities hinder sustainable digital supply chains. Jabbour et al. (2019) proposed integrating Industry 4.0 with sustainable production. Lyver and Lu (2018) and Lu and Ramamurthy (2011) linked IT capability with innovation and agility. However, gaps remain regarding SMEs in Lagos, developing economies, theory integration, and environmental and social dimensions.

Furthermore, the joint effect of organisational capability on sustainable entrepreneurship is also significant ($\beta = .373, p < 0.01$). This finding indicates that organisational capability—captured through the combined influence of strategic agility and adaptive capability—plays a crucial role in driving sustainable entrepreneurship. The R^2 value of 0.373 implies that approximately 37.3% of the variance in sustainable entrepreneurship is explained by organisational capability, while the remaining 62.7% is attributable to other factors not included in the model.

Therefore, hypothesis three, which posits that organisational capability (strategic agility and adaptive capability) has a significant positive effect on sustainable entrepreneurship, was supported. The path diagram is as shown in Fig. 1.

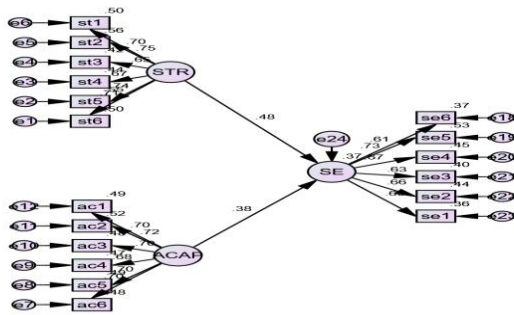


Fig. 1. Path diagram showing the relationship between Strategic agility, Adaptive Capability and Sustainable Entrepreneurship Development

Mediation Role of Artificial Intelligence

Table IV. The Mediating effects of Artificial Intelligence

| Variable/Effect | B | SE | P | 95% Confidence Interval | | Decision |
|-----------------|------|------|------|-------------------------|----------------|-------------|
| | | | | Upper boundary | Lower boundary | |
| ORC → SE | .647 | .065 | .000 | .345 | .600 | Significant |
| ORC → AI | .472 | .056 | .000 | .532 | .754 | |
| ORC → AI → SE | .302 | .055 | .000 | .200 | .415 | Significant |
| Direct | .647 | .065 | .000 | .345 | .600 | Significant |
| Indirect | .000 | .038 | | .128 | .275 | significant |
| Total | .647 | | | | | |

Note: SE: Sustainable entrepreneurship; ORC: Organisational capability; AI: Artificial intelligence. Source: Table Computed by Author, (2026)

Using bootstrapping with 5,000 resamples, the mediating role of artificial intelligence in the relationship between organisational capability and sustainable entrepreneurship was examined. The results in Table IV reveal that the indirect effect of organisational capability on sustainable entrepreneurship through artificial intelligence is statistically significant ($\beta = .302, p < .01$), with a 95% confidence interval [.200, .415]. Since the confidence interval does not include zero, this confirms the presence of a significant mediating effect.

Furthermore, the direct effect of organisational capability on sustainable entrepreneurship remains significant ($\beta = .647, p < .01$; 95% CI [.345, .600]) even after the inclusion of artificial intelligence as a mediator. This indicates

that artificial intelligence only partially mediates the relationship between organisational capability and sustainable entrepreneurship.

These findings suggest that while organisational capability directly enhances sustainable entrepreneurship, it also does so indirectly by facilitating the adoption and utilization of artificial intelligence. Therefore, artificial intelligence serves as an important mechanism through which organisational capability translates into improved sustainable entrepreneurship outcomes. The diagram is as shown in Fig.2.

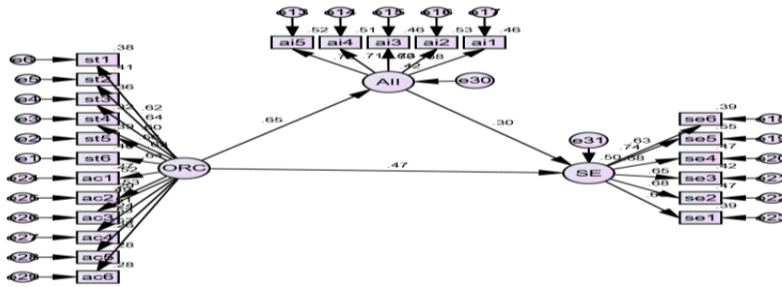


Fig. 2. Path diagram showing the Mediating effect of Artificial intelligence (AI) on the relationship between Organisational Capability (ORC) and Sustainable Entrepreneurship Development (SED)

DISCUSSION OF FINDINGS

The purpose of this study is to examine organizational capability, AI and sustainable entrepreneurship among SMEs. Significant insights into how organizational capability translates into sustainable entrepreneurship through technological mechanisms are provided by the statistically significant relationships found, which are theoretically supported and in line with current viewpoints. According to the findings, attaining sustainable entrepreneurship in environments with limited resources and rapid change, like Lagos, requires internal strategic capacity and adaptive competence. However, it is challenging to determine a distinct cause-and-effect sequence due to the study’s cross-sectional methodology. Notwithstanding this drawback, the relationships found are in line with accepted theoretical viewpoints.

The first hypothesis was also accepted because the data showed a strong positive correlation between strategic agility and sustainable entrepreneurship. This suggests that when SMEs are able to predict environmental changes, react quickly to shifting market conditions, and successfully realign their resources and strategic approaches, they are more likely to achieve sustainable entrepreneurial outcomes—such as ongoing innovation, sustained competitive advantage, and a balance across economic, social, and environmental objectives. SMEs in Lagos with high strategic agility are better able to anticipate market fluctuations, adapt to regulatory changes, and realign operations to take advantage of sustainability opportunities. These findings align with the submissions of Osiyevskyy and Dewald (2015), Lu and Ramamurthy (2011) and Al-Dhaafri and Alosani (2026).

The second hypothesis was accepted by the study, which discovered a significant relationship between adaptive capability and sustained entrepreneurship. According to this, respondents thought that SMEs with strong adaptive capability—shown by their ability to adjust internal processes, change operational structures, realign resources, and learn continuously—were more likely to cultivate sustainable entrepreneurship. This finding is consistent with the findings of Lengnick-Hall et al. (2011) and Duchek (2020) and the Resource-Based View (RBV) (Barney, 1991).

The third hypothesis was accepted because the results demonstrated that organizational capability—which is defined as the combined effect of strategic agility and adaptive capability—significantly influences the development of sustainable entrepreneurship. In other words, businesses that are both quick to respond and able to adapt over time are more likely to succeed in a sustainable way (economically, socially, and environmentally). This result is in line with the claims made by Olamide et al. (2011) and Phan et al. (2023). The findings demonstrate the complimentary and mutually reinforcing nature of these capacities.

The fourth hypothesis was supported by the study's finding that artificial intelligence affects the correlation between organizational capability and sustainable entrepreneurial development. These results support the claims made by Beltramino et al. (2022), Rath et al. (2025), and Coad (2025). The structural pathways are well-understood thanks to the Resource-Based View and Dynamic Capabilities Theory. Thus, there is theoretical justification for the direction and importance of the observed connections. The context is a highly dynamic and institutionally limited framework that is appropriate for testing theoretical concepts, even though the outcomes are based on Lagos.

Above all, the study found that the relationship between organizational capability and sustainable entrepreneurship was mediated by artificial intelligence. This implies that while organizational capability promotes sustainable entrepreneurship on its own, it also indirectly improves results by empowering businesses to use artificial intelligence for better decision-making, operational effectiveness, and innovation. These results support the claims made by Beltramino et al. (2022), Rath et al. (2025), and Coad (2025) and consistent with the Dynamic Capabilities Theory (DCT).

Even though the study is located in Lagos, a very dynamic and resource-constrained area, this location offers a useful framework for comprehending how organizational capability and artificial intelligence work together to promote sustainable entrepreneurship. As a result, the results provide solid analytical insights that might be applicable to other rising economies that face institutional difficulties and fast technology change.

CONCLUSION AND RECOMMENDATIONS

This study offers empirical support that organizational capability is a key factor in promoting sustainable entrepreneurship, especially in dynamic, resource-constrained settings like SMEs in Lagos State. The findings show that organizational capability both directly and indirectly influences sustainable entrepreneurship through artificial intelligence, demonstrating how digital technology and internal capabilities work together to promote long-term value creation. Companies with strong organizational capabilities are better able to use artificial intelligence to improve efficiency, creativity, and strategic decision-making. The study concludes that achieving sustainable entrepreneurship requires combining strong internal capabilities with effective adoption of artificial intelligence, enabling adaptive responses to market and environmental changes.

This study makes three contributions: it provides empirical evidence from SMEs in a rising economy, extends the integration of the Resource-Based View and Dynamic Capabilities Theory through artificial intelligence, and offers insights into how organizational capability and digital transformation jointly promote sustainable entrepreneurship under uncertainty and resource constraints. Based on the findings of the study, the following recommendations are proposed:

- i. Companies should consciously improve their strategic agility by including quick decision-making, ongoing environmental scanning, and adaptable resource reconfiguration methods. Organizations can improve their long-term economic, social, and environmental results by proactively responding to market changes, regulatory changes, and sustainability demands.
- ii. By encouraging innovation-driven cultures, process improvement, and ongoing learning, organizations can use artificial intelligence to boost their adaptive potential. AI-enabled training programs, knowledge-sharing websites, and routine assessment and improvement of operational tasks can all help achieve this
- iii. Organizations should strive for a cohesive approach to organizational capability rather than seeing strategic agility and adaptive capability as distinct competencies. By combining these capabilities, sustainable business practices may be implemented more successfully and sustained entrepreneurial growth can be supported.
- iv. In order to overcome structural inertia, policymakers and business support organizations should create AI-driven capability-building programs that help organizations become more agile through the use of structured systems and sustainability-oriented practices. These programs should also allow more established companies to regain flexibility and innovation.

Suggestions for Further Studies

Notwithstanding the study's achievements, it is important to recognize some of its limitations. The study's primary focus on organizational capability, artificial intelligence, and sustainable entrepreneurship is one of its main limitations. To give a more thorough picture of sustainable entrepreneurship, future research should look at other organizational and technological aspects, such as innovation capability, preparedness for digital transformation, leadership style, and organizational resilience. Additionally, only SMEs in Lagos State, Nigeria, were included in the study. To improve the generalizability of the results across various institutional and economic contexts, future research should broaden the scope to include additional regions within Nigeria or throughout Sub-Saharan Africa.

Furthermore, the study used a quantitative and cross-sectional methodology, which limits the capacity to identify causal links and track changes over time. Longitudinal designs should be used in future research to investigate how artificial intelligence and organizational capabilities change over time and impact sustainable entrepreneurship. Further insights into how SME owners and managers really incorporate AI into their business processes to promote sustainable results may also be obtained through qualitative or mixed-method approaches.

Lastly, although this study looked at artificial intelligence as a mediating variable, other mediating and moderating factors like financial access, stakeholder involvement, regulatory support, and digital infrastructure could be investigated in future studies. These factors could either strengthen or weaken the relationships found in this study.

REFERENCES

1. Akter, S., Michael, K., Uddin, M. R., McCarthy, G., and Rahman, M. (2022). Transforming business using digital innovations: the application of AI, blockchain, cloud and data analytics. *Annals of Operations Research*, 308(1), 7-39.
2. Al-Dhaafri, H. S., and Alosani, M. S. (2026). The role of leadership, continuous improvement and benchmarking on organizational performance: the mediating mechanism of EOC. *Benchmarking: An International Journal*, 33(1), 264-285.
3. Al-Dhaafri, H., and Alosani, M. S. (2022). Role of leadership, strategic planning and entrepreneurial organizational culture towards achieving organizational excellence: evidence from public sector using SEM. *Measuring Business Excellence*, 26(3), 378-396.
4. Alharbi, I. B., Jamil, R., Mahmood, N. H. N., and Shaharoun, A. M. (2023). Transformational leadership's impact on organizational innovation: The mediating role of management control system. *Global Business Review*, 24(6), 1418-1433.
5. Ametepe, P. K., Banwo, A. O., and Arilesere, M. S. (2023). Amoral behavior, control climate, job insecurity and fraudulent intentions among bank employees. *International Journal of Ethics and Systems*, 39(4), 781-803.
6. Ametepe, P. K., Obasi, N. P., Nnaji, C. F., & Otuaga, E. U. (2025). Green human resources management and corporate sustainability: a mediating role of leader support in the oil and gas industry. *IIMT Journal of Management*, 2(2), 233-257.
7. Arroyabe, M. F., Arranz, C. F., De Arroyabe, I. F., and de Arroyabe, J. C. F. (2024). Analyzing AI adoption in European SMEs: A study of digital capabilities, innovation, and external environment. *Technology in Society*, 79, 102733.
8. Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of management*, 17(1), 99-120.
9. Barney, J. B., Ketchen Jr, D. J., and Wright, M. (2021). Resource-based theory and the value creation framework. *Journal of management*, 47(7), 1936-1955.
10. Bate, A. F., and Pittaway, L. (2024). The effect of entrepreneurial orientation on SME business performance in Ethiopia: The configurational approach. *The Journal of Entrepreneurship*, 33(3), 439-484.
11. Beliaeva, T., Ferasso, M., Kraus, S., and Damke, E. J. (2020). Dynamics of digital entrepreneurship and the innovation ecosystem: A multilevel perspective. *International Journal of Entrepreneurial Behavior and Research*, 26(2), 266-284.

12. Beuren, I. M., dos Santos, V., and Theiss, V. (2022). Organizational resilience, job satisfaction and business performance. *International Journal of Productivity and Performance Management*, 71(6), 2262-2279.
13. Bocken, N. M., and Geradts, T. H. (2020). Barriers and drivers to sustainable business model innovation: Organization design and dynamic capabilities. *Long range planning*, 53(4), 101950.
14. Corrales-Estrada, A. M., Gómez-Santos, L. L., Bernal-Torres, C. A., and Rodríguez-López, J. E. (2021). Sustainability and resilience organizational capabilities to enhance business continuity management: A literature review. *Sustainability*, 13(15), 8196.
15. Doz, Y. L., and Kosonen, M. (2010). Embedding strategic agility: A leadership agenda for accelerating business model renewal. *Long range planning*, 43(2-3), 370-382.
16. Duchek, S. (2020). Organizational resilience: a capability-based conceptualization. *Business research*, 13(1), 215-246.
17. Duong, C. D. (2025). Artificial intelligence innovation, innovation niches and entrepreneurial performance: the curvilinear role of open innovation. *Business Process Management Journal*, 1-28.
18. Dwivedi, A., and Paul, S. K. (2022). A framework for digital supply chains in the era of circular economy: Implications on environmental sustainability. *Business strategy and the environment*, 31(4), 1249-1274.
19. Fan, M., Soomro, S., Soomro, S., Sohu, J. M., Shah, S. B., and Shaikh, S. N. (2026). The human side of AI adoption: exploring technostress, training and employee well-being in manufacturing SMEs. *Journal of Manufacturing Technology Management*, 37(2), 273-294.
20. Fatma, C. H. E. R. I. F. (2025). Artificial Intelligence Adoption and the Performance of Tunisian SMEs: The Moderating Role of Entrepreneurial Orientation. *International Journal Of Applied Management And Economics*, 2(16), 239-260.
21. Ferreira, J. J., Fernandes, C. I., Veiga, P. M., and Hughes, M. (2022). Prevailing theoretical approaches predicting sustainable business models: A systematic review. *International Journal of Productivity and Performance Management*, 71(3), 790-813.
22. Gast, J., Gundolf, K., and Cesinger, B. (2017). Doing business in a green way: A systematic review of the ecological sustainability entrepreneurship literature and future research directions. *Journal of cleaner production*, 147, 44-56.
23. Ghobakhloo, M. (2020). Determinants of information and digital technology implementation for smart manufacturing. *International Journal of Production Research*, 58(8), 2384-2405.
24. Hair, J. F., Astrachan, C. B., Moisescu, O. I., Radomir, L., Sarstedt, M., Vaithilingam, S., and Ringle, C. M. (2021). Executing and interpreting applications of PLS-SEM: Updates for family business researchers. *Journal of Family Business Strategy*, 12(3), 100392.
25. He, H., and Harris, L. (2020). The impact of Covid-19 pandemic on corporate social responsibility and marketing philosophy. *Journal of business research*, 116, 176-182.
26. Hejazi, M. T. (2021). Effect of supply chain resilience on organizational performance through knowledge sharing. *Revista geintec-gestao inovacao e tecnologias*, 11(4), 4764-4771.
27. Inigo, E. A., Albareda, L., and Ritala, P. (2017). Business model innovation for sustainability: Exploring evolutionary and radical approaches through dynamic capabilities. *Industry and innovation*, 24(5), 515-542.
28. Jabbour, C. J. C., de Sousa Jabbour, A. B. L., Foropon, C., and Filho, M. G. (2019). When titans meet – Can industry 4.0 revolutionize the environmentally-sustainable manufacturing wave? The Role of Human Resource Management. *International Journal of Production Economics*, 219, 251–263.
29. Joulal, N., and Messaoudi, A. (2024). From disruption to continuity: Understanding organizational resilience strategies in the face of technological change. *Scholars Journal of Economics, Business and Management*, 11(9), 275-282.
30. Kanti, P. S., Sadia, R., and Suchismita, D. (2022). Artificial intelligence adoption in supply chain risk management: Scale development and validation. *Ho Chi Minh City Open University Journal of Science-Economics and Business Administration*, 12(2), 15-32.
31. Kaouache, D. E., Amara, C., Chatter, C., and Kaouache, A. (2024). The effect of individual entrepreneurial orientation on entrepreneurial intention among university students. *Business Ethics and Leadership*, 8(2), 63-75.
32. Kraus, S., Breier, M., and Dasí-Rodríguez, S. (2020). The art of crafting a systematic literature review in entrepreneurship research. *International Entrepreneurship and Management Journal*, 16(3), 1023-1042.

33. Lengnick-Hall, C. A., Beck, T. E., and Lengnick-Hall, M. L. (2011). Developing a capacity for organizational resilience through strategic human resource management. *Human resource management review*, 21(3), 243-255.
34. Lu, Y., and K.(Ram) Ramamurthy. (2011). Understanding the link between information technology capability and organizational agility: An empirical examination. *MIS quarterly*, 931-954.
35. Mamun, M. A. A., Mahmud, M. H., Islam, M. T., Gomes, K., Rana, M. R. I., and Tadesse, M. G. (2025, July). Towards sustainability: a bibliometric study on advances in textile research. In *Sustainability Nexus Forum* (Vol. 33, No. 1, p. 8). Berlin/Heidelberg: Springer Berlin Heidelberg.
36. Mansouri, M., Malainine, C., Souti, H., and Cadimi, I. (2022). Dynamic capabilities, competitiveness and performance of small and medium-sized enterprises: a systematic literature review. *International Journal of Accounting, Finance, Auditing, Management and Economics*.
37. Mokline, B., and Ben Abdallah, M. A. (2021). Organizational resilience as response to a crisis: Case of COVID-19 crisis. *Continuity and Resilience Review*, 3(3), 232-247.
38. Osiyevskyy, O., and Dewald, J. (2015). Explorative versus exploitative business model change: the cognitive antecedents of firm-level responses to disruptive innovation. *Strategic Entrepreneurship Journal*, 9(1), 58-78.
39. Raisch, S., and Krakowski, S. (2021). Artificial intelligence and management: The automation–augmentation paradox. *Academy of management review*, 46(1), 192-210.
40. Renzl, B., Mahringer, C., Rost, M., and Scheible, L. (2021). Organizational agility: Current challenges and future opportunities. *Journal of Capabilities, Strategy and Management*, 11, 1-10.
41. Reuther, K., Dahle, Y., Schmidt, C., and Schösser, F. (2023). Motivational facets of sustainable entrepreneurship: A systematic review and future research agenda. *Sustainability*, 15(3), 2272.
42. Santiago, F., Zurita, A. H., and Pollak, R. (2025). Building foundational capabilities for the digitalisation of manufacturing in Africa and Latin America. In *Building Digital Technological Capabilities* (pp. 97-121). Edward Elgar Publishing.
43. Schaltegger, S., Hansen, E. G., and Lüdeke-Freund, F. (2016). Business models for sustainability: Origins, present research, and future avenues. *Organization and Environment*, 29(1), 3-10.
44. Shepherd, D. A., and Patzelt, H. (2017). *Trailblazing in entrepreneurship: Creating new paths for understanding the field*. Springer Nature.
45. Teece, D. J. (2007). Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance. *Strategic management journal*, 28(13), 1319-1350.
46. Teece, D. J. (2018). Business models and dynamic capabilities. *Long range planning*, 51(1), 40-49.
47. Teece, D. J. (2020). Hand in glove: Open innovation and the dynamic capabilities framework. *Strategic Management Review*, 1(2), 233-253.
48. Teece, D. J., Pisano, G., and Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic management journal*, 18(7), 509-533.
49. Terchila, S. (2025). *The Future of Entrepreneurship: Strategic Approaches for Business Adaptation in a Changing Global Environment. From Risks to Opportunities*. *Studies in Business and Economics*, 20(1), 263-280.
50. Tessema, W. K., and Birhane, L. A. (2024). The Relationship of Entrepreneurial Orientation and Firm Performance in the Developing Country Context: The Case of Firms in Ethiopia. In *Economic Growth and Development in the Tropics* (pp. 64-82). Routledge.
51. Van Der Vegt, G. S., Essens, P., Wahlström, M., and George, G. (2015). Managing risk and resilience. *Academy of Management Journal*, 58(4), 971-980.
52. Vial, G. (2021). Understanding digital transformation: A review and a research agenda. *Managing digital transformation*, 13-66.
53. Warner, K. S., and Wäger, M. (2019). Building dynamic capabilities for digital transformation: An ongoing process of strategic renewal. *Long range planning*, 52(3), 326-349.
54. Weick, K. E., and Sutcliffe, K. M. (2015). *Managing the unexpected: Sustained performance in a complex world*. John Wiley and Sons.
55. Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic management journal*, 5(2), 171-180.
56. Xiong, F., Li, S., Zhang, W., and Xu, N. (2025). Individuals' capacity to innovate: a literature review of individual absorptive capacity. *Innovation*, 27(4), 564-584.

57. Xiong, S., Paulraj, A., Dai, J., and Irawan, C. A. (2025). Digital integration capability asymmetry and buyer product innovation: the contingent roles of environmental dynamism and innovative climate. *International Journal of Operations and Production Management*, 45(3), 756-782.
58. Yulianto, H. (2024). An Exploratory Review of Deep Learning Methods in Education. *Moderasi: Jurnal Studi Ilmu Pengetahuan Sosial*, 5(2), 144-157.