

# Sustainable Entrepreneurship In MSMEs: A Systematic Literature Review On The Convergence Of Innovation, Digitalization, Competence, And Culture (2021-2024)

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Received : 22 November 2025

Accepted : 25 November 2025

Published online : 29 November 2025

## Abstract

Sustainable Entrepreneurship (SE) integrates economic, social, and environmental objectives to address the challenges of sustainable development while maintaining competitiveness. Micro, small, and medium enterprises (MSMEs) play a pivotal role in this transition but face multiple constraints, including limited resources, institutional barriers, and cultural rigidity. This study presents a Systematic Literature Review (SLR) of recent research published between 2021 and 2024, focusing on the determinants and mechanisms of sustainable entrepreneurship in MSMEs. Following the PRISMA 2020 framework, seven empirical and conceptual studies from Europe, Asia, and Africa were analyzed. The synthesis identifies four key pillars shaping SE: entrepreneurial competencies, innovation, digitalization, and cultural or institutional context. The findings indicate that innovation and digitalization function as mediators that strengthen the relationship between entrepreneurial competencies and sustainability performance. Cultural norms and government policies play contextual roles that may either support or inhibit implementation. This study proposes an integrative framework that aligns entrepreneurial competencies, innovation, digital transformation, and policy support as strategic drivers of MSME sustainability. Theoretical, managerial, and policy implications are discussed, along with recommendations for future research directions.

**Keywords:** Sustainable Entrepreneurship, MSMEs, Systematic Literature Review

## 1. Introduction

Over the past three decades—particularly the last two—the business sector has faced mounting pressure to balance economic growth, social well-being, and environmental preservation (Mezentseva et al., 2024). Climate change, natural resource scarcity, and widening social inequality have generated growing awareness that business orientations can no longer focus solely on financial gains (Bailey, 2015). This paradigm shift has fostered the emergence of sustainable entrepreneurship (SE), a form of entrepreneurship that integrates economic, social, and environmental values throughout business processes (Gregori & Holzmann, 2020). Sustainable entrepreneurship has become a critical pillar in supporting the achievement of the United Nations Sustainable Development Goals (SDGs), particularly Goal 8 on decent work and economic growth, Goal 9 on industry innovation and infrastructure, and Goal 12 on responsible consumption and production.

Within this context, micro, small, and medium enterprises (MSMEs) occupy a highly strategic position. MSMEs serve not only as the backbone of national economies but also as major contributors to job creation and the equitable distribution of welfare (Tekola & Gidey,



2019). In Indonesia, MSMEs account for more than 60% of the national gross domestic product (GDP) and absorb approximately 97% of the workforce (Kurniadi et al., 2024). Because of their adaptability and presence across diverse sectors, MSMEs possess significant potential to drive the transition toward sustainable economic models. Nevertheless, this potential has not been fully realized. Many MSMEs continue to face internal obstacles, including limited human resources, managerial capabilities, and restricted access to technology and financing (Sari & Kusumawati, 2022). External constraints—such as inconsistent regulations, weak institutional support, and conservative cultural norms—further slow the adoption of sustainability principles (Mohamad et al., 2024).

A growing body of research suggests that the challenges and opportunities of sustainable entrepreneurship are not shaped solely by economic factors but also by entrepreneurs' abilities to identify, exploit, and manage sustainable opportunities (Lee et al., 2022). Entrepreneurial competencies form the foundation of this process, encompassing skills, knowledge, and attitudes that enable entrepreneurs to integrate innovation with sustainability values. For example, Ismail (2022) found that entrepreneurial competence significantly influences sustainability performance through innovation as a mediating variable. This finding indicates that the success of entrepreneurs in applying sustainability principles is strongly dependent on their capacity for innovation.

At the same time, advances in digital technology have transformed how entrepreneurs conduct business. Digitalization is no longer merely a tool for efficiency but has become a key driver of the transition toward sustainable business models. Avelar (2024) emphasizes that synergies between innovation and digitalization can enhance competitiveness while simultaneously strengthening the social and environmental performance of MSMEs. Meanwhile, Gupta (2024) highlights that the use of social media and financial technology (Fintech) can accelerate sustainable entrepreneurship by expanding collaborative networks and raising environmental awareness among customers and business partners. Thus, innovation and digitalization are inseparable from efforts to advance sustainability in the modern entrepreneurial landscape.

Beyond competencies, innovation, and digitalization, cultural and institutional dimensions also play crucial roles in shaping the direction and effectiveness of sustainable entrepreneurship. Cultural values, social norms, and public regulations form the context within which sustainability principles are enacted. Sarma et al. (2022) show that in collectivist societies, sustainable entrepreneurship practices tend to emphasize social dimensions more than environmental ones. In contrast, Bajdor (2021) finds that in Eastern Europe, strong regulatory support and high consumer awareness encourage MSMEs to adopt green innovations more rapidly. These contextual differences demonstrate that the success of SE depends heavily on the interaction between internal and external factors.

Despite the growing interest in sustainable entrepreneurship, the literature on SE in the MSME context remains fragmented. Some studies focus on competencies and innovation, while others highlight digitalization or cultural contexts in isolation. Few studies integrate these four dimensions into a single, cohesive conceptual framework. Therefore, this study conducts a Systematic Literature Review (SLR) of scholarly publications from 2021–2024 with the following objectives: (1) to identify the relationships among entrepreneurial competencies, innovation, digitalization, and cultural contexts in driving MSME sustainability; (2) to synthesize recent empirical findings to build an integrative conceptual model of sustainable entrepreneurship; and (3) to provide theoretical and practical foundations for future research and policy-making aimed at strengthening sustainability-oriented MSMEs.

In doing so, this study aims to deepen theoretical understanding of sustainable entrepreneurship dynamics while offering practical contributions for the development of

strategies and policies that support MSME transformation toward a more inclusive and sustainable economy.

## 2. Literature Review

Sustainable Entrepreneurship (SE) is a concept that integrates entrepreneurial orientation with the principles of sustainability across economic, social, and environmental dimensions (Gregori & Holzmann, 2020). Ismail (2022) defines SE as a value-creation process driven by the identification of opportunities that generate innovation and foster transformative change toward sustainable development. Accordingly, SE does not focus solely on achieving financial profit but also on simultaneously creating social benefits and preserving the environment. This concept rests on the view that value creation is measured not only by financial returns but also by contributions to social well-being and environmental stewardship. As noted by Sarma et al. (2022), SE involves the recognition and exploitation of sustainability-oriented business opportunities, wherein entrepreneurs act as agents of social and ecological change.

In the context of micro, small, and medium enterprises (MSMEs), sustainability is shaped by internal and external factors that influence entrepreneurial behavior and strategic decision-making. Four interrelated dimensions—entrepreneurial competencies, innovation, digitalization, and cultural–institutional context—emerge as critical pillars for developing a sustainable entrepreneurship model.

## 3. Methods

This study employs a Systematic Literature Review (SLR) approach guided by the PRISMA 2020 framework (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) (Page et al., 2021). This approach ensures a transparent and replicable process for identifying, selecting, and synthesizing relevant studies on sustainable entrepreneurship. Relevant scholarly articles were retrieved from the Scopus academic database. The search was conducted using the following search string: TITLE-ABS-KEY (Sustainable entrepreneurship AND SMEs).

The inclusion criteria were as follows:

- (1) Publications from January 2021 to June 2024;
- (2) Empirical or conceptual studies on sustainable entrepreneurship;
- (3) Published in reputable peer-reviewed journals;
- (4) Written in English;
- (5) Focused on the context of MSMEs or entrepreneurship.

The exclusion criteria were:

- (1) Non-scholarly sources (reports, editorials);
- (2) Studies unrelated to sustainability or entrepreneurship;
- (3) Duplicates or incomplete data.

The selection process followed PRISMA guidelines. An initial total of 112 publications was identified. After removing duplicates, 95 abstracts were screened. A full-text review was conducted on 20 articles, of which 5 met all inclusion criteria. Each article was evaluated based on methodological rigor, conceptual clarity regarding sustainability, and relevance to the MSME context.

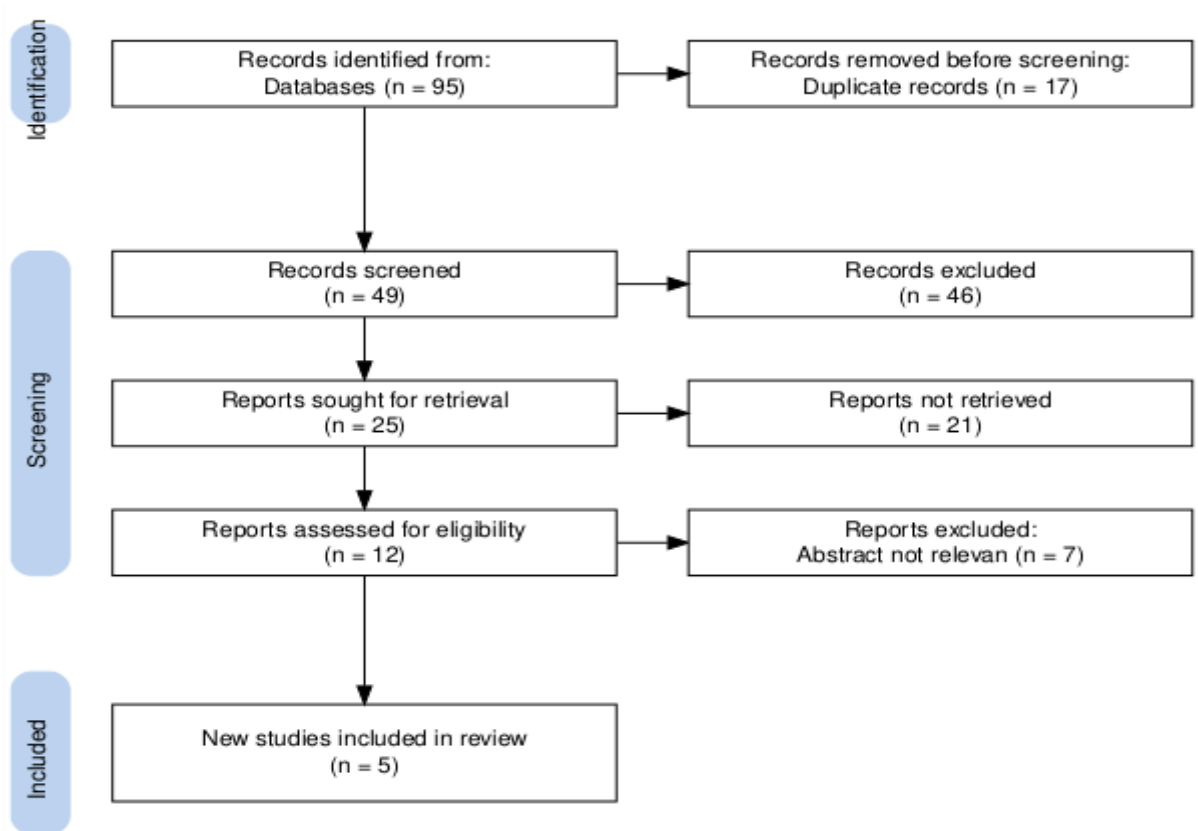
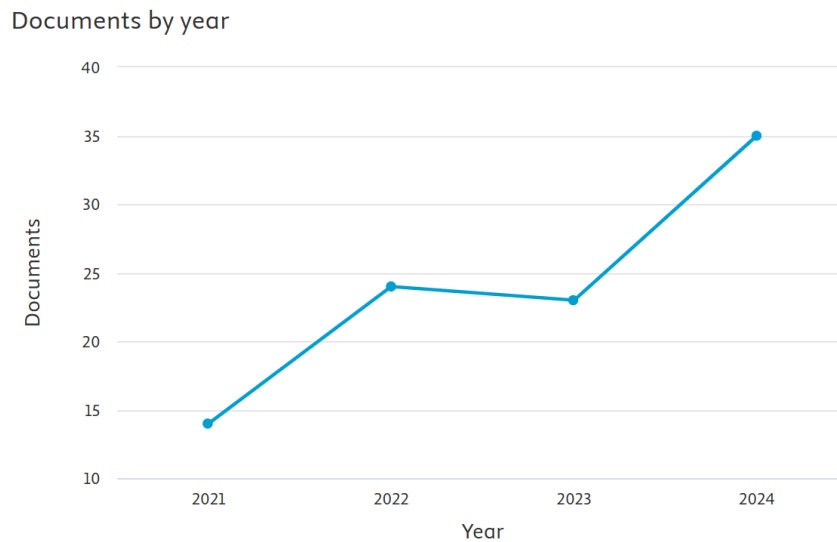
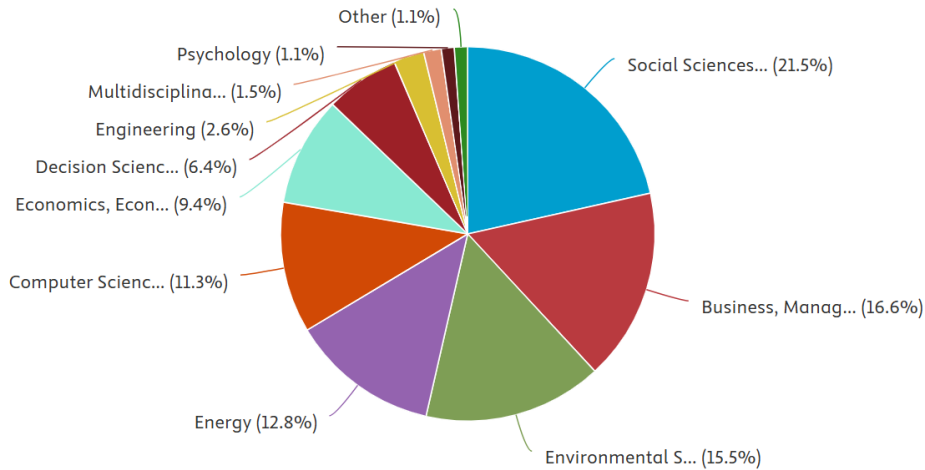


Figure 1. PRISMA 2020 flowchart

With the results of the analysis on Scopus as follows:



**Figure 1:** Frequency Of Sustainable Entrepreneurship Articles In 2021 - 2024  
Based on the frequency trend of sustainable entrepreneurship articles in Scopus, it can be seen that in 2021, there were 14 articles, in 2022, there were 24 articles, in 2023, there were 23 articles, and in 2024, there were 35 articles.



**Figure 2:** By Subject Area Of The Article

Based on the subject area of most articles on Social Science and Business, Management, and Accounting.

## 4. Results and Discussion

### 4.1. Results

Based on the results of the review of the relevant previous article, the researcher summarizes the dimensions of sustainable entrepreneurship in the context of MSMEs in the following table:

Table 1. Summary of Reviewed Studies on Sustainable Entrepreneurship (2021–2024)

Author	Year	Primary Focus	Method
Avelar et al.	2024	Convergence of innovation, digitalization, and sustainability in European MSMEs	Quantitative (GSEM using Eurobarometer data)
Bajdor et al.	2021	SE practices among Polish MSMEs	Quantitative survey & cluster analysis
Gupta et al.	2024	Utilization of Fintech and social media for SE	Bibliometric analysis & keyword network analysis
Ismail	2022	Entrepreneurial competence and innovation in MSME sustainability	SEM on 384 respondents in Tanzania
Sarma et al.	2022	Internal–external factors in recognizing SE opportunities	Qualitative (in-depth interviews)

The five studies collectively show that sustainable entrepreneurship is a multidimensional phenomenon involving human aspects (competencies), processes (innovation and digitalization), and contexts (cultural and institutional).

Based on the analysis of the review, the researcher concluded the four main pillars of sustainable entrepreneurship as follows:



**Figure 3.** Key Factors Of Sustainable Entrepreneurship

- a) **Entrepreneurial Competence as the Foundation**  
Ismail (2022) emphasizes that MSME sustainability is highly dependent on entrepreneurial competencies, including professional, social, and personal capabilities. These three dimensions enhance decision-making, collaboration, and innovation. Entrepreneurs with adaptive competencies are more capable of transforming crises into sustainable opportunities.
- b) **Innovation as the Driving Mechanism**  
Nearly all studies (Avelar, 2024; Ismail, 2022; Bajdor, 2021) highlight innovation as the key mechanism that enables the transition from conventional entrepreneurship to sustainable entrepreneurship. Product and process innovations not only strengthen competitiveness but also reduce environmental impact by improving resource efficiency.
- c) **Digitalization as an Enabler of Sustainability**  
Digitalization plays a critical role in accelerating innovation adoption and expanding market reach. Avelar (2024) finds that higher levels of digitalization among MSMEs correlate with improved social and environmental performance. Gupta (2024) adds that social media and Fintech strengthen collaborative networks that accelerate the development of sustainable business models.
- d) **Culture and Institutions as Contextual Factors**  
Sarma (2022) demonstrates that external factors such as cultural norms, policy support, and environmental regulations significantly influence how MSMEs implement sustainability practices. Bajdor (2021) further asserts that in countries with strong institutional support, SE orientations tend to be more balanced across economic, social, and environmental dimensions.

## 4.2. Discussion

The review of the five analyzed articles indicates that sustainable entrepreneurship among MSMEs is a multidimensional and context-dependent phenomenon. It is shaped not only by the individual capabilities of entrepreneurs but also by their capacity to innovate, adopt digital technologies, and align their practices with prevailing cultural values and institutional structures. Each study in the review offers a distinct perspective on how internal and external factors interact to shape sustainable entrepreneurial practices.

Overall, entrepreneurial competence emerges as the foundational element supporting business sustainability. Ismail (2022) demonstrates that professional, social, and personal competencies strongly influence entrepreneurs' ability to identify and leverage opportunities. These competencies also determine their adaptability to shifts in the business and technological environment. Within MSMEs in developing economies, competence becomes critical, as limited resources often require entrepreneurs to be more creative in managing risks and driving innovation. Ismail's findings reveal that competence has both a direct effect on sustainability and an indirect effect mediated through innovation. In other words, competent entrepreneurs are more capable of generating relevant innovations that reinforce sustainable performance.

Innovation subsequently acts as the pivotal mechanism linking competence to sustainability. Avelar (2024) and Bajdor (2021) emphasize that innovation—whether in products, processes, or business models—forms the core of sustainable entrepreneurship. Through innovation, MSMEs can generate economic value while simultaneously delivering positive social and environmental impact. Sustainability-oriented innovation enhances resource efficiency, positions firms to meet consumer expectations, and supports compliance with increasingly stringent social and environmental regulations. In this sense, innovation functions as a dynamic bridge that translates individual capabilities into organizational sustainability outcomes.

Beyond innovation, digitalization is another critical driver of sustainable entrepreneurial transformation. Avelar (2024) shows that the integration of digital technologies improves operational efficiency, enhances transparency, and expands market reach among MSMEs. Digital tools enable entrepreneurs to respond quickly to market changes, streamline production processes, and strengthen communication with stakeholders.

Gupta (2024) adds that social media and Fintech serve not only as operational tools but also as catalysts for sustainability awareness and cross-entrepreneur collaboration. Through digital platforms, entrepreneurs can share best practices, broaden their networks, and reinforce responsible business positioning. These findings indicate that digitalization plays a dual role: it accelerates innovation while simultaneously enabling the implementation of sustainability practices.

However, the successful implementation of sustainable entrepreneurship cannot be separated from the cultural and institutional contexts in which MSMEs operate. Sarma et al. (2022) highlight that societal norms, cultural values, and regulatory support from government bodies significantly influence how entrepreneurs identify and exploit sustainability opportunities. In collectivist societies—common in many Asian countries—social and communal values often enhance motivations to create social impact. Yet these same values may also constrain risk-taking and experimentation. Conversely, in more individualistic European contexts with stronger institutional support, as noted by Bajdor (2021), the adoption of green innovations and sustainable business practices progresses more rapidly due to consumer pressure and clear public policies.

Synthesizing the five studies reveals that the relationships among competence, innovation, digitalization, and culture are mutually reinforcing. Competence provides the starting point for innovation, while innovation and digitalization serve as primary drivers that convert this potential into sustainable performance. Culture and institutions, in turn, act as contextual forces that either strengthen or weaken these processes. Accordingly, MSME sustainability results from the dynamic interplay between individual capabilities and systemic support from the surrounding environment.

Conceptually, the review points to an integrative model of sustainable entrepreneurship: entrepreneurial competence drives innovation and digitalization, which subsequently enhance economic, social, and environmental sustainability outcomes, with cultural and institutional factors moderating these relationships. This model advances prior findings by positioning digitalization as a strategic mediating variable that amplifies the influence of competence on sustainability outcomes.

Practically, the discussion underscores the need to build entrepreneurial capacity, particularly in innovative and digital competencies. Governments and MSME-support organizations should prioritize training programs that emphasize technology mastery, creativity, and social responsibility. Policymakers should also promote green digital adoption and provide incentives for MSMEs that successfully integrate sustainability into their business strategies. At the same time, strengthening positive cultural values—such as collaboration, work ethic, and social concern—is essential to support entrepreneurs in navigating contemporary economic challenges.

Taken together, these findings highlight that sustainable entrepreneurship is not merely a managerial concern but an adaptive strategy involving complex interactions among people, technology, and the social environment. By understanding the interconnected roles of competence, innovation, digitalization, and culture, MSMEs can advance toward business models that generate not only economic value but also social and ecological sustainability.

## 5. Conclusion

This review shows that sustainable entrepreneurship in MSMEs is determined by four main pillars, namely entrepreneurial competence, Innovation, Digitalization, and cultural/institutional context. Competence is the basis for driving innovation, while innovation and digitalization act as mechanisms that strengthen competitiveness and sustainability performance. Cultural and institutional factors serve as environments that can strengthen or weaken its application. Thus, the sustainability of MSMEs depends on the synergy between individual capabilities and systemic support from the social and regulatory environment.

Researchers are further advised to test this integrative model empirically in various contexts of the country or the MSME sector. MSME actors need to improve innovative

competencies and digital literacy in order to be able to take advantage of sustainable opportunities. The government also needs to strengthen policies and incentives that encourage green technology adoption and cross-sector collaboration to build a sustainable entrepreneurial ecosystem.

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