



## **Impact Beyond Financial Sustainability: A Review to Unravel Factors that Impact Sustainability Initiatives in MSMEs**

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### **Abstract**

In developing countries, formal MSMEs provide up to 60% of all jobs and contribute up to 40% to the GDP (World bank, 2015). The focus of MSMEs traditionally has been financial sustainability measured by revenue and profitability. Recent calls on MSMEs however have been the drive for sustainability initiatives. The study aimed at exploring the factors that influence sustainability initiatives globally. A systematic literature review was conducted using data bases such as EBSCO, EMERALD, Science Direct Scopus, Wiley Online and Google Scholar resulting in 44 peer reviewed papers from 1990 to 2021. The study revealed diverse factors that influence sustainability, grouped into internal and external factors. A key factor that came to light in the review was the future embracement of state-of-the-art technology. Overall, the study provides important insights into the factors that can drive sustainability initiatives of MSMEs.

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## **1. INTRODUCTION**



Financial sustainability has been at heart of all business from time immemorial. Indeed, businesses are set up with the core objective of generating and optimizing profits. To the extent that for many a firm, any outcome apart from revenue generation and profit maximization is considered a failure. Business practitioners have been so keen on the financial sustainability aspect of firms, engineering practices that generate revenue but with little attention to the ecosystem. There has been a constant drive by pro-environmental groups urging businesses to adopt responsible business practices and behaviour. Indeed discussion have been ongoing with the focus on the crucial role of businesses pushing beyond the frontiers of financial sustainability and embracing the path toward environmental and societal sustainability (Gast et al., 2017; Yadav et al., 2018). Many firms have embraced the ideals of CSR initiatives, advertising, sustainability reporting, adherence to mitigation norms, carbon offsetting, and other related efforts. All these serves as clear proof of a growing awareness regarding environmental concerns and sustainability. (Christensen et al., 2021; Oláh et al., 2019; Siew, 2015; Yadav et al., 2018). Large firms have taken the lead in many regards in their quest to go beyond financial sustainability to focus on the environment and churn out programs and policies that enable protection of the environment and society in general. Large corporations like Tata, Godrej, and Mahindra &

Mahindra have demonstrated their dedication by developing various programs and policies geared towards protecting the environment in their industries (Maury, 2022; Yadav et al., 2018). Extant literature indicates the opposite for the MSMEs in that these have consistently shown a strong desire for financial sustainability with very little focus on the other aspects of sustainability ie. the environment and societal sustainability (Das et al., 2020; Llave, 2017).

From a corporate standpoint, sustainable development involves adopting strategies and actions that yield beneficial outcomes for the business and meet the needs of society both now and in the future (Ayuso & Navarrete-Báez, 2018; Yadav et al., 2018). Corporate sustainability encompasses three areas: environmental, social, and economic dimensions. Iotti & Bonazzi, (2015) describe the economic dimension as financial sustainability, which requires a company to maintain adequate cash flow to ensure liquidity and deliver a considerable return to its shareholders. Baynton, (2006) further indicates that financial sustainability pertains to the capacity of a business entity to sustain a robust and viable financial state for an extended period. Zabolotnyy & Wasilewski, (2019) further postulates that financial sustainability entails resource management that addresses present financial requirements while safeguarding the capability to fulfil future financial commitments and it crucial for businesses, non-profit organizations, and governments alike, for securing ongoing existence and the realization of objectives.

The environmental facet of sustainability involves companies ensuring they have a beneficial impact on the environment by preserving ecosystem balance and conserving natural resources (Oláh et al., 2019, 2020). Meanwhile, the social dimension of sustainability is about a company's contribution to society, aiming to generate positive social outcomes by enriching human capital. It is crucial for companies to adopt a comprehensive perspective on sustainability, as success in one dimension alone will not suffice for long-term sustainability (Yadav et al., 2018).

Small and Medium Enterprises (MSMEs) may be defined by their size, but their combined impact on the global stage is significant, making them the backbone of worldwide economic expansion. As stated by the International Finance Corporation, MSMEs represent over 90 percent of businesses globally and contribute to over half of total employment. (Lisi et al., 2023; Thanki & Thakkar, 2018). The OECD acknowledges that MSMEs contribute 60% to the GDP of the EU, serving as a primary factor fostering capital accumulation and innovation (Williamson et al., 2006). Their combined influence is particularly notable, especially in nations like New Zealand and many developing countries, where MSMEs account for 98% of the entire business landscape (Lawrence et al., 2006). In the Asian market, there exist over 2.5 million (MSMEs), which account for nearly 100% of the businesses in the region (Agan et al., 2013). Chinese MSMEs are becoming increasingly influential in embracing sustainable practices, representing 99% of the nation's businesses. They account for 60% of exports, comprise 40% of GDP, and create 75% of job prospects (Gimenez & Tachizawa, 2012). Looking at it from India's perspective, the MSME sector employs over 80 million individuals through nearly 36 million units, making up about 29% of India's GDP. These units manufacture over 6,000 products, which represent 45% of the total manufacturing production and contribute nearly half of the country's total export volume (Roy et al., 2013). While several companies have initiated implementing sustainability initiatives to tackle social, corporate, and environmental issues, initiatives to tackle (Wu et al., 2016).

Despite their significant role, numerous MSMEs have displayed little interest in environmental concerns and often lack the resources and mechanisms to integrate environmental efforts into their operations. They possess limited knowledge about environmental management and fail to grasp its importance, thereby struggling to recognize the relationship between an environmental management system and its corresponding advantages (Aghelie, 2017; Musa & Chinniah, 2016). Despite their small scale, MSMEs collectively exert a considerable impact on the natural environment, potentially offsetting the environmental footprint of larger corporations (Musa & Chinniah,

2016; Wattanapinyo & Mol, 2013). Studies suggest that MSMEs are responsible for a significant portion, estimated about 70% of the overall pollution (Beske-Janssen et al., 2015; Hoogendoorn et al., 2015).

In the EU, MSMEs were found to contribute substantially to waste and pollution, summing to 50% of the total generated wastage and environmental contamination in 2002. Similarly, in the UK, MSMEs were identified as the source pollution (80%) and commercial waste (60%), by the Environment Agency (Dasanayaka et al., 2022; Fadhilah & Ramayah, 2012; Johnstone, 2020). Despite their significant contribution to air pollution, particularly within manufacturing sectors, only a tiny fraction, roughly 0.4%, of MSMEs adhere to environmental management systems (Ahmad et al., 2021; Kasi et al., 2019). Leading researchers keep pushing for increased attention to be directed towards studies examining MSMEs' role in promoting sustainability. The lack of emphasis on environmental management within MSMEs in existing research, especially when considering their substantial impact on most economies, is of great concern and is basis for the this research (Brammer et al., 2012; Bungau et al., 2022; Smith & Sepasgozar, 2022).

## **2. METHODS**

A Systematic Literature Review (SLR) is a method of consolidating research in a way that is replicable, clear, and methodical (Boell & Cecez-Kecmanovic, 2015; R. I. Williams et al., 2021). Typically, this process involves three key stages: planning, which involves identifying research prerequisites and questions; conducting, where relevant literature is systematically searched for and analyzed; and reporting, where formulated conclusions and suggestions are offered (Ashby et al., 2012). The primary objective of an SLR is to offer comprehensive insights through synthesizing theoretical concepts. Its rigorous methodology aids in establishing a reliable source of information and formulating field-tested, grounded theoretical principles, making it a practical tool for management research. This article, with the intention of benefiting both academic and practitioner communities (Nenonen et al., 2017; Yadav et al., 2018), aligns with the framework proposed by (Klewitz & Hansen, 2014) for the Systematic Literature Review (SLR) of sustainability-oriented innovation (SOI) within MSMEs. It explores various elements of innovation methods, including various kinds of SOIs and tactical environmentally-friendly actions taken by MSMEs. This is achieved through a comprehensive review drawing from multiple fields like environmental management, sustainability management, innovation management, and research on MSMEs. The research encompasses the years 1990 to 2021 and utilizes the PRISMA approach to strengthen precision and transparency in the study.

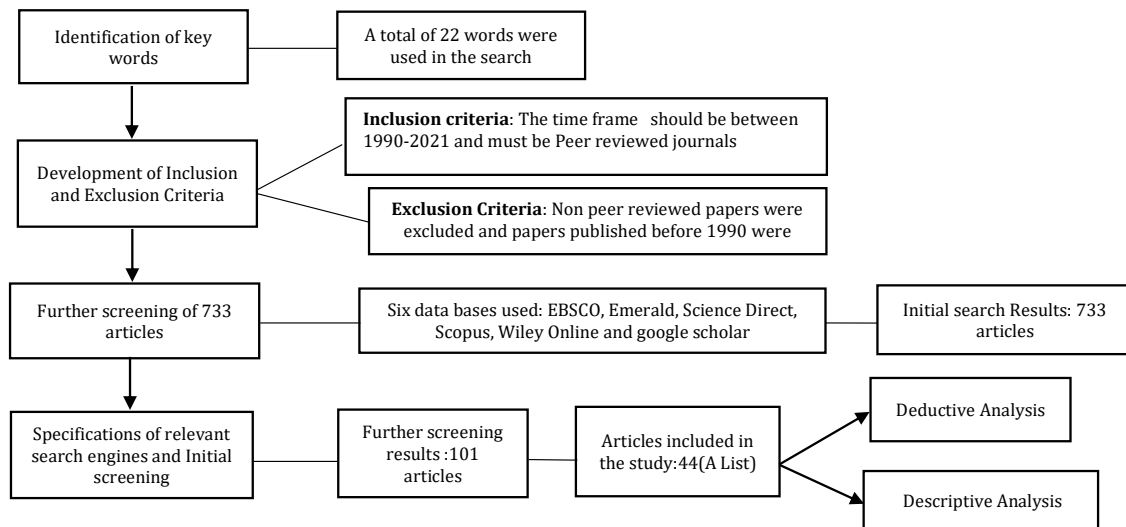
### **Identification of factors impacting sustainability initiative by conducting a systematic review of the literature**

The objective of this systematic review is to improve comprehension regarding sustainability initiatives within the realm of small and medium enterprises. The aim is to identify emerging gaps and, ultimately, make a substantive contribution to the existing theory in this particular field (Klewitz & Hansen, 2014). The study follows the process used by Klewitz and Hansen (2014) in where a six steps process is procedure is employed, as demonstrated in table 1.

**Table 1.** Steps Use in the Systematic Review

Overall Process	Individual steps	Analysis	Resultant no of articles
Search Process	Step1. Identification of key words (25 keys words)	Previous studies and reviews	
	Step 2. Formulating criteria for inclusion and exclusion criteria	Titles and abstracts based on key words	
	Step 3. Identify relevant search engines and carry out searches using five selected engines	Title and abstract (Manual) Full Text	733
	Step 4. Development of A, B, C list C- list B- list A-list		733 101 44
	Step 5. Establish areas such as the journals included, publication years, and countries		44
	Step 6. Utilizing both deductive and inductive approaches to categorize information, pinpoint key themes, and interpret findings		44

Source: Development by Researchers (2023)



**Figure 1.** Prisma Flow Chart to Article Selection For SLR  
Source: Data Processed (2023)

### Step 1 Identification of Keywords

Accessible literature were identified by creating three categories of keyword, each reflecting different understandings of "MSMEs," "sustainability initiatives," and "factors." In conducting the search, 22 keywords were used, with the requirement that selected articles include at least one of these keywords.

**Table 2.** Identification of Keywords

MSMES	Sustainability Initiatives	Factors
MSMEs	Sustainability Initiatives	Factors
Small firms	Sustainability practices	Factors
Small businesses	Green initiatives	Pressures
Small companies	Pro environmental initiatives	Motivators
Medium size firms	Environmentally friendly	Influencers
Medium size companies	practices	Reasons
Medium size businesses	Environmental management	
Small and Medium sized	Ecological practices	
Firms/businesses/companies	Sustainability issues	

Source: Data Processed (2023)

### Step 2: Creating exclusion and Inclusion Criteria

Two distinct criteria were set: the literature had to come from a peer-reviewed journal and be published between 1990 and 2021. It's important to note that systematic reviews might include a broader range of publications. Klewitz & Hansen (2014) contend that focusing on peer-reviewed academic journals in English ensures quality and narrows the scope to a manageable number of articles.

The decision to focus on the period from 1990 to 2021 was driven by the rise in attention to sustainability after the 1987 publication of the Brundtland Report, "Our Common Future." This timeline also enables researchers to analyze the effects of sustainability practices shortly before the widespread acceptance of the Sustainable Development Goals set forth by the United Nations.

### Step 3 and 4: Conducting searches in research databases and categorizing the findings into A, B, and C lists.

This review covered several leading research databases, including EBSCO, EMERALD, Science Direct, Scopus, Wiley Online, and Google Scholar. The selection of these databases was intended to ensure a comprehensive coverage of the literature related to environmental management in micro, small, and medium enterprises (MSMES). Due to varying syntax across databases and associated search engines, tailored search strings were developed as necessary.

Our search strategy focused on three core terms, forming the fundamental of our search queries across all databases. Initially, we identified 733 articles from these searches, subsequently categorizing them into three groups: Using title and abstract analysis, articles were categorized into A (most relevant), B (less relevant), and C (not relevant). Through this process, the C-list was narrowed down to 101 pertinent articles, comprising the B-list.

The B-list underwent thorough analysis, including examination of titles, abstracts, and full texts in an iterative manner. This iterative analysis resulted in the creation of the A-list, which comprised 44 articles deemed most pertinent for descriptive and thematic analysis. Additionally, articles referenced within the B-list that specifically focused on factors and sustainability initiatives were integrated into our selection process.

### Step 5: Descriptive Analysis

For the descriptive analysis, the selected categories focused on characterizing the papers by the methods they used and the journals in which they appeared (Klewitz & Hansen, 2014; Seuring & Gold, 2012; Stone, 2004).

### Step6: Thematic analysis

NVivo software was used to conduct a thematic analysis, helping to identify and formalize themes related to factors that influence sustainability initiatives. These themes emerged through an inductive process during the coding phase, which involved a thorough analysis of articles in the A-list. After the coding was completed, a systematic organization of the content was performed to pinpoint the key factors.

The results are divided into two primary sections. First, we provide a quantitative bibliographical analysis, outlining the research framework pertaining to factors influencing sustainability initiatives in MSMEs. Secondly, a qualitative thematic analysis is presented to delve deeper into the examination of these factors.

### 3. RESULT AND DISCUSSION

#### 3.1. Results

##### Descriptive Analysis

The primary journals that publish research on sustainability in MSMEs tend to specialize in sustainability or environmental issues, with significant emphasis on Corporate Social Responsibility (CSR) and environmental management. This trend is illustrated in Figure 1. Among the 44 articles analyzed, most of the empirical evidence was gathered using surveys, which included methods such as questionnaire surveys, face-to-face interviews, expert interviews, and telephonic interviews. In addition to these survey-based studies, the research corpus also included qualitative studies, specifically six case studies and two literature reviews, further enriching the scope and depth of the findings on sustainability practices within MSMEs.

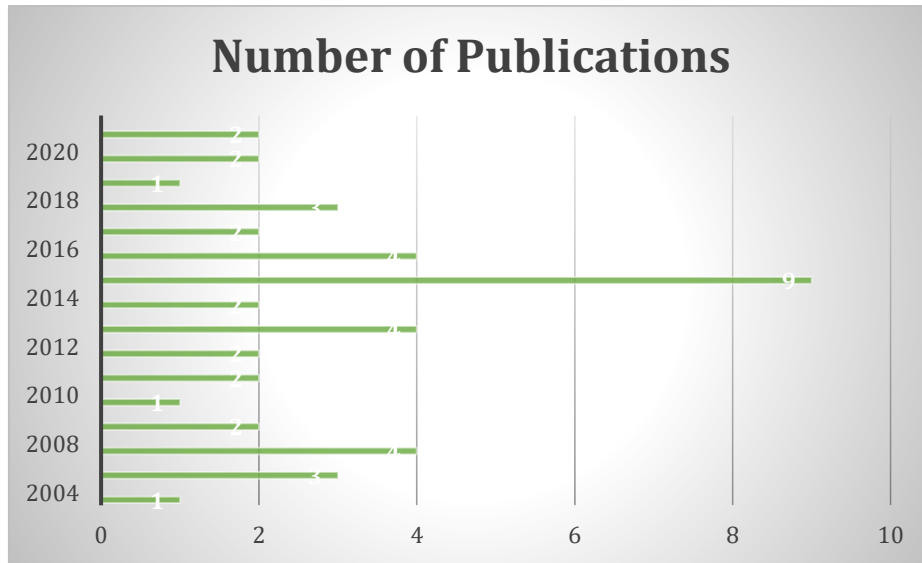


**Figure 2.** Important Journals  
Source: Data Processed (2023)

The thematic analysis of the articles indicates a global perspective, with studies conducted in various regions including North America, Europe, Africa, and Asia. Europe was the most studied region, accounting for 15 of the research publications. Within Asia, the South Asian area was notably prominent. Some research focused exclusively on specific countries.

The growing interest in the sustainability practices of micro, small, and medium enterprises (MSMEs) is evident from the publication trends. Of the 44 articles reviewed, about 66% were published after 2010, with a significant peak in research output occurring in 2015. This surge in publications likely relates to key global events like the Paris Climate Change Conference in 2016 and the adoption of the United Nations' Sustainable Development Goals (SDGs), underscoring an increased global focus on sustainability around that time.





**Figure 3.** Time frame for publications  
Source: Data Processed (2023)

## Thematic Analysis

### External Factors

This analysis was carried out to determine the key factors that drive sustainable initiatives within micro, small, and medium enterprises (MSMEs). This analysis revealed two primary categories of influence: external and internal factors. Each category was further broken down through sub-coding to specify the components of these factors. Below is an in-depth description of the factors identified within each category.

External factors play a pivotal role in prompting MSMEs towards sustainability. Research by Bolton & Scharfstein (1998) suggested that without external pressures, most MSMEs are reluctant to participate in environmental projects. The study identified stakeholders and the level of tangibility in the industry where MSMEs are situated are two significant external influences. Stakeholders encompass various groups such as governments, clients, networks and partnerships, vendors, localities, and competitors. Each of these stakeholder groups is briefly described as follows.

### Supplier

Lee, (2008) and Walton et al. (1998) suggest that MSMEs engage in greening their supply chains based on their suppliers' readiness to do so. MSMEs' adoption the implementation of green procurement policies and the inclusion of environmental criteria in their supplier selection methods have led to major changes (Lee & Klassen, 2008; Walker et al., 2008). In China, MSMEs that have international operations face more supply chain pressures than those operating solely domestically, leading these internationalized businesses to show better social and environmental performance and a stronger commitment to sustainable practices (Yu & Bell, 2007). Furthermore, Ghadge et al. (2017) pointed out that suppliers play a crucial role in motivating MSMEs to adopt greener practices within supply chain networks, particularly in the Green dairy industry

### Surrounding Environment

Local communities play a crucial role in encouraging MSMEs worldwide leading to the acceptance of sustainable practices. In Australia, environmental groups are a key influence on MSMEs' implementation of sustainable environmental practices (B. R. Williams & O'Donovan, 2015). In China, increased environmental consciousness and community pressure have prompted MSMEs to improve their environmental strategies (Zhang et al., 2009). In the UK, public demand has been identified as another significant motivator for MSMEs to pursue sustainability Jansson et al. (2017). In Thailand, civil society organizations

and institutions have been essential in helping agro-based MSMEs improve their environmental performance (Wattanapinyo & Mol, 2013). According to Gandhi et al., (2018) in India, local governments, the media, local communities, and NGOs are among the top 15 factors driving the implementation of eco-friendly production methods in Indian MSMEs.

### **Business Rivals**

According to Lee & Klassen (2008) suppliers adapt their product materials based on an analysis of new trends observed in competitors' products in global markets. This involves establishing goals to improve recyclability, implementing official protocols for environmental performance in new product creation, and integrating environmental safety and recyclability as standards for product effectiveness. In one example from Italy, it was noted that the actions of rival companies prompted MSMEs to embrace environmental management practices, particularly when they did not have the internal expertise to understand market trends (Testa et al., 2016).

### **Network and Alliances**

Owners and managers of MSMEs exhibit a positive approach towards participating in local business networks and environmental organizations. These networks are essential for developing cooperative relationships and generating the trust needed for collective efforts to solve environmental problems (Revell et al., 2008). Furthermore, MSMEs benefit from the sharing of knowledge on environmental practices and the possible cost-benefit gains linked to these practices (Sánchez-Ballesta & García-Meca, 2011).

### **Business sector tangibility**

We've looked at how various stakeholders affect the sustainability practices of MSMEs. However, it's crucial to acknowledge that these practices are also shaped by the tangibility of the sectors in which these enterprises operate. "Tangibility" in this context refers to the physical aspects of the products and services MSMEs provide. Uhlaner et al., (2012), note that the tangibility of a sector plays a significant role in the adoption of green practices—the more tangible the sector, the more MSMEs are inclined to incorporate environmental practices into their operations. Similarly, research by Hoogendoorn et al., (2015) indicates that MSMEs in sectors with high tangibility are more committed to implementing environmentally friendly processes and to offering green products and services.

### **Customers**

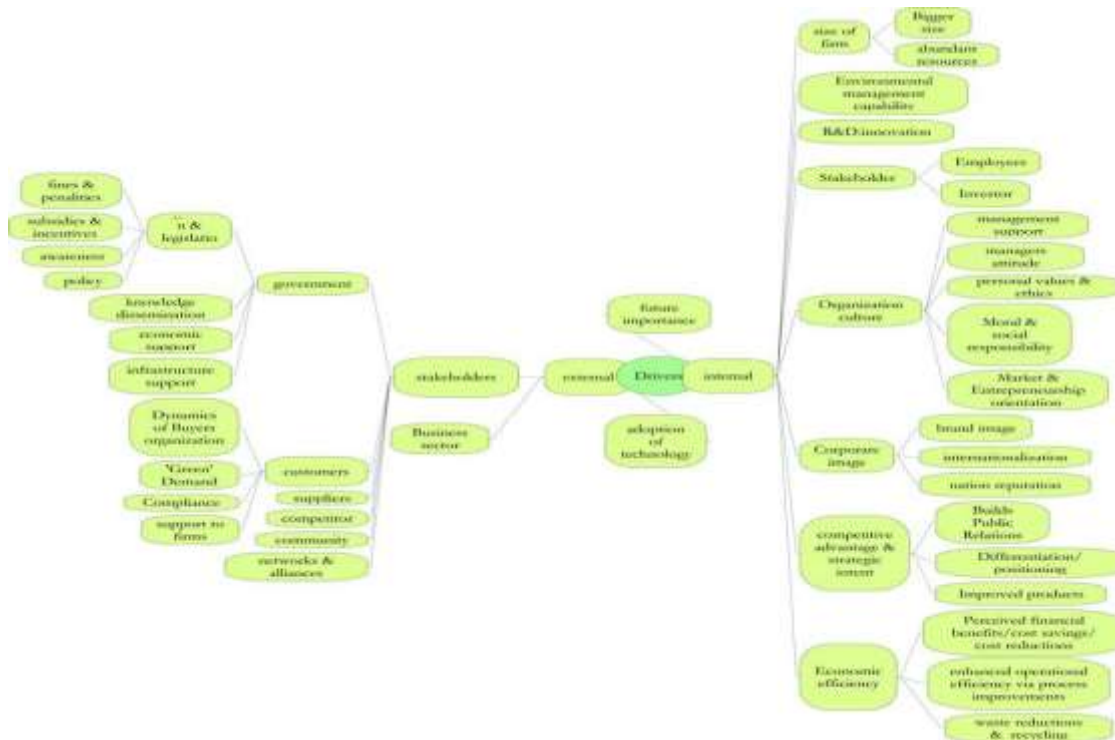
There is significant evidence from existing research that customers are key influencers of MSMEs' sustainability efforts through demands for green products, compliance with regulations, and the organizational dynamics of buyers. Scholars have consistently argued that active customer demand for environmentally friendly products, processes, and services fosters the adoption of sustainable practices in MSMEs (Battisti & Perry, 2011; Dwyer et al., 2009; Sáez-Martínez et al., 2016; Studer et al., 2006; Viranda et al., 2020). Motivated by the support of buyers, many SME suppliers have embarked on improvement initiatives aimed at enhancing energy and resource management efficiency and reducing their environmental footprints (Lee & Klassen, 2008). Furthermore, there is mention in some studies that buyers require MSMEs to hold ISO 14001 certification as a condition for being recognized as suppliers (Gadenne et al., 2009; Günerergerin et al., 2012; Lee & Klassen, 2008).

### **Government**

The government is identified as a key external factor influencing MSMEs' conduct and mainly influenced by regulation, laws, economic and structural assistance, as well as the sharing of information. Research by Gandhi et al. (2018) emphasize the importance of government backing for effectively carrying out lean-green approaches. According to (Cambra-Fierro & Ruiz-Benítez, 2011), sustainable practices are largely driven by legislative actions. Zhang et al., (2009) state, "Regulation may be the most appropriate



mechanism to improve the environmental performance of small firms.” Strict fines and penalties for non-compliance with regulations compel MSMEs to engage in sustainable practices (Sáez-Martínez et al., 2016). Moreover, incentives such as loans, grants, tax breaks, and other economic benefits are pivotal in facilitating the adoption of and behavioral shift toward environmentally friendly methods in MSMEs (Gandhi et al., 2018; Revell et al., 2008).



**Figure 4.** Developing areas on factors that influence sustainability in MSMEs  
Source: Data Processed (2023)

### Internal factors

Another group of elements influencing the sustainability efforts of MSMEs involves internal factors. These factors are employees, organizational culture, brand image and reputation, competitive advantage and strategic purpose, environmental management capability, and enterprise size. A concise summary of each factor follows.

### Employees

Employees play a significant role in influencing MSMEs towards sustainability. Zhang et al. (2009) identify employee demand as a key driver for MSMEs to implement environmental practices. Masurel (2007) emphasizes that the main incentive for MSMEs to engage in ecological initiatives is to improve working conditions for their employees. In the context of the Greek food supply chain, it has been noted that investors can influence MSMEs' environmental performance by promoting environmental awareness and influencing decision-making (Ghadge et al., 2017). Uhlaner et al. (2012) observe that family stakeholders in MSMEs advocate for environmentally friendly practices to uphold the company's reputation and preserve the family legacy.

### Organization culture

The commitment to environmental responsibility in MSMEs is deeply influenced by the personal values and ethical beliefs of their owners and managers, alongside their moral and social responsibilities, management backing, and knowledge management practices. Masurel (2007) observed that the personal habits and lifestyle of SME owners directly affect sustainability efforts within MSMEs. Additionally, (Koe et al., 2015) highlighted that

managers' personal commitment to environmental stewardship is critical for organizational performance. Moreover, MSMEs recognize environmental sustainability as a moral and social obligation towards their stakeholders and the environment (Wahga et al., 2018). Gandhi et al. (2018), point out that top management's dedication is crucial for the effective adoption of Lean and Green Manufacturing practices. The environmental initiatives are further propelled by the social responsibility and ethical concerns held by top managers (Johnson, 2015; Lee, 2008; Studer et al., 2006; Thanki & Thakkar, 2018) Additionally, organizational culture plays a significant role in shaping sustainability practices in MSMEs (Cambra-Fierro & Ruiz-Benítez, 2011; Ghadge et al., 2017; Uhlaner et al., 2012; Wahga et al., 2018).

### **Brand image and reputation**

Numerous studies highlight corporate reputation as a primary driver influencing the environmental performance of MSMEs (Agan et al., 2013; Battisti & Perry, 2011; Gadenne et al., 2009; Masurel, 2007; Sáez-Martínez et al., 2016). Social capital serves as a significant factor driving MSMEs to enhance their reputation as environmentally responsible entities in the market, leading to economic benefits, legitimization of their presence, customer attraction, increased sales, and stakeholder satisfaction (Wahga et al., 2018). MSMEs seek to enhance their eco-friendly public perception, demonstrate commitment to environmental responsibility, and cultivate a sustainable brand identity through diverse environmental efforts (Battisti & Perry, 2011; Cambra-Fierro & Ruiz-Benítez, 2011; Gandhi et al., 2018; Lee & Klassen, 2008; Revell et al., 2008; Roy et al., 2013).

### **Competitive advantage and strategic intent**

Gadenne et al. (2009) found that managers of SME often embrace sustainability practices in order to advance their economic self-interest. The various advantages, such as cost savings, waste reduction, recycling, and product differentiation, offer a competitive edge to these businesses, providing motivation for the implementation of sustainable measures (Battisti & Perry, 2011; Gadenne et al., 2009; Lee, 2008). Furthermore, long-term financial benefits and improved market positioning serve as strategic incentives for medium-sized firms to participate in environmental initiatives (Jansson et al., 2017).

### **Environmental Management Capability (EMC)**

Environmental management capabilities, encompassing assets, skills, and technologies, empower SMEs to address environmental demands from stakeholders more effectively and promptly. MSMEs that cultivate greater environmental experience, evidenced by the cultivation of internal environmental management skills, exhibit superior and proactive responses to sustainability practices, thereby enhancing organizational performance (Sáez-Martínez et al., 2016). Furthermore, a robust resource base is identified as a crucial capability for environmental practice (Yadav et al., 2018). According to Thanki & Thakkar, (2018) organizational capability stands out as an essential factor for improving both environmental and operational performances of MSMEs, ultimately driving sustainability efforts.

### **Size of firm**

According to Reyes-Rodríguez et al. (2016) research, the size of the firm has emerged as a crucial determinant of the environmental performance of MSMEs. Medium-sized companies, in terms of both workforce size and revenue, are observed to be more actively engaged in implementing environmentally friendly initiatives (Hoogendoorn et al., 2015). Additionally, Johnson (2015) has observed that MSMEs are more inclined to embrace sustainability management tools if they have a larger organizational size, as they perceive the advantages of these tools over traditional practices in a positive light.

### 3.2. Discussion

The analysis indicates the presence of various factors that can be grouped into themes and sub-themes. External and internal factors emerge as significant in the research papers, with some papers highlighting them as primary factors while others consider them secondary. Additionally, certain categories, the potential significance and integration of cutting-edge technology, cannot be easily classified into these two blocks. For instance, Lawrence et al. (2006), Lee & Klassen (2008) and Gandhi et al. (2018) emphasize that MSMEs businesses are increasingly shifting towards environmental practices, recognizing their future importance as a critical factor for success. Furthermore, studies by Gandhi et al. (2018), Wang et al. (2014), Gandhi et al. (2018), Aboelmaged (2018), Hofmann et al. (2012) and Gandhi et al. (2018) explore the significance of technological upgrades for MSMEs to drive sustainable practices, enhancing operational efficiency and profits. In addition to these factors, certain barriers and constraints hinder the integration of environmentally-friendly methods in MSMEs. These include time constraints, financial constraints, perception of limited environmental impact, insufficient environmental consciousness, inadequate government oversight, and cultural influences. Overall, the relevance of these factors depends on the operational context of MSMEs, such as their sector and stakeholders from outside the country of operation. Ultimately, MSMEs have the option to decide whether they want to engage in collaborative endeavors for sustainability or continue with their conventional business practices. This article contributes valuable insights to sustainability research by presenting a thorough collection of important factors that impact sustainable initiatives within the framework of MSMEs.

### 4. CONCLUSION

The conclusion of this research is that the factors influencing sustainability initiatives in SMEs are very diverse, and can be grouped into internal and external factors. Several factors, such as the application of cutting-edge technology, are key in encouraging the sustainability of SME businesses. Research also highlights that SME companies are increasingly turning to environmental practices, recognizing the importance of this factor for future success. However, there are several obstacles in integrating environmentally friendly practices within SMEs, such as limited time and finances, limited perception of environmental impact, lack of environmental awareness, inadequate government supervision, and cultural influences. In conclusion, the relevance of these factors depends on the operational context of the SME, such as the sector and foreign stakeholders.

The advice for SMEs is to consider the role of advanced technology and environmental practices in their business strategy. They can consider collaboration for sustainability, which can improve their operational efficiency and profitability. The government can also help by providing incentives or assistance to overcome existing obstacles. Thus, this article provides valuable insights for sustainability research by presenting a collection of important factors influencing sustainability initiatives within an SME framework.

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