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Research paper

A Thematic Analysis of Strategic Flexibility and Green Management Practices in SMEs Facing Market Disruption

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Abstract

This study examines the relationship between strategic flexibility and green management practices in Small and Medium Enterprises (SMEs) that face market disruptions. The aim is to investigate how SMEs integrate these factors to enhance resilience and competitiveness in volatile markets. Using a qualitative approach, the research involves thematic analysis of secondary data from studies published between 2020 and 2025. The analysis identifies key patterns in how strategic flexibility and green practices influence SME performance during disruptions. The findings show that SMEs adopting both strategic flexibility and green management practices reported better performance during market disruptions. SMEs that integrated these two practices experienced enhanced resilience, highlighting the importance of combining flexibility and sustainability in navigating market uncertainty. This research contributes to the literature by highlighting the complementary nature of these two factors and provides new insights into how SMEs can effectively leverage both for long-term success. The study underscores the value of integrating strategic flexibility with green management to improve SME resilience. It also suggests that external support mechanisms, such as government incentives, are critical in helping SMEs overcome barriers to adopting these practices. Future research should focus on exploring the challenges SMEs face in implementing these practices, particularly in developing economies, and their long-term effects on business growth.

Keywords: *Green Management; Market Disruption; SMEs; Strategic Flexibility; Sustainability.*

1. Introduction

The ability of Small and Medium Enterprises (SMEs) to maintain operational resilience in the face of market disruptions is becoming increasingly critical. Global markets are continuously exposed to various forms of disruption, from technological advancements and shifts in consumer preferences to macroeconomic fluctuations and environmental concerns. One of the pivotal responses to these challenges is the integration of strategic flexibility and green management practices. These practices enable firms not only to adapt to sudden changes but also to leverage them as opportunities for sustainable growth. Strategic flexibility, as a dynamic capability, allows SMEs to adjust their business models, strategies, and operational approaches in response to changing environmental conditions (Gorondutse et al., 2021). Meanwhile, green management practices emphasize environmental sustainability and corporate social responsibility, both of which are becoming crucial in the context of modern business operations (Ugrinov et al., 2024).

The rise of environmental consciousness among consumers and regulators alike, coupled with an increasingly volatile global economy, has made it essential for SMEs to adopt both green management and flexible strategic practices. A compelling example is the case of SMEs in the manufacturing sector, which are now focusing on green innovations, such as eco-efficient production processes, waste reduction, and sustainable sourcing, to differentiate themselves in a competitive market (Russo & Fouts, 1997). These firms often face unique challenges when managing market disruptions due to their limited resources and capacities compared to larger corporations. However, their agility and proximity to local markets can provide them with unique advantages in responding to such changes (Hitt et al., 1998). The growing body of literature indicates that SMEs, despite their size, are increasingly recognized as pivotal players in sustainable business practices, with their strategic flexibility acting as a vital mechanism for adapting to disruptive forces (Pertheban et al., 2023).

The importance of investigating the intersection of strategic flexibility and green management in SMEs is amplified by the current gap in research concerning how these concepts interplay during times of market disruption (Ragazou et al., 2022). While strategic flexibility and green management have been studied separately, few studies have explored how these two dimensions coalesce within SMEs specifically

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during disruptive periods. Furthermore, the mechanisms through which SMEs integrate these practices into their operations remain underexplored, particularly in developing economies where resources are constrained, but sustainability concerns are rising. This gap in understanding presents a pressing need for a more comprehensive examination of how SMEs can strategically align their flexible practices with green management principles to ensure long-term success.

This research aims to fill this gap by analyzing the thematic connection between strategic flexibility and green management practices within SMEs facing market disruptions. By focusing on this specific context, the study seeks to uncover the strategies that SMEs deploy to respond to market volatility while simultaneously pursuing sustainability goals. This research will contribute both theoretically and practically by offering new insights into the integration of flexibility and sustainability within SMEs, providing valuable implications for managers, policymakers, and scholars in the fields of strategic management and environmental sustainability.

The primary objective of this study is to explore how SMEs navigate market disruptions by employing both strategic flexibility and green management practices. Specifically, the research will address the following question: How do SMEs integrate strategic flexibility with green management practices to effectively respond to market disruptions? This question will guide the exploration of the underlying mechanisms that enable SMEs to remain competitive and sustainable in the face of market volatility. By providing a deeper understanding of these dynamics, the study will contribute to the existing literature on strategic management and environmental sustainability, offering practical guidance for SME leaders aiming to balance adaptability and sustainability in their operations.

This study is significant not only in its potential contribution to academic knowledge but also in its practical implications. In a rapidly changing world where environmental sustainability is becoming a business imperative, understanding how SMEs can leverage strategic flexibility in combination with green management practices is crucial. By examining real-world cases of SMEs facing market disruptions, this research will offer practical insights on how firms can use these approaches to not only survive but thrive in an uncertain and ever-evolving market environment.

The core problem addressed by this research is how SMEs can combine strategic flexibility and green management practices to effectively navigate market disruptions. This question is essential because it acknowledges the increasing importance of both strategic agility and environmental responsibility in modern business practices. By providing answers, this study will enhance our understanding of the mechanisms that allow SMEs to succeed in a turbulent business landscape while maintaining their commitment to sustainability.

2. Literature Review

2.1. Strategic flexibility in SMEs

Strategic flexibility refers to the ability of firms, particularly SMEs, to adapt and adjust their strategies in response to environmental changes and market disruptions. It is considered a dynamic capability that allows SMEs to reconfigure their business models, strategies, and operational approaches as market conditions evolve (Otokiti et al., 2022). The importance of strategic flexibility has been widely recognized, especially in the context of small businesses that face higher uncertainty and resource constraints compared to larger corporations. SMEs are particularly susceptible to market fluctuations and external pressures such as technological advancements, regulatory changes, and shifts in consumer preferences. Hence, the ability to quickly modify operational strategies is crucial for their survival and competitive advantage (Benzidia & Makaoui, 2020). Recent studies have shown that SMEs with high levels of strategic flexibility can respond faster to market disruptions, such as economic crises or technological shifts, thus maintaining a strong position within their respective markets.

In the current dynamic business environment, SMEs are constantly faced with the challenge of balancing immediate operational demands with long-term strategic goals. As markets are increasingly influenced by rapid technological advancements and shifting global trends, strategic flexibility provides SMEs with the necessary agility to adjust quickly. For example, SMEs in Southeast Asia that successfully adopted flexible strategies during the 2008 global financial crisis were able to survive and even expand, while less flexible firms struggled to cope with the economic downturn (Wided, 2025). Furthermore, SMEs that demonstrate adaptability in their strategies are better positioned to leverage emerging opportunities, which is vital for their long-term success and growth. The ability to pivot in response to market disruptions not only helps SMEs maintain stability but also enhances their capacity to innovate and differentiate themselves from competitors. Thus, strategic flexibility is a critical capability for SMEs striving to thrive amidst an uncertain and ever-changing market landscape.

2.2. Green management practices in SMEs

Green management practices in SMEs are essential for addressing the growing environmental concerns and aligning business operations with sustainability goals. These practices include adopting eco-friendly production processes, reducing waste, sourcing sustainable materials, and reducing carbon footprints (Settembre-Blundo et al., 2021). Despite the challenges SMEs face, such as limited financial and technological resources, many small businesses are beginning to integrate green management practices into their operations. Studies indicate that SMEs embracing sustainability can improve their operational efficiency, enhance brand reputation, and meet the increasing demand for environmentally responsible products (Rofiaty et al., 2022). As consumers and regulators place more emphasis on environmental responsibility, SMEs are increasingly recognizing that green management is not just a cost but an opportunity for long-term growth and market differentiation.

Recent literature highlights that although the adoption of green practices in SMEs is often hindered by resource constraints, it can lead to significant advantages when implemented strategically. For instance, small firms that successfully implement green management practices often experience cost savings through energy efficiency improvements and waste reduction (Rofiaty et al., 2022). Moreover, environmentally responsible businesses are more likely to build stronger customer loyalty and increase market share, as consumers are becoming more conscious of the ecological impact of their purchasing decisions. Additionally, government regulations and global sustainability initiatives are further encouraging SMEs to adopt green practices to remain competitive and compliant with evolving environmental standards (Fachrunnisa et al., 2020). Therefore, green management practices not only contribute to environmental sustainability but also provide SMEs with a competitive edge in an increasingly eco-conscious marketplace.

2.3. Market disruptions and challenges faced by SMEs

Market disruptions have become a central concern for SMEs, as they tend to be more vulnerable than larger organizations due to their limited resources, smaller economies of scale, and greater dependence on local markets. Disruptions can stem from various sources, such as technological advancements, global crises, regulatory changes, or shifts in consumer preferences (Thomas & Douglas, 2024). For

example, the COVID-19 pandemic brought about significant market disturbances, disproportionately affecting SMEs, many of which had limited access to digital platforms or resilience mechanisms. According to research, SMEs in developing countries were particularly impacted due to a lack of financial cushion and dependence on traditional business models. The challenge for these firms is not only to survive during such disruptions but also to adapt and innovate rapidly to recover and thrive.

Although SMEs face unique challenges in navigating market disruptions, their agility and closer proximity to customers can often provide them with advantages in responding to changes. Recent research has shown that SMEs that are more flexible and adaptable in their operations are better positioned to pivot during market disruptions (Ali et al., 2021). For example, SMEs that quickly adopted digital transformation strategies during the pandemic were able to continue their operations and even reach new markets online. However, the ability to adapt depends on several factors, including the firm's size, technological capabilities, and managerial expertise. Moreover, market disruptions often prompt SMEs to rethink their business strategies, which can lead to innovations and better alignment with changing market demands. In this regard, SMEs that combine strategic flexibility with sustainable practices can turn market disruptions into opportunities for growth, rather than threats to their survival (Alraja et al., 2022).

2.4. The relationship between strategic flexibility and green management

Recent studies have highlighted the synergy between strategic flexibility and green management practices, particularly in the context of SMEs. While both concepts have been studied separately, their intersection has received less attention, especially in how SMEs integrate these practices to cope with market disruptions. Strategic flexibility allows SMEs to adjust their business models and operations quickly, while green management ensures that these adjustments align with sustainability goals (Zahoor & Lew, 2023). In this way, SMEs can maintain their competitive edge while also fulfilling environmental responsibilities. The ability to quickly switch to green technologies or adapt to new regulatory requirements related to sustainability is a critical advantage for SMEs, enabling them to thrive in a rapidly changing business environment.

The integration of strategic flexibility and green management is particularly important for SMEs in facing market disruptions. As markets become more volatile, the combination of these two elements allows SMEs to not only adapt to changes but also innovate and lead in sustainable practices (Omowole et al., 2024). For example, SMEs in the manufacturing sector that adopted eco-efficient processes were able to reduce costs, improve product quality, and meet new regulatory standards, which helped them maintain profitability during periods of economic uncertainty. This integration is also supported by studies that suggest that green management practices, when implemented with strategic flexibility, can enhance an SME's ability to pivot quickly and effectively to market changes (Uddin et al., 2023). Therefore, the combination of these two factors equips SMEs with the tools necessary for navigating both environmental and market disruptions while positioning them as leaders in sustainability.

2.5. Case studies and applications in the context of SMEs

Several case studies have demonstrated the successful integration of strategic flexibility and green management practices in SMEs, showing that these companies can not only survive market disruptions but thrive in them. For example, a case study of SMEs in South Korea found that those adopting green management practices, such as reducing carbon emissions and utilizing renewable energy sources, were able to improve their operational efficiency and brand reputation while remaining flexible in their business strategies (Dwikat et al., 2023). These firms were able to pivot their business models to meet new customer demands for sustainable products and services, which allowed them to maintain market relevance even during periods of economic turmoil. Furthermore, their ability to quickly adjust production processes and implement green innovations contributed to their resilience against market disruptions.

In another case, SMEs in the European Union, particularly in the manufacturing and retail sectors, faced similar challenges due to fluctuating market conditions and the increasing demand for eco-friendly products. Research indicates that SMEs that integrated green practices into their supply chain management, such as using eco-friendly materials and reducing waste, were better able to weather disruptions caused by supply chain delays or changing consumer preferences (Widodo & Andjarwati, 2024). These companies were not only able to meet the rising demand for sustainability but also gained a competitive advantage in the market by aligning their business practices with environmental goals. Such case studies illustrate how SMEs can leverage both strategic flexibility and green management practices to achieve long-term success, particularly in an unpredictable business environment.

3. Method

3.1. Type of research

This study adopts a qualitative research approach, specifically employing a literature review design, to explore the intersection of strategic flexibility and green management practices in SMEs facing market disruptions. A qualitative design is considered the most suitable as it enables a deeper understanding of complex phenomena, particularly the nuanced relationships between strategic flexibility, green management, and market disruption. Given the limited empirical research that thoroughly examines how these two concepts converge in the context of SMEs, qualitative research allows for the synthesis of existing literature, the identification of emerging patterns, and the development of insights that are not easily quantifiable (Creswell, 2018). The focus on thematic analysis ensures the identification of key themes and trends, providing a comprehensive view of the subject matter. This approach is particularly effective for answering the central research question: How do SMEs integrate strategic flexibility with green management practices to respond to market disruptions?

3.2. Data collection

The data collection process for this study involves a systematic review of academic articles, journals, books, and other scholarly sources published between 2020 and 2025. The selection of sources will be based on their relevance to the research questions, their methodological rigor, and their contribution to understanding the intersection of strategic flexibility, green management, and market disruptions in SMEs. The sources will be gathered from reputable academic databases such as Google Scholar, JSTOR, and ScienceDirect.

The inclusion criteria for the selected studies are as follows:

- Studies that specifically address the relationship between strategic flexibility and green management in the context of SMEs.
- Research published within the last five years (2020–2025) to ensure the relevance and timeliness of the data.

- Empirical studies, theoretical frameworks, or literature reviews that offer insights into the topic.
- Exclusion criteria:
- Studies not directly related to strategic flexibility, green management, or market disruptions.
- Non-peer-reviewed articles or sources that do not meet the methodological rigor required for academic research. A total of 35 studies will be analyzed for this research. These studies will provide a well-rounded and in-depth understanding of the topic, allowing for the synthesis of diverse perspectives from various sources.

3.3. Data analysis

Data analysis will follow a thematic analysis approach, a widely used method in qualitative research for identifying, analyzing, and reporting patterns or themes within the data (Braun & Clarke, 2022). This method is especially suitable for this research as it enables the organization and interpretation of qualitative data, categorizing material into themes that emerge from the literature.
The process of thematic analysis will be carried out in the following stages:
a) Familiarization with the Data
The first step involves reading and re-reading all selected articles to become familiar with the data and identify any initial ideas or patterns. This phase allows for a deeper understanding of the literature and the relationships between strategic flexibility, green management, and market disruptions.
b) Initial Coding
In this stage, initial codes will be generated from the text. These codes will be simple labels that summarize the content of the data related to strategic flexibility, green management practices, and market disruptions. For example, codes may include terms such as "resilience strategies," "sustainable practices," "market volatility," and "SME adaptation."
c) Developing Themes
The initial codes will then be organized into broader themes that reflect key areas of investigation. For instance, themes could include "Adaptation to Market Disruption," "Integration of Green Practices," "Strategic Flexibility for Sustainability," and "SME Response to Environmental Challenges." These themes will be reviewed and refined through an iterative process, ensuring that they accurately represent the data and the research questions.
d) Reviewing and Finalizing Themes
After the initial themes are developed, the analysis will undergo a process of refinement. Each theme will be reviewed for coherence and consistency, ensuring that all relevant data is appropriately categorized and that the themes are representative of the broader trends within the literature.

4. Results

4.1. Strategic flexibility in SMEs and its impact on market disruptions

The concept of strategic flexibility was a critical factor in SMEs' ability to respond effectively to market disruptions. The findings show that SMEs with greater strategic flexibility were more adept at adjusting their strategies and operations to cope with sudden and unforeseen changes in the market (Gorondutse et al., 2021) . For example, SMEs in the retail sector demonstrated a higher degree of adaptability by quickly shifting to online platforms when physical stores were temporarily closed during the COVID-19 pandemic. These businesses were able to pivot their business models in real-time, which significantly contributed to their survival and growth during the crisis. In contrast, SMEs that lacked this flexibility were more likely to struggle or fail in the face of disruption due to their rigid business models.
Further examination revealed that SMEs with flexible strategies typically possessed dynamic capabilities that allowed them to identify opportunities and threats faster than competitors. These firms continuously reassessed their market position and adjusted their products, services, and business operations accordingly. The research indicated that SMEs in sectors heavily impacted by market disruptions, such as manufacturing, attributed their recovery to the ability to reconfigure their strategies quickly (Muneeb et al., 2023) . For instance, businesses diversified their product offerings or altered their supply chains to address shifting customer preferences or disruptions in the supply of raw materials.
The importance of strategic flexibility was also highlighted by the ability of SMEs to modify their internal processes without significant delay. Many SMEs adopted agile project management techniques, enabling them to launch new initiatives and make operational changes swiftly. These practices were crucial in minimizing the negative impact of disruptions, such as changes in consumer behavior, and enabled SMEs to retain a competitive advantage. In conclusion, strategic flexibility played a pivotal role in ensuring that SMEs could adapt and overcome challenges posed by market disruptions, reinforcing its importance in the overall resilience of small businesses.

4.2. Green management practices and their role in enhancing SME resilience

Green management practices were found to be a crucial driver for SME resilience, especially considering growing environmental concerns and increasing customer demand for sustainable products and services. SMEs that integrated green practices, such as energy-efficient production processes, waste reduction strategies, and eco-friendly sourcing, reported significant cost savings and improvements in operational efficiency (Sapian, 2022). For instance, SMEs in the European Union that adopted renewable energy solutions and reduced waste found that these efforts lowered their operational costs by 15% while simultaneously enhancing their brand's reputation among environmentally conscious consumers. Such practices not only benefited the environment but also provided a competitive edge by aligning business strategies with global sustainability trends.
The research further highlighted that SMEs adopting green management practices were able to respond more effectively to market disruptions. Many of these businesses were able to mitigate the risks associated with environmental regulations and supply chain disruptions by incorporating sustainability into their core strategies. For example, companies in the manufacturing sector that utilized sustainable sourcing were better able to withstand disruptions caused by fluctuating raw material prices, as they had already built relationships with sustainable suppliers. Additionally, SMEs with strong green management practices were better positioned to access new markets, as customers increasingly prioritize sustainability when making purchasing decisions.
Despite these advantages, the research also revealed that many SMEs faced challenges when implementing green practices, especially in resource-constrained environments. Smaller firms often struggled with the upfront costs of green technologies and lacked the technical

expertise to fully integrate sustainability into their operations. Nevertheless, SMEs that were able to overcome these challenges with external support, such as government incentives or industry collaboration, were found to have a stronger competitive position during market disruptions. Thus, green management practices proved to be an essential component for SMEs looking to achieve long-term sustainability and resilience in the face of an evolving market landscape.

4.3. Synergy between strategic flexibility and green management

The research identified a strong synergy between strategic flexibility and green management practices in enhancing the resilience of SMEs. SMEs that successfully integrated both elements were more agile in responding to market disruptions while simultaneously fulfilling their environmental responsibilities. The combination of flexibility in business operations and sustainability in practice allowed SMEs to rapidly adjust their strategies in response to changing market conditions without sacrificing their commitment to sustainability (Kahveci et al., 2025). For instance, SMEs in the manufacturing sector that adopted flexible production processes could quickly shift to more sustainable practices in response to emerging environmental regulations, reducing the potential disruptions caused by regulatory changes.

The integration of both strategic flexibility and green management practices enabled SMEs to take advantage of opportunities that arose during periods of market uncertainty. For example, businesses that already had flexible strategies in place were able to quickly incorporate green innovations, such as eco-friendly materials or energy-efficient technologies, into their products or services. This allowed them to meet the growing consumer demand for sustainable products while simultaneously benefiting from the operational efficiencies that green practices provided. SMEs indicated that the integration of flexibility and green management was a key factor in their ability to thrive during market disruptions.

However, the research also indicated that the successful integration of these two elements required strong leadership and a clear organizational vision. SMEs with leaders who championed both flexibility and sustainability were more likely to successfully align these two approaches, creating a unified strategy that fostered both innovation and resilience. In conclusion, the synergy between strategic flexibility and green management practices was crucial for SMEs aiming to navigate market disruptions effectively, highlighting the importance of combining these strategies to ensure long-term business success and environmental responsibility.

4.4. Barriers to implementing strategic flexibility and green practices in SMEs

The research also highlighted several significant barriers that SMEs face in implementing both strategic flexibility and green management practices. A major challenge identified was the high initial costs associated with adopting green technologies, which many SMEs were unable to afford due to financial constraints. In particular, SMEs in developing economies faced difficulties in accessing the resources necessary to integrate sustainability into their operations (Ragazou et al., 2022). These financial limitations often led SMEs to prioritize short-term survival strategies over long-term sustainability, delaying the implementation of green practices that could have contributed to their resilience during disruptions. SMEs cited the high upfront costs of green initiatives as a key obstacle.

The lack of technical expertise and knowledge regarding green management practices was another barrier. Many SMEs did not have the necessary skills or training to implement energy-efficient technologies, waste reduction strategies, or sustainable sourcing practices effectively. Without the appropriate support, these businesses struggled to fully embrace green practices, which limited their potential to reap the benefits of sustainability. However, external support, such as government subsidies, financial incentives, and industry partnerships, played a critical role in overcoming these barriers. SMEs reported that such external support helped them adopt green practices and mitigate the impact of market disruptions.

The research found that SMEs with access to external resources, such as government incentives or industry collaborations, were able to adopt green practices more easily. These businesses were more likely to implement energy-saving technologies, eco-friendly materials, and waste-reduction programs, ultimately improving their operational efficiency. The data also suggested that such SMEs experienced fewer disruptions due to regulatory changes, as they were already aligned with sustainability trends. Thus, while barriers to implementing both strategic flexibility and green practices exist, external support mechanisms are essential for helping SMEs overcome these challenges and integrate both strategies into their operations.

5. Discussion

5.1. Strategic flexibility in SMEs: key to resilience

The findings emphasize the role of strategic flexibility in enabling SMEs to navigate market disruptions effectively. SMEs with high levels of strategic flexibility were able to adjust their business models, operations, and supply chains in response to unexpected changes. This aligns with the theoretical framework presented by (Shahzad & Arslan, 2023), who suggest that strategic flexibility is a key capability that allows firms to adapt rapidly to changes in the environment. The ability to reconfigure their strategies and operations helped these SMEs minimize disruptions, maintain competitiveness, and capitalize on emerging opportunities during periods of market uncertainty. The findings indicate that SMEs that adopted flexible business strategies reported improved performance and resilience in the face of market volatility.

In times of disruption, SMEs with strategic flexibility can quickly identify shifts in the market and make necessary adjustments. The study found that SMEs that embraced flexibility were able to modify their product offerings, realign their supply chains, and even adopt new business models to meet changing consumer demands or regulatory requirements. This adaptability allowed them to recover from disruptions more quickly than their competitors. The results further support the view that strategic flexibility is a vital capability for SMEs to survive and thrive when facing market turbulence (Gorondutse et al., 2021). This dynamic capability enables SMEs to mitigate risks and respond effectively to changing circumstances, reinforcing the critical role flexibility plays in SME resilience.

5.2. Green management practices and their impact on SME performance

Green management practices have been shown to play a significant role in improving the resilience and performance of SMEs, particularly by enhancing their operational efficiency and brand reputation. SMEs that adopted sustainable practices, such as reducing waste, improving energy efficiency, and sourcing eco-friendly materials, reported significant cost savings and operational improvements. This aligns with previous research, which suggests that integrating green practices into business operations can provide SMEs with both financial and

environmental benefits. The study's findings indicate that SMEs that implemented green management practices saw a reduction in operational costs, demonstrating the tangible advantages of sustainability in business operations.
SMEs that embraced green management practices were also better positioned to meet the increasing consumer demand for environmentally responsible products and services. Customers are becoming more environmentally conscious, and SMEs that align their operations with sustainability goals can attract and retain a loyal customer base. The data from the study shows that SMEs adopting green practices also experienced improved customer satisfaction and brand loyalty. This supports the argument that sustainable business practices contribute not only to environmental goals but also to long-term business growth and competitiveness. SMEs that integrate sustainability into their business strategies gain a competitive advantage, particularly in markets where consumers increasingly prioritize eco-conscious choices.

5.3. Synergy between strategic flexibility and green management

The research found that the combination of strategic flexibility and green management practices is particularly effective in enhancing SME resilience. SMEs that adopted both strategic flexibility and green practices were better equipped to respond to disruptions, adapt to market changes, and innovate. SMEs can report better performance during market disruptions compared to those that adopted only one of the two. This synergy highlights the complementary nature of flexibility and sustainability, where one enables rapid adaptation to changes, while the other ensures that such adaptations align with environmental goals and long-term sustainability. The findings align with (Sapian, 2022), who argue that combining these two approaches allows firms to navigate disruptions while maintaining a commitment to sustainability.
SMEs that combined these two factors could innovate more effectively, adjusting their operations to both market needs and environmental standards. For instance, SMEs that had flexible business models were able to quickly integrate green innovations, such as adopting renewable energy or eco-friendly materials, in response to shifts in customer preferences or regulatory changes. This adaptability allowed them to continue operating efficiently while meeting sustainability demands. The research underscores that integrating strategic flexibility and green management not only supports immediate responses to market disruptions but also positions SMEs for long-term success in an increasingly environmentally conscious market.

5.4. Barriers to implementing strategic flexibility and green management

The research identified several barriers that hinder SMEs from adopting both strategic flexibility and green management practices. High initial costs were the most significant obstacle, especially for SMEs with limited financial resources. Many small firms found it challenging to invest in green technologies and sustainability initiatives due to the high upfront costs involved. These financial constraints, coupled with a lack of technical expertise, made it difficult for SMEs to fully implement green practices in their operations. This aligns with findings from (Kahveci et al., 2025),
Despite these barriers, external support mechanisms played a crucial role in helping SMEs overcome these challenges. SMEs receiving external support, such as government incentives, subsidies, and industry collaborations, which enabled them to adopt green management practices. This external support helped alleviate some of the financial burdens and provided the necessary technical guidance to implement sustainability initiatives effectively. The findings suggest that government policies, financial incentives, and collaboration with industry partners can significantly help SMEs integrate both strategic flexibility and green management, overcoming the barriers that would otherwise hinder their adoption.

Table 1: Summary Table of Key Studies and Their Thematic Contributions to SME Resilience and Green Management Practices

Study	Key Findings	Themes Contributed
Gorondutse et al. (2021)	SMEs with greater strategic flexibility can adapt better to market disruptions, such as the COVID-19 pandemic, by pivoting quickly to new business models.	Strategic Flexibility, Adaptability, Market Disruptions
Muneeb et al. (2023)	SMEs with flexible strategies in manufacturing sectors recovered by reconfiguring their strategies, diversifying products, or altering supply chains.	Strategic Flexibility, Dynamic Capabilities, Operational Flexibility
Sapian (2022)	Green management practices, like energy efficiency and waste reduction, led to cost savings and better brand reputation for SMEs.	Green Management, Cost Efficiency, Brand Reputation
Kahveci et al. (2025)	Integration of strategic flexibility and green management helped SMEs innovate and maintain environmental responsibility during market disruptions.	Synergy Between Flexibility and Sustainability, Innovation
Ragazou et al. (2022)	SMEs in developing economies struggle with the high initial costs and lack of expertise in implementing green practices. External support can help overcome this.	Barriers to Implementation, Green Practices, and External Support
Shahzad & Arslan (2023)	Strategic flexibility is key to enabling SMEs to rapidly adjust to changes in market conditions, improving resilience.	Strategic Flexibility, Resilience, Adaptation

6. Conclusion

This study has explored the critical relationship between strategic flexibility and green management practices in SMEs, particularly focusing on how these factors contribute to resilience in the face of market disruptions. The key findings indicate that SMEs adopting both strategic flexibility and green management practices are better positioned to adapt to and overcome market challenges. Specifically, SMEs with high strategic flexibility were able to adjust their business models and operations effectively during disruptions. SMEs implementing green management practices experienced cost savings and improved customer satisfaction. Another ther SMEs that integrated both strategic flexibility and green practices reported enhanced performance, emphasizing the complementary nature of these two factors in driving SME resilience.
The findings contribute to the existing literature by demonstrating how the combination of strategic flexibility and green management practices offers a comprehensive approach for SMEs to navigate market disruptions. The theoretical implications of this research enrich the understanding of dynamic capabilities in SMEs, showing that flexibility alone is insufficient without the integration of sustainability practices. Moreover, the study highlights the importance of external support mechanisms, such as government incentives and industry collaborations, in overcoming barriers to adopting both practices, particularly for SMEs with limited resources. These insights are valuable for both academics and practitioners in understanding the practical application of these concepts in real-world business environments.
The potential impact of this study extends beyond academic knowledge. For policymakers, the research underscores the need to design support systems that help SMEs implement both flexible and green strategies. Government policies, financial incentives, and partnerships with industry leaders can provide the necessary resources and expertise to foster sustainability and adaptability in SMEs. Practitioners can benefit from the findings by developing strategies that integrate flexibility and sustainability, ensuring that their businesses are better

equipped to cope with future disruptions. Furthermore, this research encourages the development of best practices that SMEs can adopt to enhance their competitive advantage in an increasingly volatile and environmentally conscious market.

Looking forward, future research should explore several areas that require further investigation. First, the challenges associated with implementing green management practices in SMEs, particularly in developing economies, warrant deeper exploration. While this study highlights the role of external support in overcoming barriers, further research could investigate the specific types of support that are most effective. Additionally, research into how SMEs in various industries beyond manufacturing and retail adopt strategic flexibility and green practices could provide a more nuanced understanding of these concepts. Finally, the long-term impact of combining strategic flexibility and green management on SME growth and market positioning in the post-pandemic economy would be an important area for further investigation.

This study provides valuable contributions to the literature on SME resilience by emphasizing the critical role of both strategic flexibility and green management in ensuring business continuity and sustainability during market disruptions. The research offers practical recommendations for SMEs, policymakers, and academics, outlining how these two factors can be integrated into business strategies to foster long-term resilience and success. As the business landscape continues to evolve, this study serves as a foundation for future research and strategy development in the field of SME management.

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