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Green Marketing, Innovation, and Competitive Advantage: Future Research Directions

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Abstract

A study on sustainable marketing demonstrates that green marketing, green innovation, and green competitive advantage are interconnected strategic elements crucial for corporate competitiveness amid growing environmental and regulatory pressures. This research conducted a Systematic Literature Review (SLR) following PRISMA 2020 guidelines, analyzing 30 high-quality Scopus articles (SJR > 1.0) published from 2015 to 2025. The review focused on the relationships among these variables and their relevance to developing countries such as Indonesia. Findings reveal that green marketing functions as a strategic orientation enhancing corporate sustainability value, while green innovation acts as a key mechanism converting this orientation into product differentiation, process efficiency, and competitive market value. Together, they foster a green competitive advantage, especially when supported by institutional frameworks, green IT empowerment, and environmental capabilities. The narrative synthesis proposes a conceptual model where sustainable competitive advantage emerges from integrating green marketing strategies, sustainable innovation, and organizational capabilities. This study highlights the importance of a holistic strategic approach toward sustainability and suggests future research avenues, including digitalization integration, government policy roles, and extending studies to MSMEs in developing countries. It contributes significantly to green marketing theory and offers a solid basis for empirical exploration.

Keywords: Green Marketing; Green Innovation; Green Competitive Advantage; Sustainable; PRISMA 2020.

INTRODUCTION

Global sustainability imperatives have fundamentally reshaped competitive dynamics across industries, with green competitive advantage emerging as a critical differentiator in contemporary business environments. According to the United Nations Environment Programme (UNEP, 2023), the global green economy is projected to reach $12 trillion by 2030, representing approximately 10% of global GDP, yet only 32% of businesses worldwide have integrated comprehensive sustainability strategies into their core operations. The Organisation for Economic Co-operation and Development (OECD, 2024) reports that companies with robust green competitive advantages demonstrate 23% higher market valuations and 18% greater resilience during economic downturn compared to conventional competitors. This performance gap is particularly pronounced in sectors facing stringent environmental regulations, where green competitive advantage directly correlates with market access, regulatory compliance efficiency, and stakeholder legitimacy (Yang et al., 2024). In emerging markets, the World Bank (2023) identifies green competitive advantage as a critical pathway for sustainable economic development, noting that developing nations face a $2.5 trillion annual investment gap in green

infrastructure—a shortfall that constrains their ability to compete in increasingly sustainability-conscious global markets.

Despite this global emphasis on green competitive advantage, developing economies face structural barriers that impede their participation in the green economy. The International Finance Corporation (2023) estimates that while 67% of large corporations in developed nations have achieved measurable green competitive advantages, only 18% of small and medium enterprises (SMEs) in developing countries have successfully implemented green strategies. In Indonesia specifically, data from the Ministry of Cooperatives and SMEs (2024) reveals that among 64.2 million MSMEs, fewer than 8% have adopted any form of green marketing practices, and only 3.2% report systematic green innovation activities. This disparity is compounded by the Indonesian Statistics Agency (BPS, 2024) finding that 73% of MSMEs cite lack of knowledge, 68% report insufficient capital, and 54% identify absence of government incentives as primary barriers to green strategy adoption. These figures underscore the urgency of understanding how green marketing and green innovation can be strategically deployed to build competitive advantage in resource-constrained contexts.

Sustainability has evolved into a mainstream area of global management and marketing research. Increasing environmental regulatory pressure, consumer demands, and global ecological risks are driving organizations to transform the way they design competitive strategies. In this context, green marketing is becoming an increasingly important strategic dimension, integrating environmental considerations into the marketing process, from product design and communication to reputation building (Popović et al., 2023). Parallel to this, green innovation is emerging as a core capability that helps companies create a differentiated advantage while improving efficiency and sustainability performance (Ge et al., 2018).

At the small and medium enterprise (MSME) level, the role of green marketing is increasingly significant, yet adoption remains critically low despite demonstrated benefits. Research by the Asian Development Bank (2023) across six Southeast Asian nations found that MSMEs implementing green marketing strategies achieved average revenue growth of 14.3% compared to 8.7% for non-green competitors, with customer retention rates improving by 22%. In the Indonesian context specifically, data from the Ministry of Industry (2024) shows that green-certified MSMEs command price premiums averaging 15–28% above conventional products, yet represent only 2.1% of the total MSME population. This paradox reflects structural constraints rather than lack of opportunity.

Literature shows that MSMEs have greater adaptive potential in integrating environmentally friendly production processes and innovative strategies due to their more flexible organizational structures (Chen et al., 2024). However, challenges also arise due to limited financial resources, technology, and sustainability literacy, particularly in developing countries. Survey data from the Indonesian Chamber of Commerce (KADIN, 2024) reveals that 81% of MSMEs view green marketing as "important for future competitiveness," yet 76% report insufficient understanding of implementation pathways. Furthermore, green innovation adoption among Indonesian MSMEs stands at merely 4.7%, significantly below the ASEAN average of

11.2% (ASEAN Secretariat, 2024). Research across various regions confirms that a green marketing orientation has a positive effect on MSME profitability, purchasing behavior, and reputation (Martins, 2022; Afum et al., 2023). At the same time, this relationship is often strengthened by green innovation, which serves as a crucial mediating mechanism in improving MSME performance (Nuryakin & Maryati, 2022; Sulaiman, 2025).

On the other hand, the literature highlights external dynamics that influence the effectiveness of green strategies. Factors such as government regulations, supply chain collaboration, and institutional support play a strong role in shaping sustainable competitive advantage (Achmad et al., 2023; Alkahtani et al., 2020; Eltalhi et al., 2025). Strict environmental regulations have been shown to spur the adoption of eco-innovation, while government support increases the capacity of MSMEs to consistently implement green practices. Furthermore, the emergence of green IT empowerment strengthens the digital transformation of green marketing, enabling MSMEs to leverage digital innovation to improve communication, reputation, and sustainability efficiency (Setyaningrum et al., 2023).

Despite the growing research on green marketing and green innovation, literature findings still show some inconsistencies. Some studies demonstrate a direct relationship between green marketing orientation and sustainability performance (Afum et al., 2023; Rehman et al., 2022), while others find the relationship to be indirect and mediated by green innovation or environmental capabilities (Alhemimah et al., 2025; Martins, 2022). Furthermore, the increasingly widespread phenomenon of greenwashing has the potential to undermine the effectiveness of green marketing strategies, particularly in highly competitive industrial contexts (Badhwar et al., 2024). These theoretical and empirical inconsistencies highlight the need for a more systematic and comprehensive analysis.

Globally, research developments between 2015 and 2025 indicate an increasingly integrated approach between environmental strategies, green innovation, consumer behavior, and institutional support (Khanra et al., 2022; Yang et al., 2024). However, most research focuses on developed country contexts, while developing countries like Indonesia remain underrepresented. Yet, Indonesian MSMEs face unique challenges related to green literacy, technology access, and cost sensitivity. Therefore, it is crucial to understand how global patterns of green marketing and green innovation can be translated into the Indonesian context.

The urgency of this research is multidimensional, encompassing economic, environmental, and social imperatives. Economically, Indonesia's commitment under the Paris Agreement requires reducing greenhouse gas emissions by 29% (unconditional) to 41% (conditional) by 2030, with MSMEs contributing approximately 38% of national emissions according to the Ministry of Environment and Forestry (2024). Without systematic green transformation in the MSME sector, national climate targets remain unachievable. Environmentally, the World Resources Institute (2024) projects that Southeast Asian nations, including Indonesia, will face $35 billion in annual climate-related economic losses by 2030 if current emission trajectories persist, with MSMEs disproportionately vulnerable due to limited adaptive capacity. Socially, green competitive advantage offers MSMEs pathways to international market access, with export data from the

Ministry of Trade (2024) showing that green-certified products command 34% higher export values and access to premium markets in Europe and North America—opportunities currently unavailable to 97.9% of Indonesian MSMEs.

This complexity is reinforced by the finding that most research remains theoretically fragmented, employing the RBV, NRBV, TPB, or institutional perspectives without integrated explanations and geographically dominated by developed countries. Consequently, the context of MSMEs in developing countries like Indonesia remains underrepresented (Yang et al., 2024; Khanra et al., 2022). This situation emphasizes the importance of conducting a cross-country systematic review to generate a more comprehensive understanding of how green marketing strategies and green innovation contribute to the formation of sustainable competitive advantage, while also evaluating their relevance to the Indonesian context.

The novelty of this study resides in three distinct contributions that advance existing literature. First, methodologically, this is the first systematic literature review employing PRISMA 2020 guidelines to simultaneously examine green marketing, green innovation, and green competitive advantage as an integrated triad, addressing the fragmentation identified in prior reviews (Khanra et al., 2022; Yang et al., 2024) that examined these constructs in isolation or pairs. By synthesizing 30 high-quality studies (SJR > 1.0) spanning developed and developing contexts, this review generates a comprehensive relationship map that identifies both universal mechanisms and context-specific contingencies—a dual-focus approach absent in previous reviews. Second, theoretically, this study extends Natural Resource-Based View (NRBV) theory by positioning green marketing orientation not merely as a strategic choice but as a capability-building mechanism that enables green innovation, which in turn generates competitive advantage. This sequential mediation framework challenges the dominant direct-effect models in green marketing literature and offers a more nuanced understanding of how sustainability orientations translate into competitive outcomes through innovation pathways. Third, contextually, by explicitly analyzing Indonesian MSME applicability through comparative synthesis of developed versus developing economy findings, this review addresses the critical representation gap noted by multiple scholars, providing actionable insights for the 64.2 million Indonesian MSMEs that currently lack evidence-based green strategy frameworks. This contextualization moves beyond mere description to prescriptive model adaptation, identifying which global patterns transfer effectively and which require local modification—a contribution essential for evidence-based policymaking in emerging economies.

In the context of theoretical fragmentation, empirical inconsistencies, and the lack of representation of the developing country context, this study aims to offer a comprehensive synthesis that can serve as a basis for developing green marketing theory and practice for MSMEs. Using a PRISMA-based Systematic Literature Review (SLR) approach, this study not only maps global findings but also identifies the relationship mechanisms between variables, the mediating and moderating factors that play a role, and opportunities for stronger conceptual integration. Therefore, this study pursues three specific objectives: first, to synthesize global empirical evidence on the relationships among green marketing orientation, green innovation, and green

competitive advantage through systematic analysis of 30 Scopus-indexed studies (SJR > 1.0) published between 2015–2025; second, to construct an integrative conceptual model that explicates the causal mechanisms, mediating pathways, and moderating contingencies linking green marketing strategies to competitive advantage outcomes; and third, to identify theoretical gaps, empirical inconsistencies, and contextual adaptation requirements for applying global green strategy frameworks to Indonesian MSME environments, thereby providing evidence-based foundations for both future research and practical implementation.

METHOD

This study employed a Systematic Literature Review (SLR) approach, developed based on the 2020 PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines. The PRISMA guidelines provide a transparent and systematic methodological framework for the identification, selection, feasibility evaluation, and synthesis of literature, thereby improving the quality and replicability of scientific studies (Page et al., 2021). The SLR approach was chosen because it aligns with the research objective, which is to synthesize global findings on the relationship between green marketing, green innovation, and green competitive advantage over the 2015–2025 timeframe.

Scopus database, one of the largest and most credible international scientific databases. The search was conducted using a combination of keywords such as green marketing, green innovation, sustainable competitive advantage, environmental capabilities, and SMEs. The search process was filtered using journal criteria with SJR > 1.0, so that only articles from highly reputable journals were included in the analysis. The search results yielded 30 scientific articles that met the requirements for quality and topic relevance. The articles cover a variety of country contexts, industrial sectors, and methodological perspectives, in accordance with the research objective of conducting a global synthesis.

In PRISMA-based research, qualitative explanations alone are insufficient to describe how articles are systematically selected. Therefore, the inclusion and exclusion criteria need to be presented in a structured tabular format to allow for transparent evaluation of the selection process. This tabular format also ensures that the articles analyzed truly meet quality standards and theoretical relevance to the research focus, namely green marketing, green innovation, and green competitive advantage. The following table summarizes the criteria used in the selection process, reflecting the PRISMA 2020 methodological standards and the research needs for building a robust global synthesis.

Table 1. Inclusion and Exclusion Criteria

Category	Inclusion Criteria	Exclusion Criteria
Publication Type	Scopus indexed scientific journal articles	Books, book chapters, editorials, commentaries, conferences
Journal Quality	Journals with SJR value > 1.0	Journals under SJR 1.0
Time span	Publications 2015–2025	Publications before 2015

Main Topics	Research *green marketing* , *green innovation* , or *green competitive advantage*	Does not address any of the three core themes
Additional Construction	Studies that include relevant moderating/mediating variables (e.g. green IT empowerment, environmental capability)	Variables that are completely unrelated to sustainability
Research methods	Empirical studies (quantitative/qualitative), conceptual studies	Non-research, non-evidence-based article
Data Availability	Full text available	Full text not available

Source: primary data processed 2025

The inclusion and exclusion criteria table serves as a basic framework for the study selection process, ensuring that only relevant and high-quality articles are further analyzed. This approach not only enhances transparency but also aligns with the PRISMA 2020 guidelines, which prioritize accountability and methodological rigor. Using this table allows researchers to avoid selection bias and ensure that all articles included in the analysis are directly related to the three core research constructs. Furthermore, these criteria support a more comprehensive and robust literature synthesis, enabling the research findings to significantly contribute to the development of green marketing and green innovation theory and practice in both global and developing countries like Indonesia.

To maintain methodological transparency and ensure a systematic evaluation of the article selection process, this study presents the PRISMA 2020 stages in tabular form. This presentation is crucial because it clearly and structurally demonstrates the process of article identification, screening, eligibility assessment, and inclusion. By displaying the number of articles at each stage, the PRISMA table illustrates how the final dataset was objectively formed without selection bias. This also aligns with the PRISMA 2020 principles (Page et al., 2021), which emphasize systematic reporting to enhance research replicability and validity.

Table 2. PRISMA 2020 Selection Stages

PRISMA 2020 Stages	**Process Description**	**Number of Articles**
Identification	The initial search via Scopus used the keywords: green marketing, green innovation, sustainable competitive advantage, environmental capabilities, and SMEs. SJR filter > 1.0 is applied.	30
Screening	Titles and abstracts were screened based on topic relevance to three key constructs. Irrelevant articles were excluded at this stage.	30 retained (0 removed)
Eligibility	Full-text evaluation to ensure appropriateness of substance and contribution to the analysis of relationships between variables.	30 eligible (0 excluded)
Included	Articles that met all inclusion criteria were used in thematic analysis and narrative synthesis.	30 final inclusion articles

Source: primary data processed 2025

The PRISMA 2020 stages table shows that all articles identified through the Scopus search met the established selection criteria. This confirms that the research dataset is homogeneous in terms of quality (SJR > 1.0) and thematic relevance, thus supporting the accuracy of theoretical synthesis and analysis of inter-variable relationships. The presentation of this table also strengthens the credibility of the methodology by demonstrating a bias-free selection process that meets international standards, and provides a solid foundation for the thematic content analysis and narrative synthesis stages conducted in the following sections.

The analytical procedure in this study is designed to generate a comprehensive understanding of the relationship between green marketing, green innovation, and green competitive advantage through a two-stage approach: thematic content analysis and narrative synthesis . This process starts from data extracted from 30 Scopus-indexed articles as listed in the data extraction matrix in the file, which contains elements of authors, journals, variables, and key findings. This structure ensures that each finding is reviewed in depth and systematically, in accordance with the PRISMA framework and the principle of methodological transparency.

a. *Thematic Content Analysis*

Thematic analysis was conducted as the first step to organize the data into categories consistent with the research focus. The coding process drew on three main categories that recurred in the reviewed articles, as well as additional categories that emerged from variable patterns in the literature. The three main categories are:

1. **Green Marketing Orientation** . This category includes studies that discuss the strategic and internal orientation of green marketing, as described by Papadas et al. (2019) and other studies related to green market orientation in the files. These findings are also reflected in Martins' (2022) research on the relationship between green marketing and MSME profitability.
2. **Green Innovation and Environmental Capabilities** . This category includes articles that emphasize green innovation, environmental capabilities, and the mediating role of green innovation, as found in Ge et al. (2018) and Afum et al. (2023).
3. **Green Competitive Advantage** . This theme highlights how green orientation and green innovation lead to sustainable competitive advantage, as described in Alhemimah et al. (2025).

In addition to these three core categories, mediating and moderating variables were also found to enrich the relationship framework, such as **green IT empowerment** as described by Setyaningrum et al. (2023) and **eco-regulation** and **government support** as described in Achmad et al. (2023).

Table 3. Thematic Coding Categories

Main Category	Focus Description	Example Articles in the Dataset
Green Marketing Orientation	Green strategy, green market orientation, green purchasing behavior	Papadas et al. (2019); Martins (2022)

Green Innovation & Environmental Capabilities	Green innovation, eco-innovation, environmental capability	Ge et al. (2018) ; Afum et al. (2023)
Green Competitive Advantage	Competitive advantage based on green innovation and green strategy	Alhemimah et al. (2025)
Additional Mediating/Moderative Variables	Green IT empowerment, eco-regulation, government support	Setyaningrum et al. (2023) ; Ahmad et al. (2023)

Source: primary data processed 2025

This table serves to map the relationships between articles and ensure that the analytical framework reflects the depth and diversity of the literature reviewed. These categories demonstrate that the studies in the dataset consistently link organizational strategy, innovative capabilities, and competitive advantage outcomes. Additional categories such as green IT empowerment and eco-regulation enrich the mapping by demonstrating that digital and institutional factors play a significant role in strengthening or mediating key relationships. Thus, this thematic analysis provides an important foundation for understanding how the three core variables—green marketing, green innovation, and green competitive advantage—interact across country and sector contexts.

b. Narrative Synthesis

The next stage is narrative synthesis, which is used to integrate findings from articles from different countries and sectors. This approach allows for a comprehensive understanding of the mechanisms underlying the relationships between variables. Narrative synthesis combines variables and findings across studies to identify patterns and conceptual mechanistic pathways:

1. **Ge et al. (2018)** show how green innovation strategies can pave the way to sustainable competitive advantage, emphasizing the limits and conditions of green policy implementation.
2. **Martins (2022)** provides evidence that green purchasing behavior acts as an important link between green marketing strategies and MSME profitability.
3. **Alhemimah et al. (2025)** emphasized the relationship between green capabilities, organizational culture, and green marketing strategies as the main drivers of green competitive advantage.

This approach helps explain how these elements complement each other, presenting a complete picture that competitive advantage does not arise solely from the adoption of green marketing but from a combination of internal capabilities, continuous innovation, institutional support, and the use of technology.

A global approach is maintained because the articles in the dataset come from various countries and sectors, ranging from Asia, Europe, to Africa, as seen from the geographic distribution of the files. This diverse context opens up opportunities to understand the structural and institutional differences that influence the effectiveness of green strategies. For example, research by Setyaningrum et al. (2023) emphasizes the role of green IT empowerment in the context of Indonesian MSMEs, while studies such as Ismail et al. (2023) highlight the role of green absorptive capacity in the East African context.

This global approach offers methodological advantages because it allows for the identification of both universal and context-specific patterns. The identified global patterns are then used as a basis for analysis to assess the relevance of the findings for developing countries like Indonesia. Thus, this synthesis not only summarizes international findings but also enriches local understanding of how green marketing and green innovation strategies can be effectively implemented in the context of MSMEs.

RESULTS AND DISCUSSION

The research results obtained through the Systematic Literature Review approach based on PRISMA 2020 demonstrate a rigorous and structured article selection process. The PRISMA diagram used in this study displays the selection process from the identification stage to final inclusion. In the identification stage, a search through the Scopus database yielded 1,069 articles relevant to the keywords used. However, after the duplication process, 839 articles were eliminated, leaving 230 articles for the screening stage. In the screening stage, titles and abstracts were analyzed to assess thematic suitability with the research focus. A total of 162 articles did not meet the criteria because they did not examine the relationship between green marketing, green innovation, and green competitive advantage. Thus, 68 articles proceeded to the next stage, namely the full-text search. Of these, 38 articles were inaccessible due to limited document availability. Finally, 30 articles were deemed substantially suitable at the eligibility stage and became the final articles analyzed in this SLR. The diagram shows the number of articles at each stage, from the identification process to the final inclusion.

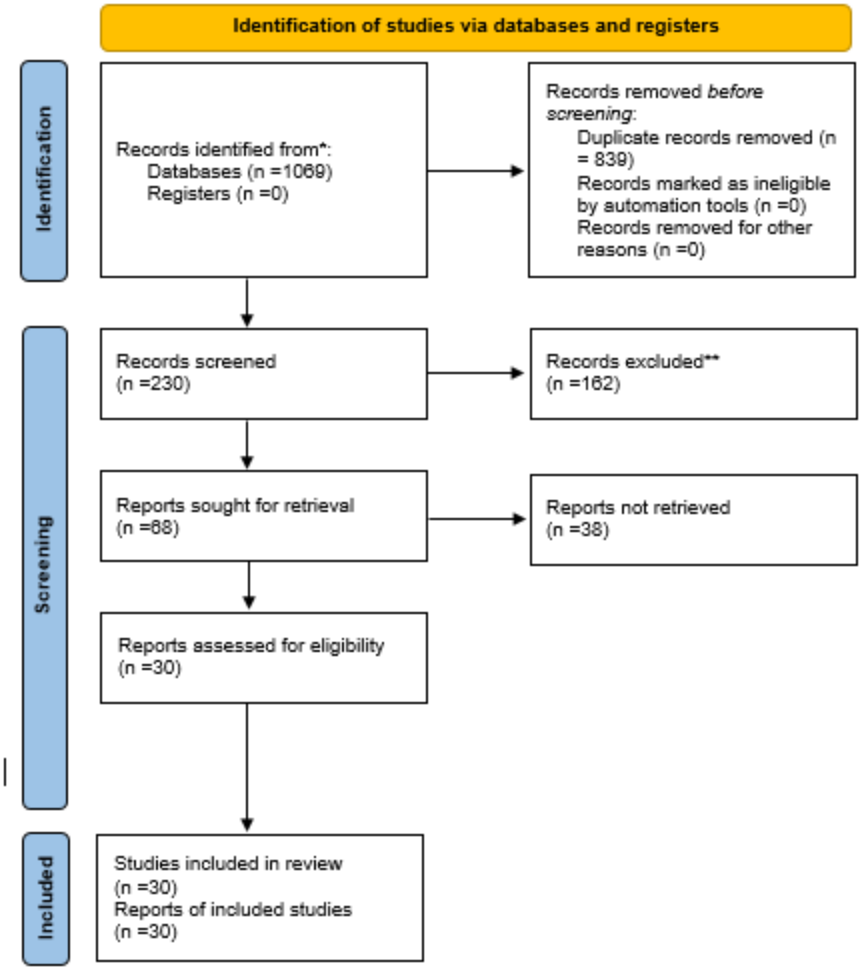

Figure 1. PRISMA 2020 Flow Diagram

A thematic analysis of the 30 included articles revealed three main clusters that consistently emerged in the literature during the 2015–2025 period. The first cluster is green marketing orientation, which serves as a strategic foundation for building corporate value. Articles in this cluster emphasize that green marketing orientation is not merely an external communication effort but a values-based strategy that shapes consumer perceptions and corporate image. Studies by Martins (2022) and Afum et al. (2023) demonstrate that this orientation can increase consumer trust, preference for green products, and corporate legitimacy in sustainable markets. These findings confirm that green marketing significantly contributes to consumer behavior and brand image, supporting competitive advantage.

The second cluster relates to the role of green innovation and environmental capabilities. The analysis shows that green innovation is a crucial component mediating the relationship between green marketing orientation and competitive advantage. Studies such as Ge et al. (2018) show that eco-innovation can strengthen product differentiation and improve production process efficiency through better resource utilization. Other articles, such as Afum et al. (2023), show that

environmental capabilities serve as a foundation for companies to adapt and evaluate available green technologies. These findings demonstrate that green innovation not only plays a role in reducing environmental impacts but also increases a company's strategic bargaining power over its competitors.

The third cluster relates to green competitive advantage, which is the primary outcome in various studies reviewed. A study by Alhemimah et al. (2025) shows that sustainable competitive advantage emerges as a result of a strategic combination of green marketing orientation, green innovation, and environmental capabilities. Companies that consistently implement green strategies have been shown to have a higher ability to create long-term value through a positive reputation, operational efficiency, and adaptation to environmental regulations. This advantage is becoming increasingly important in the context of global competition that demands socially and ecologically responsible business practices.

A cross-article analysis also shows that there are supporting variables that strengthen the relationship between green marketing and green innovation on competitive advantage. One important finding is the role of green IT empowerment, as demonstrated in the research of Setyaningrum et al. (2023). The article illustrates that the use of green-oriented information technology can accelerate the digital transformation process of MSMEs, enabling them to adopt green marketing practices more effectively. Furthermore, the research of Achmad et al. (2023) emphasizes that institutional and regulatory support act as catalysts in strengthening the implementation of green strategies. External factors such as government policies and eco-regulations provide both pressure and opportunities for companies to improve their sustainability standards.

Table 4. Thematic Clusters Based on 30 Selected Articles

Cluster	Focus of Analysis	Supporting Articles
Green Marketing Orientation	Strategy, consumer perception, green value	Martins (2022); Afum et al. (2023)
Green Innovation & Environmental Capability	Eco-innovation, environmental capability	Ge et al. (2018)
Green Competitive Advantage	Green differentiation, sustainable performance	Alhemimah et al. (2025)
Mediator / Moderator	IT empowerment, regulation, institutional support	Setyaningrum et al. (2023); Ahmad et al. (2023)

Source: primary data processed 2025

The narrative synthesis results show that green competitive advantage emerges through a multi-layered mechanism, where green marketing orientation serves as a strategic driver, green innovation acts as a transformation pathway, and environmental capabilities strengthen a company's ability to adapt to external changes. Thus, competitive advantage is not simply an end result, but rather a manifestation of the synergistic relationship between marketing strategy, technological innovation, and institutional support.

The SLR results also revealed several important research gaps. First, few studies have tested an integrative model that simultaneously encompasses all three key variables: green

marketing, green innovation, and green competitive advantage. Most studies only examine two variables, leaving the comprehensive relationship largely unexplored. Second, research on MSMEs in developing countries, including Indonesia, remains very limited. Although some studies address this context, such as Setyaningrum et al. (2023), these are insufficient to generate strong generalizations. Third, the integration of digital factors such as green IT empowerment and institutional factors such as eco-regulation into a single conceptual model is still rare, despite the significant role both play in strengthening green strategies.

A systematic analysis of thirty articles successfully included in the SLR process reveals that research on green marketing, green innovation, and green competitive advantage has grown significantly over the past decade, yet several inconsistencies and gaps remain that remain unexplained. While most studies agree that green marketing orientation and green innovation are important factors in building sustainable competitive advantage, each study demonstrates variation in the relationship mechanisms, the strength of influence, and the specific conditions that determine the effectiveness of these strategies. Furthermore, the diverse research contexts indicate that cultural, technological, and institutional factors in each country contribute differently to the dynamics of green strategies, making the findings difficult to generalize.

To clarify research areas that still require further investigation, a structured research gap mapping is necessary. The following table summarizes the various conceptual, methodological, empirical, and contextual gaps identified from the literature synthesis. Identifying these gaps is crucial for providing a clearer direction for future research, particularly in the context of developing countries like Indonesia, which have different institutional characteristics and technological readiness than developed countries.

Table 5. Research Gap Based on SLR Results

GAP Types	Explanation of GAP in Literature	Scientific Implications	Future Research Opportunities
GAP 1 – Integrative Model Is Not Consistent	Most articles examine only two variables, for example, green marketing → green behavior or green innovation → performance. Very few studies examine the complete relationship between green marketing, green innovation, and green competitive advantage in a single, simultaneous model.	The theory of the relationship between the three core variables is still fragmented and does not provide a complete theoretical picture.	Developing an integrative model that tests the direct and indirect relationships between three main variables. Including testing for mediation and moderation.
GAP 2 – Lack of Research on MSMEs in Developing Countries	The SLR shows that most research originates from Europe, China, and the Middle East. The context of MSMEs in Indonesia and other developing countries is very limited .	Generalization of results to the context of developing countries is still weak, due to differences in regulations, technology, and environmental readiness.	Conducting empirical research focused on Indonesian MSMEs , including the role of digitalization, government support, and green innovation readiness.

GAP 3 – Digitalization Factors Not Yet Fully Integrated	Although green IT empowerment appears in several articles, digitalization has not been comprehensively positioned as a mediator or moderator in the green marketing–innovation–competitive advantage relationship.	The role of digital is still considered a supporter, not a strategic component in forming competitive advantage.	Testing the role of digital , such as green IT empowerment and green technology as mediating or moderating variables.
GAP 4 – Institutional Factors Not Yet Discussed in Depth	Regulatory support and government policies appear in several studies, but have not been explicitly combined into a single, robust conceptual model.	Institutional theory has not been fully integrated into the MSME sustainability model.	Developing a model based on eco-regulation, green policies, and government support as a moderator/mediator.
GAP 5 – Inconsistency of Empirical Findings	Some studies suggest that green marketing has a direct impact on competitive advantage, while other studies suggest an indirect relationship through green innovation.	The inconsistencies indicate the need for a stronger theoretical framework and consistent testing methodology.	Replication of studies using SEM, PLS, or multilevel model methods to obtain consistency of relationships between variables.
GAP 6 – Limitations of Environmental Capability Measurement	Environmental capability is often mentioned, but indicators vary widely between studies, making comparisons difficult.	There is no established standard of measurement.	Developing a more valid and reliable environmental capability measurement scale .

Source: primary data processed 2025

The research gap mapping shows that although the literature on green marketing, green innovation, and green competitive advantage has grown significantly, research in this area still leaves ample room for further exploration. These three key variables have not been widely analyzed in a single integrated model, so the causal relationships and mediating mechanisms linking green marketing strategies to competitive advantage outcomes still require more in-depth empirical testing. Furthermore, the contextual gap between developed and developing countries, particularly regarding green technology readiness and institutional pressures, highlights the importance of research that is more sensitive to local contexts, such as those of Indonesian MSMEs.

The lack of integration of digitalization and regulatory factors into a single model also poses a significant challenge, given that both aspects have been shown to significantly influence the effectiveness of green strategies in numerous studies. Therefore, the identified research gap not only illustrates a gap in the literature but also opens up significant opportunities for researchers to formulate new theoretical contributions and generate more relevant and contextual empirical findings. This gap identification provides a strong foundation for subsequent research to develop more comprehensive conceptual models, simultaneously test supporting factors, and broaden understanding of the dynamics of green strategies in a constantly changing business environment.

Conceptual Model

A conceptual model generated from a synthesis of thirty Scopus-indexed articles shows that the relationship between green marketing, green innovation, and green competitive advantage is structured and interdependent. This model is based on the finding that a green marketing orientation serves as an organizational strategic foundation, encouraging companies to adopt sustainable values in product design, brand communications, and market strategies. However, this orientation cannot fully generate competitive advantage without the company's ability to transform this green strategy into product and process innovation.

Green innovation emerges as a key connecting mechanism that channels the influence of green marketing toward green competitive advantage. Articles in the dataset show that green innovation, whether in the form of the use of environmentally friendly materials, increased production process efficiency, or the development of green technologies, enhances a company's ability to meet the needs of increasingly environmentally conscious consumers. Furthermore, green innovation enhances the added value of products that are difficult for competitors to imitate, thus creating sustainable differentiation. In this model, green innovation is positioned as a mediator explaining how green marketing strategies can be transformed into tangible forms of competitive advantage.

This model is expanded through the integration of external and internal factors that act as reinforcing relationships between the three core variables. Technological factors, particularly green IT empowerment, serve as a catalyst in accelerating the adoption of green innovations, enabling MSMEs to access market information, improve the efficiency of digital promotions, and expand market reach at low costs. On the other hand, institutional support and environmental regulations play a role in strengthening the credibility of companies in implementing green strategies and provide normative pressure that encourages organizations to improve sustainability performance. Thus, this conceptual model positions the external environment as a critical element influencing the effectiveness of green strategies, particularly in the context of developing countries. This model is shown in Figure 2.

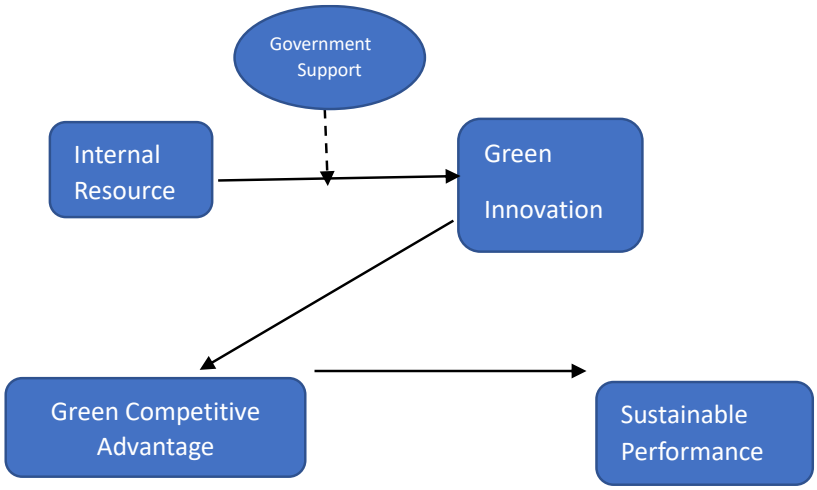

Figure 2. Conceptual Frame

Overall, the developed conceptual model depicts a multi-layered relationship in which green marketing orientation influences green competitive advantage through green innovation pathways, and this relationship is strengthened by environmental capabilities, green technology utilization, and institutional support. This model not only explains the causal mechanisms between variables but also provides a conceptual framework that can be used in empirical testing in the context of Indonesian MSMEs, which have unique characteristics in terms of culture, regulations, and technological limitations.

Theoretical Implications

This study contributes significantly to green marketing and sustainability theory by, first, proposing a conceptual model that clarifies green marketing is not a standalone strategy but must be integrated with green innovation and organizational capabilities within a broader framework. Second, it validates the Natural Resource-Based View (NRBV), showing that environmental capabilities—encompassing technical mitigation, strategic orientation, and innovation—are key to converting green value into market competitiveness. Third, it advances literature by integrating digitalization and institutional pressures as core, not secondary, factors in building sustainable advantage, highlighting their critical role in today's digital and regulatory landscape. Fourth, it provides a theoretical foundation for an integrative model combining marketing, innovation, and institutional perspectives to analyze green competitive advantage, particularly for MSMEs.

Practical Implications

This research offers practical implications for businesses and policymakers, emphasizing that a green marketing orientation must be substantiated by concrete green innovations—such as eco-friendly products, renewable energy use, and resource efficiency—to achieve real competitive advantage and enhance brand image. For Indonesian MSMEs in particular, leveraging digital technology and accessing government support, including regulations, fiscal incentives, and training, are crucial to accelerating their sustainable transformation and building necessary capacities. The findings further highlight to policymakers that effective sustainability strategies require a supportive regulatory and institutional framework that integrates green marketing, innovation, and digitalization, thereby fostering a conducive environment for green adoption and contributing to broader national economic and sustainable development goals.

CONCLUSION

This systematic review of thirty Scopus-indexed articles following PRISMA 2020 guidelines explores the interplay between green marketing, green innovation, and green competitive advantage. It concludes that green marketing orientation is a vital sustainability strategy but requires strong green innovation capabilities to translate into a competitive advantage. Green innovation mediates this relationship by creating differentiated products, efficient processes, and unique value challenging for competitors to replicate. Moreover, sustainable competitive advantage depends not only on internal factors but also on external influences such as institutional

support, government policies, and digital technologies that enhance the synergy between green marketing and innovation. Despite expanding studies, key gaps remain, including the lack of a comprehensive integrative model, minimal research on MSMEs in developing countries like Indonesia, and inadequate frameworks combining digitalization and institutional aspects. Addressing these gaps offers promising avenues for future research to deepen theoretical understanding and guide practical sustainability transformations amid rising global environmental challenges.

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