

Green Marketing Mix as a Competitive Advantage Strategy in Improving the Marketing Performance of MSMEs in Indonesia

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ABSTRACT

This research aims to investigate whether the green marketing mix (green product, price, place, and promotion) is associated with the competitive advantage and marketing success of micro, small, and medium-sized enterprises (MSMEs) in Indonesia. The methodology employed quantitative data collection from 100 MSMEs in the Jabodetabek region, using Structural Equation Modeling (SEM) in SmartPLS. The results showed that the green product ($\beta=0.277$, $p=0.021$) and the green price ($\beta=0.481$, $p=0.004$) positively influenced competitive advantage while the green place ($\beta=0.173$, $p=0.338$) and green promotion ($\beta=0.238$, $p=0.054$) did not. Regarding the impact of the green marketing mix on marketing success, the result showed that the green price had positive effects ($\beta=0.405$, $p=0.005$). At the same time, there were no statistically significant positive effects from the green product ($p=0.202$), green place ($p=0.728$), and green promotion ($p=0.061$). The result also indicated that competitive advantage mediated the relationships between green price (VAF=57.3%) and green product (VAF=74.4%) and marketing performance. Still, it did not mediate the relationships between green place and green promotion and marketing performance. Still, it did not mediate the relationships between green place and green promotion and marketing performance.

Kajian ini bertujuan untuk menyiasat sama ada campuran pemasaran hijau (produk hijau, harga hijau, tempat hijau, dan promosi hijau) berkaitan dengan kelebihan daya saing dan prestasi pemasaran perusahaan mikro, kecil, dan sederhana (PMKS) di Indonesia. Kajian ini menggunakan pendekatan kuantitatif dengan pengumpulan data dari pada 100 PMKS di wilayah Jabodetabek serta dianalisis menggunakan Pemodelan Persamaan Berstruktur (SEM) melalui perisian SmartPLS. Dapatan menunjukkan bahwa produk hijau ($\beta=0.277$, $p=0.021$) dan harga hijau ($\beta=0.481$, $p=0.004$) memberi pengaruh positif terhadap kelebihan daya saing, manakala tempat hijau ($\beta=0.173$, $p=0.338$) dan promosi hijau ($\beta=0.238$, $p=0.054$) tidak menunjukkan pengaruh yang signifikan. Dari segi kesan terhadap prestasi pemasaran, hanya harga hijau ($\beta=0.481$, $p=0.004$) memberi pengaruh positif terhadap kelebihan daya saing, manakala tempat hijau ($\beta=0.173$, $p=0.338$) dan promosi hijau ($\beta=0.238$, $p=0.054$) tidak menunjukkan pengaruh yang signifikan. Dari segi kesan terhadap prestasi pemasaran, hanya harga hijau ($\beta=0.405$, $p=0.005$) didapati mempunyai kesan positif yang signifikan, sementara produk hijau ($p=0.202$), tempat hijau ($p=0.728$) dan promosi hijau ($p=0.061$) tidak menunjukkan kesan yang signifikan secara statistik. Selain itu, kelebihan daya saing didapati memediasi hubungan antara harga hijau (VAF=57.3%) dan produk hijau (VAF=74.4%) dengan prestasi pemasaran, namun tidak memediasi hubungan antara tempat hijau dan promosi hijau dengan prestasi pemasaran.



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INTRODUCTION

Across various domains, the consequences of climate change are expected to be profound and persistent. Particularly, global climate change raises serious economic concerns and poses great threats to the environment and to the livelihoods of people around the world. If no effective actions are taken to manage the climate change challenges, we are heading towards an almost 3°C increase in global average temperature, and therefore, in the next 30 years, world GDP (Gross Domestic Product) is expected to fall by 18% (Maziriri, 2020). If the emissions of greenhouse gases remain constant, Indonesia by 2050 will lose 30-40% of its GDP (Dzulkarnain et al., 2019). Therefore, all segments of the economy, including the MSMEs (Micro, Small, and Medium-Sized Enterprises) sector, which is the backbone of the Indonesian economy, will need to incorporate sustainability (Daniel, 2019).

MSMEs make up the majority of Indonesia's economy, contributing over 61% of the country's GDP and employing 97% of its workers (Rahaduari et al., 2021). However, MSMEs report a number of challenges when it comes to incorporating sustainable business practices (Fadli, Heriyanto & Augustin, 2023). In recent years, MSMEs have struggled to implement green marketing strategies as customers have become more conscious of their environmental impact. These enterprises have difficulty obtaining reliable and actionable data and tend to have limited market resources (Erwin, Suade & Poernomo, 2021).

Indonesian MSMEs have been fundamental to the economic backbone of the country, yet still experience several long-standing, marketing-related issues, which have the potential to drive down their competitiveness in the increasingly aggressive, digitized marketplaces in which they function. Most MSMEs utilize the marketing strategy of minimal promotion. Additionally, these strategies could also be ineffective given the fact that MSMEs usually employ distribution channel system in conjunction with insufficient customer knowledge, inadequate financing, and/or lack of managerial/digital marketing, and minimal advocacy of marketing, where MSMEs have performed poorly, and even in the marketing activities where there is automation (Khoiri et al., 2024; Lestari, 2022). Moreover, apart from the absence of marketing activities at scale, the MSMEs are facing major shifts in consumer behavior, and there are more demanding factors like the eco-friendliness of the marketing approaches, which the MSMEs are not able to handle with traditional marketing techniques (Atika, 2023; Mendrofa 2024). For that reason, the majority of the MSMEs of Indonesia are unable to sustain differentiation and development of long-term customer collaboration, which identifies the gap in marketing techniques to be focused on digital marketing with the aim of integrating eco-friendly approached to enhance the competitiveness and marketing performance of the MSMEs.

Based on the environmental advantages of offered products and services, such as green marketing, it has become significant approach for companies wanting to secure an increasingly competitive edge and become sustainable (Aqmal, 2022). However, the effect of eco-friendly marketing on MSMEs, particularly in developing countries like Indonesia, is still unexplored (Ardianingsih, et al., 2024). While large corporates have the capacity for the same (Khan, Sheikh & Zainab, 2024). The green marketing mix (GMM) includes green product, green price, green place, and green promotion. This means that a company considers environmental factors when making marketing decision (Kilic & Ozdemir, 2018; Osiako, Wikurendra & Abdeljawad, 2022; Prakash, 2002). The GMM focuses on the creation of environmentally sustainable products, pricing based on the cost and value of the environmental issue, selection of distribution channels that negatively affect the environment the least, and promotion that communicates to consumers the environmentally responsible and sustainably committed company (Farradia, 2021; Osiako, Wikurendra & Abdeljawad, 2022). The GMM does not replace the traditional marketing mix, which includes roduct, price, place, and promotion. Instead, it adds a new layer. The GMM, on the other hand, integrates companies' sustainability goals into the 4Ps thereby enabling them to develop marketing programs aligned with their overall environmental and sustainability objectives (Osiako, Wikurendra & Abdeljawad, 2022). Many prior studies have described GMM as a strategic tool used by companies to mitigate their adverse ecological effects and, at the same time, influence customers' perceptions of the company, their intention to purchase from the company, and the company's reputation

based on the green attributes of the company's products, pricing, distribution, and communications (Govender & Govender, 2016; Sienatra & Evani, 2021). In other words, the GMM provides companies, including MSMEs, with a strategic mechanism for pursuing environmentally based differentiation and long-term competitive advantage. The study specifically looks into the impact of green marketing strategies on the competitive edge and marketing performance of MSMEs in Indonesia while also attempting to fill a gap in the research literature. The effectiveness of green marketing for larger companies has been studied in depth (Duffett et al. 2018), however, there is a need for a better understanding of the successful implementation of these methods by MSMEs. This study differs from prior research by examining the mediating effect of competitive advantage in the relationship between the elements of green marketing (i.e., green product, green price, green place, and green promotion) and marketing success (Khan et al. 2020). Additionally, this study provides empirical data from Indonesia, a developing economy in which MSMEs are essential for maintaining and enhancing economic stability and development (Hanaysha, Abuowda & Gulseven 2024). Finally, the findings of this study will provide helpful information to MSMEs in the Jabodetabek area on how to successfully implement green marketing strategies to enhance their competitiveness in both local and international markets (Nuryakin & Maryati, 2022).

METHODS

This study is grounded in the Resource-Based View (RBV) and the Natural Resource-Based View (NRBV). RBV explains that a firm can achieve sustained competitive advantage when it controls resources and capabilities that are valuable, rare, difficult to imitate, and non-substitutable, while NRBV extends this reasoning to capabilities developed in response to environmental constraints and opportunities (Habib et al., 2021; Miller, 2019). From this perspective, a green marketing activity is not automatically a strategic resource. It creates competitive advantage only when it is embedded in accumulated knowledge, organizational routines, supplier and customer relationships, credible environmental information, and coordinated managerial practices that competitors cannot easily reproduce. The green marketing mix can therefore be understood as a market-facing capability bundle that converts environmental orientation into differentiation, superior customer value, cost efficiency, reputation, and ultimately marketing performance (Shaukat et al., 2023; Tjahjadi et al., 2023).

Green product capability refers not merely to offering an environmentally friendly item, but to the firm's accumulated ability to identify lower-impact materials, redesign products and packaging, coordinate with responsible suppliers, maintain quality, and communicate verifiable environmental benefits. Under RBV and NRBV, these interconnected routines can be valuable because they respond to growing environmental demand, rare among less-prepared competitors, and difficult to imitate because they depend on learning, supplier relationships, technical knowledge, and reputation developed over time. When these capabilities create meaningful product differentiation or lower lifecycle costs, they can generate competitive advantage (Baeshen, Soomro & Bhutto, 2021; Zameer et al., 2022). Empirical studies also suggest that green product development and an innovation-oriented sustainability culture can strengthen market positioning and improve sales growth, market share, and customer loyalty (Alshebami, 2023; Muangmee et al., 2021; Kussujaniatun, Sujatmika & Hartati, 2022; Rachmawati, Wijaya & Pambreni, 2023). Therefore, the following hypotheses are proposed:

H₁: Green product positively affects competitive advantage.

H₂: Green product positively affects marketing performance.

A well-designed green pricing program could aid a company's development of product-market and financial advantages as part of an overall green marketing strategy (Goh et al. 2019; Leonidou, Katsikeas & Morgan 2013). As a strategic tool, green pricing enables a company to generate additional revenue from its customers. At the same time, it allows the company to signal its environmental responsibility, distinguish itself, and create a sustainable competitive advantage through consistent messaging across

the marketing mix (Yıldırım, Yıldırım & Urul 2024). The same relationship exists between consumer perception of green pricing and consumer perceptions of other dimensions of the marketing mix because when consumers perceive green pricing as being fair and providing sufficient value for the price paid for a green product or service, consumers are likely to exhibit greater trust in the product/service and perceived value, and therefore greater willingness to pay for the product or service (Shaukat et al. 2023; Sindhu et al. 2025). Thus, the success of green pricing will depend on the degree to which companies can successfully integrate green pricing into their entire marketing mix and can develop a regulatory environment that supports the use of green pricing, such as aligned supply chain strategies and government incentives that support the efficiency and profitability of using green pricing to encourage the purchase of green products or services (Su et al., 2020). Based on these elaborations, the following hypotheses are proposed:

H₃: Green price positively affects competitive advantage.

H₄: Green price positively affects marketing performance.

Green places, including environmental distribution, green logistics, and sustainable supply chains, could provide strategic opportunities for organizations to develop a competitive advantage and enhance their marketing performance. Prior research has shown that organizations utilizing eco-efficient distribution systems, reverse logistics, and environmentally responsible suppliers represent a significant portion of those strategic capabilities through which organizations can meet increasing regulatory pressures and the growing desire for consumers to purchase sustainable goods and services to ultimately create competitive advantage (Cosimato & Troisi 2015; Laari, Töyli & Ojala 2018). Further research has found that integrating green supply chain practices into an organization's overall competitive strategy results in improved operational efficiency, service quality, and environmental performance, all of which support differentiation and cost advantages that are likely to be difficult for other organizations to replicate (Maas, Schuster & Hartmann 2014; Norddin et al. 2021). Green place initiatives also improve an organization's brand image and corporate reputation by reinforcing perceptions of environmental stewardship across the entire distribution channel, thereby enhancing customer trust and loyalty and, subsequently, marketing performance (Pacevičiūtė & Razbadauskaitė-Venskė, 2023). Therefore, based on this past research, the following hypotheses were developed:

H₅: Green place positively affects competitive advantage.

H₆: Green place positively affects marketing performance.

Several prior studies have consistently found that green marketing and promotional strategies positively affect a corporation's image, brand equity, and trust in consumers, which represent critical paths through which corporations achieve a competitive advantage in both developed and developing markets (Mukonza & Swarts 2020; Muniba Ali et al. 2023; Shaukat & Ming 2022; Solanki & Lakhera 2023). Firms that effectively communicate their commitment to the environment, as well as their green innovation, will increase consumers' knowledge and awareness about green issues and create a higher level of consumer demand for green products, thus increasing their firm's market size and the overall marketing performance of their firm through an increase in sales, customer retention, and market share (Jaiswal et al. 2022; Muniba Ali et al. 2023). The effect of green promotion is enhanced when external promotional communications are supported internally by an organization's capacity to innovate ecologically (green innovation), because it has been demonstrated that ecological innovation mediates the association between green marketing orientation and the resultant marketing performance, thus allowing organizations to develop a more sustainable competitive position (Adusei, Demah & Mensah 2024; Sudirman et al. 2024). The following hypotheses are proposed based on these elaborations:

H₇: Green promotion positively affects competitive advantage.

H₈: Green promotion positively affects marketing performance.

Green competitive advantage is frequently cited as a mediating variable that links green strategy to improved performance. Literature has shown that there are no direct performance benefits from green innovation, green supply chain management, or environmental orientation, but instead these strategies will first develop a distinct green capability that forms the base for competitive advantage (Liboni et al. 2023; Novitasari & Agustia 2022; Úbeda-García et al. 2022). Research from different environments shows that ambidexterity in green innovation, where both exploration and exploitation are combined, increases green competitive advantage, which ultimately creates sustainable performance, and thus clearly demonstrates the mediation path from green strategies to performance via competitive advantage (Baquero 2024; Úbeda-García et al. 2022). Furthermore, empirical evidence indicates that green competitive advantage mediates the relationship between green innovation and performance across both small and large firms and across industries, demonstrating that this mediation path is robust (Barakat et al. 2023; Sudirman et al. 2024; Zameer et al. 2022). The mediating impact strength, however, depends on organizationally and contextually relevant variables (such as absorptive capacity, strategic positioning, and competitive pressure), which determine the degree to which an organization can utilize green capabilities to develop a sustainable competitive advantage with resulting performance outcomes (Baquero 2024; Chen & Liu 2018). Based on these explanations, the following hypotheses are proposed:

H₉: Competitive advantage mediates the relationship between green place and marketing performance.

H₁₀: Competitive advantage mediates the relationship between green price and marketing performance.

H₁₁: Competitive advantage mediates the relationship between green product and marketing performance.

H₁₂: Competitive advantage mediates the relationship between green promotion and marketing performance.

Competitive advantage is also essential for the marketing performance of MSMEs, as it can serve as both a mediator and an indicator of such performance. Empirical evidence indicates that competitive advantage mediates the relationship between strategic orientations (product innovation, entrepreneurial orientation, and market orientation) and the marketing performance of MSMEs (Dahana, Indrawati & Mugiono 2021; Fatikha, Rahayu & Sumiati 2021; Sefnedi, Utami & Fernanda 2023). Therefore, these studies show that firms' marketing performance will increase through strategic initiatives that enhance their competitive advantage through differentiation, value creation, and market position. Moreover, complementary research across different contexts has shown that the market orientation improves the competitive advantage, which leads to an improvement in the marketing performance of the companies, and supports the importance of capability-based routes for turning the strategy into a market success (Murray, Gao & Kotabe 2011; Pramuki & Kusumawati 2021). Competitive advantage is not only a mediator of competitive advantage but also a direct factor affecting marketing performance, thereby improving the value, sustainability, and strategic position of the company (Haseeb et al. 2019; Wijayanto et al. 2019). Therefore, the following hypothesis is proposed:

H₁₃: Competitive advantage positively affects marketing performance.

This study employs a quantitative analysis to examine the impact of green marketing strategies on MSMEs in the Jabodetabek region of Indonesia. The study involved collecting primary data by distributing structured questionnaires to 100 MSME respondents selected through purposive sampling, specifically targeting MSMEs that are actively engaged in and have adopted green marketing practices. The

questionnaire was constructed using operational definitions derived from the literature, with items assessed using a Likert scale. According to Hair, Sarstedt & Ringle (2019), the advantages of using Structural Equation Modelling (SEM) with the Partial Least Squares (PLS) are that it can provide a good alternative for models with many constructs or many items, as well as when working with small sample sizes; however, traditional SEM usually requires a significantly larger sample size, typically between 100 and 200 samples. As an alternative, SEM-PLS allows analysis with smaller sample sizes; the smallest acceptable sample size for SEM-PLS is reported to be approximately 30–50 (Purwanto & Sudargini 2021). Consequently, the ability to analyze relationships in smaller samples is invaluable when collecting larger samples is difficult or impractical. The SmartPLS program was used to evaluate the measurement and structural models, employing techniques such as Confirmatory Factor Analysis (CFA), Composite Reliability, Cronbach's Alpha, and Average Variance Extracted (AVE). Specifically, the study employed SEM-PLS to analyze the relationships among green marketing strategies, competitive advantage, and marketing success. The F2 benchmarks of 0.02, 0.15, and 0.35 indicate small, medium, and large effects, respectively. Q2 values above zero indicate predictive relevance. For SRMR, values below 0.10

RESULTS AND DISCUSSION

Results

As shown in Table 1, respondents in this study were predominantly female (62%), whereas males accounted for the remainder (38%). Most respondents (81%) are categorized as being under the age of 20, which indicates most are extremely young entrepreneurs. Only 12% of respondents are aged between 21 and 30, and all other age categories comprise a negligible portion of the sample (1-5%).

Table 1.
Demographic Characteristics of Respondents

Demographic Variable	Frequency	Percentage
Gender		
Male	38	38%
Female	62	62%
Age		
< 20	81	81%
21-30	12	12%
31-40	1	1%
41-50	5	5%
> 50	1	1%
Education		
High school	25	25%
Bachelor's degree	75	75%
Business Fields		
Food and beverages	60	60%
Fashion	9	9%
Accessories	12	12%
Household appliances	4	4%
Others	15	15%
Business Age		
< 2 years	83	83%
3-5 years	11	11%
> 6 years	6	6%

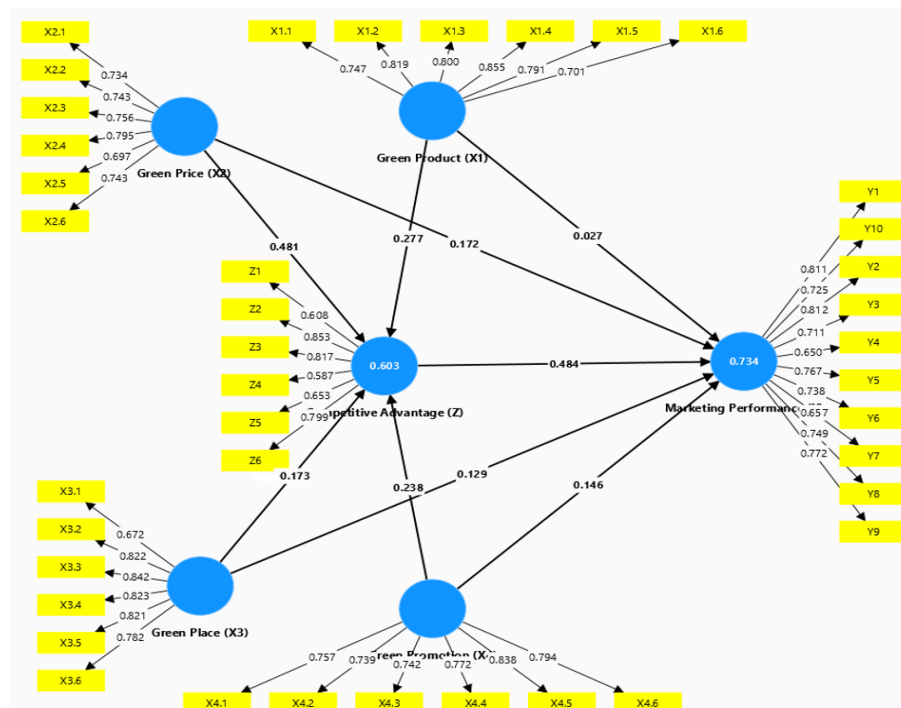
Source: Data Processed

Most respondents (75%) had completed a Bachelor's degree, and approximately one-quarter (25%) had finished high school. Thus, the sample is moderately educated. A significant proportion of respondents' businesses are in the food and beverage industry (60%), followed by the accessory industry

(12%), and then "other" (15%). A smaller portion of respondents' businesses are in the fashion (9%) and household appliance (4%) industries; therefore, MSMEs in this sample appear to be almost entirely focused on consumer-based and creative industries.

Additionally, most respondents' businesses (83%) are relatively new, having operated for less than two years. Approximately 11% of respondents' companies have operated for three to five years, and an even smaller number (6%) have operated for longer than six years. Therefore, the sample comprises primarily new MSMEs in the early stages of their development.

Based on Figure 1, the outer model results are in accordance with the requirements. They are considered valid across all indicators for the variables studied because the loading factor exceeds 0.5. Therefore, it can be continued for subsequent data testing.



Source: Data Processed
Figure 1. Outer Model

Table 2 demonstrated how convergent validity of the constructs was assessed through the AVE, as well as how the outer loadings were analyzed to establish the validity of each construct. Ideally, outer loadings should be 0.70 or greater; however, if loadings are less than 0.70 but 0.50 or above, overall construct reliability can support the loading. Although several indicators had outer loadings slightly below the desired threshold, all constructs in the study met the minimum required for convergent validity. The outer loading values being below the threshold suggest that, although the indicators in question were still acceptable, they could be improved to measure the construct more accurately.

All AVE values exceeded the recommended minimum of 0.50; thus, the constructs accounted for an acceptable amount of variance among the items measuring them. Although several AVE values were at the lower end of the range, the constructs were still considered valid, indicating the reliability of the measurement model. Overall, it can be concluded that the measurement model has been established to meet acceptable levels of validity as needed for research purposes. Satisfactory convergent validity was demonstrated by all constructs in this study, regardless of which constructs had a few indicators showing a low outer loading.

Table 2.
Validity Testing

Variables	AVE	Decision
Competitive Advantage (Z)	0.529	Valid
Green Place (X3)	0.633	Valid
Green Price (X2)	0.555	Valid
Green Product (X1)	0.619	Valid
Green Promotion (X4)	0.600	Valid
Marketing Performance (Y)	0.549	Valid

Source: Data Processed

To ensure internal consistency, the reliability of the constructs was assessed using composite reliability and Cronbach's alpha (Table 3). All constructs exhibit composite reliability values above the 0.7 threshold, indicating satisfactory reliability.

Tabel 3.
Reliability Testing

Variables	Composite Reliability	Cronbach's Alpha	Conclusion
Competitive Advantage (Z)	0.840	0.817	Reliable
Green Place (X3)	0.884	0.883	Reliable
Green Price (X2)	0.841	0.839	Reliable
Green Product (X1)	0.884	0.877	Reliable
Green Promotion (X4)	0.873	0.866	Reliable
Marketing Performance (Y)	0.911	0.908	Reliable

Source: Data Processed

The next step evaluates the explanatory quality of the structural model. As shown in Table 4, the adjusted R^2 for competitive advantage is 0.587, indicating that the four green marketing-mix dimensions explain 58.7% of its variance. The adjusted R^2 for marketing performance is 0.720, indicating that the predictors explain 72.0% of its variance. These results demonstrate moderate-to-substantial explanatory power. The model-fit assessment in Table 5 shows that the SRMR value is 0.084 for both the saturated and estimated models. This value is slightly above the conservative threshold of 0.08 but remains below 0.10, indicating marginally acceptable approximate fit. In contrast, the NFI value of 0.556 is below the commonly recommended level of 0.90, suggesting limited incremental fit. The d_ULS (5.720) and d_G (3.961) values are reported descriptively because their adequacy can only be determined by comparison with the HI95 or HI99 bootstrap confidence limits.

As presented in Table 6, green price has the largest substantive contribution to competitive advantage, with a medium effect size ($f^2 = 0.155$). Green product ($f^2 = 0.064$), green promotion ($f^2 = 0.050$), and green place ($f^2 = 0.022$) have small effect sizes. These findings reinforce the path-coefficient results by showing that green price is not only statistically significant but also the strongest green marketing-mix dimension in explaining competitive advantage, whereas the remaining dimensions make relatively limited incremental contributions.

Table 4.
R-Square and Adjusted R-Square

Variables	R-Square	Adjusted R-Square
Competitive Advantage (Z)	0.603	0.587
Marketing Performance (Y)	0.734	0.720

Source: Data Processed

Table 5.
Model Fit Assessment

Fit Index	Saturated Model	Estimated Model	Assessment
SRMR	0.084	0.084	Marginally acceptable (< 0.10), but above the conservative 0.08 criterion
d_ULS	5.720	5.720	Requires comparison with bootstrap HI95/HI99
d_G	3.961	3.961	Requires comparison with bootstrap HI95/HI99
Chi-square	1673.194	1673.194	Reported descriptively
NFI	0.556	0.556	Below the recommended 0.90 level

Source: Data Processed

Table 6.
Effect Size (f^2) on Competitive Advantage

Structural Path	f^2	Effect Size	Interpretation
Green Place → Competitive Advantage	0.022	Small	Limited incremental contribution
Green Price → Competitive Advantage	0.155	Medium	Strongest substantive contribution
Green Product → Competitive Advantage	0.064	Small	Modest incremental contribution
Green Promotion → Competitive Advantage	0.050	Small	Modest incremental contribution

Source: Data Processed

Table 7.
Hypothesis Testing Results

Hypotheses	Original Sample (O)	T Statistics (O/STDEV)	p-values	Conclusion
H1: Green Product → Competitive Advantage	0.277	2.316	0.021	Significant
H2: Green Product → Marketing Performance	0.161	1.276	0.202	Not Significant
H3: Green Price → Competitive Advantage	0.481	2.911	0.004	Significant
H4: Green Price → Marketing Performance	0.405	2.806	0.005	Significant
H5: Green Place → Competitive Advantage	0.173	0.958	0.338	Not Significant
H6: Green Place → Marketing Performance	0.046	0.347	0.728	Not Significant
H7: Green Promotion → Competitive Advantage	0.238	1.929	0.054	Not Significant
H8: Green Promotion → Marketing Performance	0.262	1.876	0.061	Not Significant
H9: Green Place → Competitive Advantage → Marketing Performance	0.084	0.802	0.423	Not Significant
H10: Green Price → Competitive Advantage → Marketing Performance	0.233	2.118	0.034	Significant
H11: Green Product → Competitive Advantage → Marketing Performance	0.134	1.987	0.049	Significant
H12: Green Promotion → Competitive Advantage → Marketing Performance	0.115	1.612	0.107	Not Significant
H13: Competitive Advantage → Marketing Performance	0.484	4.881	0.000	Highly Significant

Source: Data Processed

The hypothesis testing results in Table 7 indicate that green price and green product are the most influential predictors of competitive advantage and marketing performance. Green product has a significant positive effect on competitive advantage ($\beta = 0.277$, $p = 0.021$), whereas green price has an even more substantial effect ($\beta = 0.481$, $p = 0.004$). In comparison, green place ($\beta = 0.173$, $p = 0.338$) and green promotion ($\beta = 0.238$, $p = 0.054$) are both not significantly associated with an enhancement of competitive advantage. For marketing performance, only the green price ($\beta = 0.405$, $p = 0.005$) has a significant direct relationship. In contrast, green product ($\beta = 0.161$, $p = 0.202$), green place ($\beta = 0.046$, $p = 0.728$), and green promotion ($\beta = 0.262$, $p = 0.061$) show no significant effects. Competitive advantage as a construct is strongly and positively related to marketing performance ($\beta = 0.484$, $p = 0.000$) and thus is key to understanding the relationships presented in the model.

This same pattern continues through the mediation analysis shown in Table 8. The mediation analysis demonstrates that competitive advantage partially mediates the relationship between green price and marketing performance (indirect effect = 0.233; VAF = 57.3%), and also partially mediates the relationship between green product and marketing performance (indirect effect = 0.134; VAF = 74.4%). However, no mediation is found for green place (indirect effect = 0.084; VAF = 14.7%) or green promotion (indirect effect = 0.115; VAF = 19.2%). Overall, the findings highlight that although green pricing and green products are beneficial for improving marketing performance, their effects are primarily channeled through competitive advantage, which is a key mechanism driving MSMEs' marketing success.

Table 8.
Variance Accounted for (VAF) Results

Mediating Pathway	Indirect Effect	Total Effect	VAF (%)	Mediation Type
H9: Green Place → Competitive Advantage → Marketing Performance	0.084	0.568	14.7%	No mediation
H10: Green Price → Competitive Advantage → Marketing Performance	0.233	0.406	57.3%	Partial mediation
H11: Green Product → Competitive Advantage → Marketing Performance	0.134	0.180	74.4%	Partial mediation
H12: Green Promotion → Competitive Advantage → Marketing Performance	0.115	0.596	19.2%	No mediation

Source: Data Processed

Discussions

H₁: Effect of Green Product on Competitive Advantage

A positive correlation was identified between the competitive advantage and the adoption of green products ($r = 0.277$). The computed t-value for green products is 2.316, which exceeds the critical t-value of 1.984. For green products, the calculated p-value is 0.021, which is less than the predetermined alpha of 0.05. Therefore, it may be said that there is a positive and statistically significant relationship, to a certain degree, between green products and competitive advantage. Hence, it can be said that by offering green products, an MSME can enhance its competitive advantage by positioning itself in the market differently from its competitors.

This conclusion is supported by Nuryakin (2018) by saying that, making new “green” products is an important way for businesses to get long-term competitive advantages. For MSMEs that make green products, it is important to show how their products help the environment and keep the quality of their products high in order to get a competitive edge. According to Galindo-Martín et al. (2020) green innovation can help businesses reach their sustainability goals and do better at what they do.

People are more likely to buy eco-friendly products now that more people are aware of environmental issues. To put it another way, if business owners can clearly explain the unique benefits of eco-friendly products, a lot of people may be more likely to buy them if they care a lot about the environment. Goh et al. (2019) claimed that the effectiveness of green product innovations is directly correlated with overall market demand. Before fully taking advantage of the competitive edge of green products, MSMEs should find out how much demand there is for them among their target customers.

H₂: Effect of Green Product on Marketing Performance

These results suggest some level of correlation exists between green products and marketing performance (coefficient = 0.161). However, the computed t-value is 1.276 (compared to the t-table value of 1.984), and the p-value is 0.202 (more than 0.05). This indicates that green products have no statistically significant impact on marketing performance. Green products are designed to reduce environmental harm across all stages of a product's life cycle using sustainable materials and practices. For example, Hafezi and Zolfagharinia (2018) indicate that the increased use of sustainable raw materials and eco-labeling can increase production costs. While offering an environmentally friendly product may confer some benefits, this study shows that simply producing a “green” product does not automatically yield greater marketing performance for MSMEs.

There can be several explanations for this finding. First, the higher cost that comes with the development of eco-products (i.e., the higher price that comes with sustainable materials use and labelling as eco-products) also makes these products unappealing to consumers with price sensitivity. In eco product development, a win-win situation can be created for the producer and the consumer; however, as Nuryakin and Maryati (2020) point out that the additional cost can pose entry barriers for both parties. Second, consumer demand for eco-products may be limited; without strong consumer

demand, there will be limited marketing advantage in selling green products. Lastly, it is also essential that MSMEs develop and execute a comprehensive marketing communications plan to communicate the environmental benefits of their green products to consumers. If the ecological aspects of their products do not meet high standards, or the environmental benefits of their products are not clearly communicated to consumers, then the marketing performance of those green products will be limited.

MSMEs may utilize green product offerings to differentiate themselves from competitors; however, green products will likely have minimal or no positive influence on marketing performance unless they are incorporated into a comprehensive marketing strategy (marketing mix) that encompasses green pricing and promotional alternatives. This study shows how difficult it is to determine how people behave and how many components of a successful marketing strategy are related to environmental protection.

H3: Effect of Green Price on Competitive Advantage

The results show that the green price has a significant effect on competitive advantage, as evidenced by a t-value of 2.911 (compared with the t-table value of 1.984) and a p-value of 0.004 (below the significance level of 0.05). This confirms hypothesis H3. To have a competitive advantage means to have the ability of a business to formulate and execute the optimal tactics to have a competitive advantage against other businesses. A business could strengthen its competitive advantage through the use of green pricing. This is seen in MSMEs with the promotion of green pricing, with the offering of discounts to clients who come to the store using their reusable shopping bags.

According to Leonidou, Katsikeas & Morgan (2013) the green marketing approach (for example, green pricing) allows businesses to grow considerably while adding financial value and enlarging their market domain. Sembiring (2021) claims that in situations where consumers display a willingness to pay a premium for green products or services, the selection of the optimal green pricing technique is vital to achieving a competitive edge. The American Marketing Association (AMA) concurs that businesses can cultivate client retention and loyalty through green pricing that actually lessens environmental harm. Tshuma (2022) also notes that businesses adopting sustainable methods may lower their financial exposure related to climate change, and hence, their sustainability in the market is likely to continue improving.

H4: Effect of Green Price on Marketing Performance

The results show that the green pricing element had a significant effect on marketing performance, as indicated by a t-value of 2.806 (compared with a t-table value of 1.984) and a p-value of 0.005 ($p < 0.05$), supporting hypothesis H4. Green pricing is the way companies price eco-friendly products and services (in terms of how responsive consumers are to changes in price and their willingness to pay more for sustainable products). It is a key pricing strategy because it signals to consumers that they will derive added value from purchasing eco-friendly products, which typically have higher production costs due to the use of eco-friendly materials and processes (Dangelico & Vocalelli 2017).

Eco-friendly products are easily sellable products because an increasing number of people are willing to purchase them. Customers believe that these products are more environmentally friendly and better crafted. Businesses that use these green pricing techniques are able to stand out from their competitors, show dedication to improving the environment, and win the loyalty of many customers. Moreover, the companies that practice green pricing are able to surpass their competitors and gain additional profit, which results in an increase in their overall market share (Dangelico & Vocalelli 2017).

Furthermore, the profitability of MSMEs will increase only if proper knowledge-based pricing strategies are implemented. Implementation of green pricing models will increase MSME success in international trade, as stated by Limanseto (2023). Environmental rules and pricing strategies must be adopted by MSMEs to better their position in the market and increase their marketing outcomes. As much as MSMEs need to position themselves in the market, they need to come up with good pricing strategies so as not to lose customers who are very sensitive to pricing, especially in very competitive markets. The

results illustrate the need for MSMEs to integrate sustainability in their pricing strategies to improve marketing outcomes, enhance brand visibility, increase market share, and increase customer loyalty.

H5: Effect of Green Place on Competitive Advantage

The functionalities of a green place are influenced by multiple variables. For competitive advantage, preliminary statistical results indicate that green space exhibits a positive coefficient of 0.173. The t-value is 0.958, which is less than the critical t-table value of 1.984, and the p-value is 0.338, which is more than the significance level of 0.05. Consequently, green place lacks a statistically significant correlation with competitive advantage. This is contrary to Wakjira & Amante (2023) and Yuningsih et al. (2021), who state that there are positive correlations from the application of green logistics methodologies to both social and competitive advantages.

The presence of green areas (ecological contexts/processes) likely provides more of a competitive advantage, although there are several variables that could influence their effectiveness. These include unfocused, low consumer education/awareness on 'green,' sporadic implementations, high rivalry, and monocentricity. Also, MSMEs' logistical and spatial parameters may hinder their capabilities to successfully incorporate green space applications (Ahmed et al. 2023). The economic impact of climate change will be unavoidable for MSMEs that fail to adopt sustainable practices, including the incorporation of green spaces (Jiang, Fan & Klemeš 2021). As such, to create sustainable programs, it is necessary to ensure that these programs are successful and meet the needs of both the broader market and consumers' understanding/knowledge of the program, thereby creating the greatest possible competitive advantage.

H6: Effect of Green Place on Marketing Performance

According to this study, the effect of MSMEs' marketing outcomes is likely negligible due to the presence of green spaces. While MSMEs can apply green area tactics (such as minimizing the environmental impacts of product delivery by choosing the most environmentally friendly delivery route) to enhance their ecological sustainability, these strategies are unlikely to improve the marketing performance of MSMEs. This outcome implies that many other significant elements could have a substantially larger influence on the marketing performance of MSMEs than the green place tactics used (such as MSMEs' geographic location and MSMEs' ability to locate environmentally concerned consumers); and/or the level of consumer awareness of environmental concerns and the consumer's demand for these types of products would also have a greater impact on a firm's competitive position than the green place tactics.

A prior study (Fitriyah, Tjahjadi & Soewarno 2020) identified economic risks faced by businesses arising from climate change when they do not adopt environmentally friendly practices or efficient green workplace techniques. Likewise, Jiang et al. (2021) indicated that if MSMEs fail to utilize eco-friendly practices successfully, there could be significant economic ramifications due to climate change; however, the successful utilization of green workplace strategies could also be limited by logistics related to green distribution and the specific capabilities of MSMEs, which would limit the effectiveness of these strategies in relation to marketing performance and competitive advantage.

H7: Effect of Green Promotion on Competitive Advantage

According to the results, the data show the green promotion variable has a significant result, but the overall effect on the variable is limited and weak, with a coefficient of 0.238 for the competitive advantage. The t-value in this instance is 1.929 (compared with the t-table value of 1.984), and the p-value is 0.054 (greater than 0.05), so the data do not support a statistically significant relationship between promoting green practices and competitive advantage. Green promotion focuses on marketing to green target audiences based on the environmental positioning of the product/service. While green promotion holds some positive value, the impact is likely limited alongside significant variables as consumer awareness, market saturation, and the authenticity of promotional activities.

Green promotion will not result in greater sales if the target market is not knowledgeable or does not believe in the environmental benefits. Since many businesses seek to attract eco-conscious customers with "green" claims, green promotion will likely not act as a distinguishing competitive advantage. The extent to which the message is focused and effectively implemented will determine the success of green promotion. If consumers perceive a green promotion as unclear, contradictory, or dishonest about its environmental effects, it is unlikely to reach its target audience. Therefore, green promotion should be viewed as one component of a comprehensive, integrated marketing strategy supported by other elements of the marketing mix, such as green products, pricing, and distribution.

For businesses to establish long-term trust with consumers, prior studies have shown that marketing methods must align with the social values consumers expect from businesses (Lima et al. 2024). As such, a competitive advantage will occur when a long-term bond of trust develops between a company and its customers. Studies have also shown that MSMEs currently lack sufficient evidence on how green marketing can provide them with a competitive advantage. The results suggest that current green marketing practices and promotions lack sufficient distinctiveness and sufficient impact to establish a competitive advantage for MSMEs. Other study Amir & Dhyani (2022) have found that companies that incorporate green marketing into their marketing strategies (e.g., green promotion), as well as into all aspects of their operations, are most likely to obtain a competitive advantage through the use of green marketing; however, there should be complete integration of the green marketing strategy within the overall strategy of the company. Therefore, MSMEs must implement green marketing campaigns by increasing consumer awareness, fostering open communication between the company and its consumers, and aligning these efforts with other sustainable business practices to establish a competitive advantage in their marketplace.

H8: Effect of Green Promotion on Marketing Performance

Green promotion was significantly linked to marketing performance (coefficient = 0.262). However, the t-value of 1.876 (compared to the critical value of 1.984) and a p-value of 0.061 (more than 0.05) suggest that green promotion does not have a statistically significant impact on marketing performance. Therefore, the marketing performance impact of advertising marketed green is, to some extent, positive, but not sufficient to make much of a difference. Lin et al. (2013) extent to which green marketing may be successful may depend upon the extent to which the people's values that the promotion messages are directed to. The results of the study indicate that the green promotion messages of MSMEs are superficial, with no clear, honest, and appealing communication to the target consumers, hence not enhancing the marketing effectiveness.

H9: The Mediating Role of Competitive Advantage on the Effect of Green Place on Marketing Performance

The study identified a first positive effect of green place on marketing performance (0.084) affected by competitive advantage; but, since the t-value 0.802 is less than the t-table value of 1.984, and the p-value of 0.423 is higher than 0.05, it was determined that competitive advantage does not mediate the effect of green place on marketing performance. This conclusion suggests that, for MSMEs to develop marketing strategies that successfully attract environmentally conscious consumers, they must accurately identify these potential consumers and select an effective operational location. In addition, research has shown that companies that do not develop and implement sustainable business practices, including successful green place initiatives, are at financial risk from climate change. However, logistical challenges with green delivery and distribution methods can reduce their effectiveness in achieving the goal of improving marketing performance.

H10: The Mediating Role of Competitive Advantage on the Effect of Green Price on Marketing Performance

Research has shown that green pricing has a significant positive effect on marketing success, as indicated by a t-value of 2.118 (compared with the critical t-value of 1.984) and a p-value of 0.034 (below the significance level of 0.05). It is shown that competitive advantage mediates the relationship between green price and marketing performance. The initial sample result of 0.233 further substantiates the favorable impact of green price on marketing results. The study shows that pricing strategies should reflect a company's focus on environmental sustainability and should address the customer's price sensitivity. Green pricing allows MSMEs to target customers who are willing to pay for sustainable products and enhance marketing performance, academically validating Nuryakin et al. (2021) findings to the MSMEs. Limanseto (2023) further builds on this by stating that, for MSMEs to be successful, they need to enhance their competitiveness in international markets, and one way to achieve this is through the proper implementation of green pricing strategies, which, for many, is the only way to enhance their competitiveness. Consequently, MSMEs may strengthen their market positioning, gain a competitive edge, and realize superior success in their marketing activities through the adoption of a pricing strategy that is relevant to eco-sustainability.

H11: The Mediating Role of Competitive Advantage on the Effect of Green Product on Marketing Performance

The results for H11 indicate a significant indirect effect of green products on marketing performance via competitive advantage ($\beta = 0.134$; $p = 0.049$; VAF = 74.4%). Although the direct relationship between green products and marketing performance was not statistically significant, a high degree of mediation was observed, indicating that only one enhancement to the firm's competitive advantage can positively impact marketing performance through the implementation of a green product strategy. These results suggest that although all green product strategies (green materials, eco-safe design, and green packaging) may offer opportunities for differentiation from competitors' offerings, only those that provide differentiation will improve marketing performance.

The findings were consistent with previous research indicating that the use of green technology and innovative products leads to higher quality, lower costs, and, consequently, greater efficiency. This results in the customer having more value from the product, as well as more competition in the marketplace (Chen, Lai & Wen 2006; Zhu et al. 2023). The previous research also showed that companies that utilize green technology and innovate on green products generally see positive results in terms of their performance, due to them improving their position in the market (Chen, Lai & Wen 2006; Dangelico, Pujari & Pontrandolfo 2017; Dangelico & Pujari 2010). Green innovation allows organizations to create opportunities for new markets, reduce the cost to produce a product/service, enhance the organization's brand image, and increase the level of trust that consumers have in the organization, resulting in enhanced marketing performance (Chen, Lai & Wen 2006; Dangelico, Pujari & Pontrandolfo 2017; Dangelico & Pujari 2010).

Thusly, the competitive advantage acts to help organizations realize a positive impact from their green product strategy on their marketing performance. The existing body of research demonstrates that, across multiple industries, competitive advantage mediates the positive relationship between green innovation and marketing performance (Hussain et al. 2020; Shaukat & Ming 2022; Sudirman et al. 2024). The literature also supports the idea that organizations need to adopt a set of dynamic capabilities, including green technology adoption, digitalization, and green inclusive capabilities, to more effectively use green products to differentiate themselves (Dangelico, Pujari & Pontrandolfo 2017; Hussein et al. 2024). When firms implement digital marketing, customer-supplier coordination, and environmentally focused managerial practices, the strength of competitive advantage is amplified, and the indirect effect of green product innovation on marketing success is strengthened (Awwad, Anouze & Ndubisi 2022; Sudari & Pambreni 2024).

H12: The Mediating Role of Competitive Advantage on the Effect of Green Promotion on Marketing Performance

The H12 model indicates that there is no indirect effect of green promotion on marketing performance via competitive advantage (indirect effect = 0.115, $p = 0.107$; VAF = 19.2%). Similarly, the direct relationships between green promotion and competitive advantage ($\beta = 0.238$, $p = 0.054$) and between green promotion and marketing performance ($\beta = 0.262$, $p = 0.061$) were not significant. The failure of an indirect relationship to emerge here is attributable to the lack of a competitive edge conferred by green promotional strategies and to the absence of a direct link between these strategies and improved marketing outcomes for MSMEs in this study. There are several possible reasons for this, all of which have theoretical backing. Firstly, green promotion is an activity designed to raise awareness and signal to consumers. When these signals are unclear, inconsistent, or appear superficial, it is unlikely that the reputation and/or differentiation needed to establish a sustainable competitive advantage will be generated (Papadas, Avlonitis & Carrigan 2017; Papadas et al. 2019). Secondly, existing empirical evidence demonstrates that promotional activity requires support through substantive capabilities (eco-innovation, operational green practices, digital marketing expertise) before a competitive advantage can be achieved; without these complementary assets, promotional messaging will not result in sustained market advantages (Han et al. 2019; Mukonza & Swarts 2020). Thirdly, given that MSMEs are constrained by resource availability, promotional strategies are likely to be lacking in terms of reach, credibility (e.g., certification) or storytelling quality - all factors that inhibit the influence of promotional activity on consumer perception and willingness to pay (Adusei, Demah & Mensah 2024; Zameer et al. 2022). Fourthly, consumer awareness and the level of green market maturity are essential: when consumer preferences are weak or skeptical, promotional efforts will not drive a shift in marketing performance (Hasan & Ali 2015; Nagaty 2022). Fifthly, measurement issues and contextual limitations (e.g., narrow promotional measures, young businesses, different sectors) can reduce statistical power to detect effects, even when such effects may exist in practice (Alsheref et al. 2024; Papadas et al. 2019).

Since MSMEs aspire to achieve their “green” marketing objectives through the use of promotions, these firms also have to understand that promotions cannot be the sole instrument that these enterprises will have to rely on. MSMEs will have to tie their promotions to improvements that these enterprises will be able to achieve to be able to “green” market MSMEs to make their enhanced improvement opportunities more active. The MSMEs will have to “green” market to market the digital marketing competencies, eco-certification, supply chain linkage, and internalized green practices that are easily consumable and contribute to obtaining differentiable and reputational capital (Mukonza & Swarts 2020; Nguyen, Nguyen & Ha 2025; Papadas et al. 2019). The MSME's competitive advantage in marketing performance can be enhanced by crafting compelling stories, demonstrating environmental impacts, and aligning promotional activities with a comprehensive green marketing strategy. Further research is required to identify potential moderators (e.g., certification presence, consumer green awareness, digital competency) and to employ longitudinal designs to determine whether promotional investment translates into competitive advantage and performance over time.

H13: Effect of Competitive Advantage on Marketing Performance

This study provides further support for the theory that competitive advantage positively influences marketing performance, thereby corroborating prior theoretical and empirical findings. The literature consistently indicates that competitive advantage positively affects marketing performance, both directly and indirectly, through several intermediate processes that enable a company to develop and leverage its unique characteristics or resources to create and exploit superior market value. Specifically, it appears from the literature that competitive advantage enables firms to build a sustainable competitive advantage, which can be defined as a set of firm-specific, rare, and difficult to imitate resources that are used to provide differentiated and superior products or services relative to competitors' products or services (Hussain et al. 2020; Khourouh et al. 2020; Widyanesti & Masyithah 2018). Furthermore, when a company develops an innovative culture or an entrepreneurial orientation, the relationship between competitive

advantage and marketing performance is strengthened, as these two organizational elements transform competitive advantage into innovative brands, new marketing campaigns, and higher-quality customer relationships (Sinaga & Candra 2022; Zaini et al. 2014). Finally, knowledge exploitation and organizational agility further strengthen the relationship between competitive advantage and marketing performance, as these two elements enable companies to adapt their marketing efforts to environmental changes and translate resource-based advantages into measurable improvements in marketing performance (Nurcholis 2019).

Marketing capabilities and benchmarking are the two most critical strategic avenues for increasing marketing performance, mainly because benchmarking can be used to create and enhance a company's sustainable competitive advantage (Tan & Sousa 2015; Vorhies & Morgan 2005). These studies show that all three studies agree on the importance of a company's competitive advantage to determine its marketing performance, whether it is an independent variable or a mediator, which integrates into sustainability models that ensure long-term performance (Lestari et al., 2020; Zulkarnain et al., 2019). Therefore, based on the findings from the literature referenced above, the substantial relationship between competitive advantage and marketing performance established in this hypothesis supports the assertion that companies with a strong competitive advantage will exhibit higher marketing performance.

CONCLUSIONS

The purpose of this study is to contribute to the body of knowledge on green marketing and strategic management through empirical evidence to refine and better understand the strategic value of green marketing, as it relates to GMM elements. In addition, this study extends the RBV and the NRBV by providing empirical evidence to confirm the mediating role of competitive advantage as it relates to translating green strategies into marketing performance. Furthermore, this study identifies partial mediation effects for green product and green price, indicating that sustainable practices improve marketing performance most effectively when creating distinctiveness through value, cost efficiency, or differentiation. Finally, methodological contributions include using a PLS-SEM mediation analysis model of green marketing-performance relationships in the context of MSMEs in an emerging economy.

Practically speaking, the findings from this study would suggest that MSME owner-managers should focus their attention on developing environmentally friendly products with clearly defined value propositions and develop pricing strategies that will credibly reflect the sustainability aspects of those products. It appears that these types of marketing strategies are more likely to improve marketing performance than simply investing in environmentally friendly distribution channels and promotional efforts. Additionally, the fact that the findings showed no significant relationship between green place and green promotion indicates that the potential for these activities to provide returns on investment will depend heavily on how closely they can be related to the physical characteristics of the products being sold or how well they align with the perceived value created for customers. Finally, the findings of this study will also provide direction for policy-makers and business support organizations to identify the need to facilitate MSMEs' access to green innovation resources and pricing support mechanisms, and/or to acquire the necessary capabilities to convert green initiatives into actual competitive and marketing-based outcomes.

This study examined the impact of GMM elements on marketing performance and competitive advantage, and the extent to which competitive advantage mediated the relationship between GMM elements and marketing performance. Statistical results indicated that both green product and green price were positively and statistically related to competitive advantage. This suggests that companies can use green products and green pricing strategies as practical means of differentiating their firm and positioning themselves competitively in the marketplace. No statistically significant relationships were found between green place, green promotion, and competitive advantage. Furthermore, with respect to the relationship between the elements of the GMM and marketing performance, the empirical results showed that green price is positively and statistically significantly associated with marketing performance. In contrast, green

product, green place, and green promotion are not. These findings suggest that among the different ways that companies can pursue a green marketing policy, those that focus on environmentally-driven pricing policies will obtain better marketing performance than those that use other approaches, such as using eco-products, providing services through sustainable channels, or creating awareness through advertising campaigns about the environmental benefits of the products or services they offer.

Finally, the empirical results from the mediation analysis confirmed that competitive advantage acts as a whole and partial mediator between green price and green product, respectively, and the marketing performance, but provide no evidence of mediation for green place and green promotion. This finding suggests that green pricing and green products have a more profound and lasting influence on the company's competitive advantage and, consequently, on marketing performance, because customers perceive them as capable of generating greater customer satisfaction, reducing costs, and improving the company's image. In general, the findings suggest that companies should invest in developing green products and green pricing strategies to achieve a sustainable competitive advantage and thereby improve their marketing performance. Furthermore, although a green marketing strategy is essential for achieving a sustainable competitive advantage, the findings also suggest that not all elements of the GMM have the same impact on achieving this goal. Therefore, future studies may investigate whether the relationships are moderated by industry type, environmental turbulence, or organizational capabilities, and longitudinal studies may provide further insight into the long-term effects of pursuing green marketing strategies.

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