



DOI: <https://doi.org/10.38035/gijea.v3i4>
<https://creativecommons.org/licenses/by/4.0/>

The Impact of Green Marketing on the Competitiveness of Local Ecotourism-Based MSME Products

Vinandri Hapsari¹, Heru Subiyantoro²

¹Universitas Borobudur, Indonesia, eunikevina3020@gmail.com

²Universitas Borobudur, Indonesia, herusubiyantoro@gmail.com

Corresponding Author: eunikevina3020@gmail.com¹

Abstract: This study analyzes the impact of green marketing on the competitiveness of MSME products based on local ecotourism in Indonesia. The ecotourism industry has experienced significant growth in response to increasing consumer environmental awareness. MSMEs implementing green marketing strategies show enhanced competitiveness through product differentiation and broader market access. The research employs quantitative methods with surveys of 150 ecotourism MSMEs in Java and Bali. Results indicate green marketing has a positive and significant effect on ecotourism MSME competitiveness, with a determination coefficient of 0.742. Green promotion and green product dimensions are dominant factors in enhancing competitive advantage. MSMEs implementing environmentally friendly practices experienced average revenue increases of 34% and market segment expansion up to 45%. Research implications highlight the importance of government support in facilitating environmentally friendly product certification and green marketing education programs for ecotourism MSME actors.

Keyword: green marketing, competitiveness, MSME, local ecotourism, competitive advantage

INTRODUCTION

The development of Indonesia's tourism sector is undergoing a significant transformation with the emergence of ecotourism as a future alternative. This sector would contribute 4.05% to Indonesia's Gross Domestic Product by 2024 and employ 13.2 million people. Ecotourism not only offers unique travel experiences but also promotes environmental conservation and the economic empowerment of local communities. Within this dynamic, Micro, Small, and Medium Enterprises (MSMEs) play a vital role as providers of products and services supporting ecotourism activities, contributing 61.07% to the national GDP. Global consumer environmental awareness has increased dramatically in the last decade. The Nielsen Global Corporate Sustainability Report 2023 survey showed that 73% of global consumers are willing to pay more for environmentally friendly products. This phenomenon creates a significant opportunity for Indonesian ecotourism MSMEs to develop environmentally-based marketing strategies, or green marketing. Green marketing is a strategic instrument that enables MSMEs not only to meet the expectations of

environmentally conscious consumers but also to build strong product differentiation in an increasingly competitive market.

Indonesian Small and Medium Enterprises (SMEs) find themselves in a paradoxical situation, both contributing to economic growth and having massive negative environmental implications. This situation creates an urgency for MSMEs to transform their business models toward more environmentally friendly practices. Green marketing provides an integrative solution that enables MSMEs to achieve economic growth while preserving the environment. The implementation of green marketing in the ecotourism sector includes the development of environmentally friendly products, promotion based on environmental values, pricing that reflects environmental added value, and distribution through channels that support sustainability principles. The competitiveness of ecotourism MSME products encounters various complicated market dynamics. Globalization and digitalization are shifting the competitive landscape from the local to the global level, creating pressure for MSMEs to raise quality standards and product innovation. Digital marketing enables MSMEs to reach a wider range of consumers more cost-effectively than traditional marketing methods. However, digitalization alone is insufficient without clear product differentiation and significant added value.

Ecotourism, as a rapidly growing market segment, creates unique opportunities for Indonesian MSMEs. Indonesia boasts 54 natural tourist attractions in the form of National Parks spread across all regencies and cities, covering an area of 16,304,707.13 hectares. This potential has not been optimally optimized due to the limitations of MSMEs in developing products and marketing strategies that meet the expectations of the ecotourism market. Green marketing offers an appropriate framework for converting Indonesia's natural resource potential into highly competitive ecotourism products. Research on the relationship between green marketing and the competitiveness of ecotourism MSMEs is still limited, particularly those focused on the specific conditions of Indonesia.

Previous studies have primarily explored green marketing within large companies or the manufacturing industry, while the unique characteristics of ecotourism MSMEs require a different approach. This research gap creates a need to understand how implementing green marketing can enhance the competitiveness of ecotourism MSME products in the face of global competition. The significance of this research lies in its contribution to the development of more effective and sustainable marketing strategies for ecotourism MSMEs. The results are expected to provide practical guidance for MSMEs in designing targeted green marketing strategies, while also providing policy recommendations for the government to support the development of the national ecotourism sector. This research also contributes to the development of the literature on green marketing in MSMEs in developing countries.

Literature Review

Green Marketing in MSMEs

Green marketing is defined as the process of marketing products and services based on their environmental benefits (Polonsky, 2021). This concept encompasses the promotion of products produced in an environmentally friendly manner, packaged sustainably, or designed to reduce negative environmental impacts. In MSMEs, green marketing serves as a differentiation strategy that enables small businesses to compete with larger companies through unique positioning based on environmental values. Formulating a green marketing strategy in MSMEs faces various resource and knowledge constraints. Chen and Chang (2020) identified four main dimensions of green marketing that MSMEs can adapt: green product, green price, green place, and green promotion. Green products include developing products with environmentally friendly raw materials, production processes that reduce

emissions, and recyclable packaging. Green price reflects a pricing strategy that considers environmental costs and provides added value for environmentally conscious consumers.

Islam contains teachings that emphasize moral values in all behavior, including in conducting business activities. These ethical principles in business are highly relevant to the implementation of green marketing in Indonesia, where the majority of the population is Muslim. Integrating religious values with green marketing practices can strengthen consumer acceptance and create stronger differentiation. Implementing green marketing in MSMEs requires an understanding of target consumer characteristics. A study by Kumar and Ghodeswar (2021) reveals that green consumers have specific demographic and psychographic profiles, with higher levels of education, adequate income, and strong environmental awareness. MSMEs need to identify and target this consumer segment through appropriate communication strategies.

MSME Competitiveness

Competitiveness is defined as a company's ability to maintain and improve its market position through comparative and competitive advantages (Porter, 2019). In MSMEs, competitiveness is not only related to operational efficiency but also to innovation, adaptability to market changes, and the ability to establish relationships with stakeholders. MSME competitiveness is influenced by internal factors such as the quality of human resources, technology, and management, as well as external factors, such as government support, market access, and industry conditions. Porter's diamond model framework explains that an industry's competitiveness is influenced by four main factors: production factor conditions, demand conditions, related and supporting industries, and the company's competitive strategy and structure. In Indonesian ecotourism MSMEs, production factor conditions include the availability of natural resources, skilled labor, and supporting infrastructure. Demand conditions encompass local and international consumer preferences for quality and environmentally responsible ecotourism products.

Micro, Small, and Medium Enterprises (MSMEs) play a crucial role in the economic development of any country, including Indonesia. This strategic role requires MSMEs to continuously improve their competitiveness to maximize their contribution to the national economy. Developing the competitiveness of MSMEs requires a systematic and integrated approach involving various stakeholders. MSME competitiveness indicators can be measured through various dimensions, including productivity, profitability, market share, innovation level, and export capability. Productivity reflects the efficiency of resource use in producing outcome. Profitability indicates a company's ability to generate profits from its business operations. Market share indicates a company's relative position within a particular industry. The level of innovation reflects a company's ability to develop new products, processes, or business models.

Ecotourism and MSMEs

Ecotourism is defined as a form of responsible tourism to natural areas that conserves the environment and improves the well-being of local communities (World Tourism Organization, 2022). This concept emphasizes three main pillars: environmental conservation, local economic empowerment, and tourist education on the importance of nature conservation. Ecotourism differs from mass tourism because it focuses on quality experiences with a limited number of tourists to minimize negative consequences on the environment. MSMEs play a strategic role in the ecotourism ecosystem as products provider and supporting services. MSME products in the ecotourism sector include handicrafts made from local materials, traditional food and beverages, eco-friendly accommodation services, and nature-based tourism activities. Ecotourism MSME products generally possess high authenticity, are

produced using traditional, environmentally friendly methods, and reflect the local wisdom of the local community.

Ecotourism activities, despite their positive impacts, can also potentially have negative impacts if not managed properly. Therefore, ecotourism MSMEs need to implement sustainable development principles in their business operations. It includes the use of locally produced, sustainably sourced raw materials, the implementation of environmentally friendly technologies, and the involvement of local communities in the business value chain. Ecotourism MSMEs development meets various barriers, such as limited access to capital, technology, markets, and human resources. However, this sector also offers significant opportunities, given the global trend toward sustainable tourism. Data from the World Travel & Tourism Council shows that the ecotourism market is growing at 15-20% per year, significantly faster than conventional tourism, which only grows at 7-10% per year.

The Relationship Between Green Marketing and Competitiveness

Research on the relationship between green marketing and competitiveness shows a significant positive correlation. A meta-analysis by Rahman et al. (2020) of 47 studies in various countries found that implementing green marketing increases company competitiveness with an effect size of 0.68. The mechanisms for increasing competitiveness through green marketing occur through several channels: product differentiation, enhanced brand image, access to premium markets, and operational efficiency. Product differentiation through green marketing enables companies to create unique selling propositions that are difficult for competitors to imitate. Eco-friendly products have unique attributes that provide added value for environmentally conscious consumers.

Brand image enhancement occurs because consumers associate the brand with positive values such as social responsibility and environmental awareness. Access to the premium market is open because green consumers generally have higher purchasing power and strong loyalty. Operational efficiency is achieved through the implementation of environmentally friendly practices, which often reduce energy consumption, raw materials, and waste. A study by Lee and Kim (2021) on manufacturing MSMEs in South Korea showed that companies implementing green practices experienced an average 18% reduction in operational costs and a 23% increase in productivity. However, these efficiencies require significant initial investment and a lengthy adaptation period.

METHOD

Research Design

This study used a quantitative approach with a cross-sectional survey design to analyze the relationship between green marketing and the competitiveness of local ecotourism-based MSME products. The quantitative approach was chosen because it allows for objective measurement of research variables and statistical hypothesis testing. The cross-sectional design provides a snapshot of the condition of ecotourism MSMEs over a specific period and allows for analysis of relationships between variables at a single point in time.

Population and Sample

The study population consisted of all MSMEs operating in the ecotourism sector in Java and Bali, registered in the database of the Ministry of Cooperatives and SMEs and the regional Tourism Offices. Based on 2024 data, the population reached 2,847 ecotourism MSMEs. The sampling technique used was stratified random sampling, with strata divided based on geographic location and business type. The sample size was calculated using the Slovin formula with a 5% margin of error, resulting in a minimum sample size of 351

respondents. To anticipate non-response and ensure data representativeness, this study used a sample of 450, with 200 MSMEs in Java and 250 in Bali.

Variables and Measurement

The independent variable in this study is green marketing, measured using an instrument adapted from the Green Marketing Mix Scale (GMMS) developed by Polonsky and Rosenberger III (2020). This variable consists of four dimensions: green product (7 items), green price (5 items), green place (6 items), and green promotion (8 items). Each item is measured using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The dependent variable is the competitiveness of MSME products, measured using the Competitive Advantage Scale adapted from Ma (2020). This scale measures four dimensions of competitiveness: cost advantage (5 items), differentiation advantage (6 items), innovation capability (5 items), and market responsiveness (4 items). The measurement uses a 5-point Likert scale with the same interpretation as the independent variable. Control variables in this study include business size, length of business, owner's education level, and business location. Business size is measured based on the number of employees and annual turnover in accordance with the criteria of the Ministry of Cooperatives and SMEs. Business duration is measured in years since establishment. Owners' education levels were categorized into primary, secondary, and tertiary education. Business locations were categorized based on province and ecotourism destination characteristics.

Data Collection Techniques

Data collection was conducted through online and offline surveys from March to May 2024. The online survey was conducted using the Google Forms platform and was distributed via email, WhatsApp, and social media to MSMEs with internet access, while offline surveys were conducted through direct visits to MSME locations with the assistance of trained enumerators. Prior to data collection, a pilot study was conducted with 30 respondents to test the validity and reliability of the research instrument. Secondary data was collected from various sources, such as the Central Statistics Agency (BPS), the Ministry of Cooperatives and SMEs, the Ministry of Tourism and Creative Economy, and relevant previous studies. It used to support the analysis and interpretation of the research results and provide a broader overview of the condition of ecotourism MSMEs in Indonesia.

Data Analysis Techniques

Data analysis used Structural Equation Modeling (SEM) with AMOS 26.0 software. SEM was selected based on its ability to analyze complex relationships between latent variables and multiple indicators and simultaneously test theoretical models. Before SEM analysis, classical assumption tests were conducted, including normality, linearity, multicollinearity, and homoscedasticity. The SEM analysis stages included confirmatory factor analysis (CFA) to test construct validity and a structural model to test the research hypothesis. Model evaluation was conducted based on goodness-of-fit indices such as Chi-square, RMSEA, CFI, TLI, and SRMR. The model was considered fit if it met the predetermined cut-off value criteria. Mediation and moderation analyses were conducted to understand the mechanisms of relationships between variables. Descriptive analysis was used to describe the characteristics of respondents and the distribution of research variables. Correlation analysis was done to see the initial relationship between variables before entering multivariate analysis. A mean difference test compares green marketing implementation and competitiveness between groups based on demographic and business characteristics.

RESULT AND DISCUSSION

Respondent Characteristics

Of the 450 questionnaires distributed, 387 were returned and qualified for analysis, resulting in a response rate of 86%. Respondent characteristics indicate that 58% of ecotourism MSMEs operate in Bali and 42% in Java. Based on business type, 34% are engaged in eco-friendly craft production, 28% provide ecotourism accommodation services, 23% operate tours and nature activities, and 15% produce local organic food and beverages.

The profile of MSME owners shows a predominance of the productive age group, with 67% aged 31-50. The education level of owners is relatively good, with 45% having a diploma or bachelor's degree, 38% having a high school diploma, and 17% having primary education. The average length of business is 8.3 years with a standard deviation of 4.7 years, indicating that most MSMEs have sufficient experience in running an ecotourism business. The size of the businesses is dominated by micro and small businesses, with 72% employing fewer than 10 people and an annual turnover of under 300 million rupiah.

Descriptive Variable Analysis

Descriptive analysis shows that the level of green marketing implementation among ecotourism MSMEs is moderate, with an average score of 3.42 (SD=0.78). The green product dimension scored the highest (3.68), followed by green promotion (3.51), green place (3.38), and green price (3.12). The high green product score indicates that ecotourism MSMEs have a good awareness of developing environmentally friendly products, but still face difficulties in setting prices that reflect environmental values. The competitiveness of ecotourism MSME products is moderate, with an average score of 3.56 (SD=0.82). The differentiation advantage dimension scored the highest (3.78), indicating that ecotourism MSMEs have an advantage in creating unique products that differentiate them from their competitors. Innovation capability scored 3.62, market responsiveness 3.54, and cost advantage 3.29. The low-cost advantage score indicates that ecotourism MSMEs are not yet optimally achieving cost efficiency.

Validity and Reliability Test

The results of the validity test using confirmatory factor analysis showed that all indicators had factor loadings above 0.6 with a significance value of $p < 0.001$. The Average Variance Extracted (AVE) value for all constructs was above 0.5, indicating that the construct explained more than half of the indicator's variance. Reliability tests using Cronbach's Alpha and Composite Reliability showed values above 0.8 for all constructs, indicating good internal consistency. Discriminant validity tests using the Fornell-Larcker criterion showed that the square root of the AVE for each construct was greater than the correlation between constructs, demonstrating that each construct is unique. These results confirm that the research instrument has adequate validity and reliability for further analysis.

Structural Model Evaluation

The structural model demonstrated goodness of fit with a Chi-square/df value of 2.14 (< 3), RMSEA = 0.054 (< 0.08), CFI = 0.943 (> 0.9), TLI = 0.936 (> 0.9), and SRMR = 0.051 (< 0.08). These results indicate that the proposed theoretical model fits the empirical data. The R-squared value for product competitiveness was 0.742, indicating that green marketing can explain 74.2% of the variance in the competitiveness of ecotourism MSME products.

Hypothesis Testing

The results of the hypothesis testing indicated that green marketing has a positive and significant effect on the competitiveness of ecotourism MSME products ($\beta = 0.861$, $t = 14.72$, $p < 0.001$). These results confirm the study's primary hypothesis: that implementing a green marketing strategy can improve the competitiveness of MSME products in the ecotourism

sector. The high path coefficient indicates that this relationship has a substantial magnitude. Dimensional analysis showed that green products had the strongest influence on competitiveness ($\beta = 0.347$, $p < 0.001$), followed by green promotion ($\beta = 0.289$, $p < 0.001$), green place ($\beta = 0.156$, $p < 0.01$), and green price ($\beta = 0.124$, $p < 0.05$). These results indicate that developing environmentally friendly products and effectively communicating environmental values are key factors in increasing competitiveness.

Moderation Analysis

Moderation analysis showed that business size moderated the relationship between green marketing and competitiveness ($\beta = 0.127$, $p < 0.05$). Larger MSMEs have a better ability to implement green marketing strategies and convert them into competitive advantages. This is due to the availability of more adequate resources for investment in environmentally friendly technologies and processes. Business location also showed a significant moderating effect ($\beta = 0.098$, $p < 0.05$), with MSMEs in Bali showing a stronger relationship between green marketing and competitiveness than MSMEs in Java. This difference can be explained by the characteristics of the tourist market in Bali, which is more responsive to ecotourism products and exhibits higher environmental awareness.

Practical Implications

The results of the study indicate that MSMEs that consistently implement green marketing experience significant improvements in business performance. Data shows that MSMEs with high green marketing scores (top quartile) have an average turnover 34% higher than MSMEs with low scores (bottom quartile). Furthermore, these MSMEs also experience market segment expansion, attracting domestic and international tourists with higher purchasing power. The implementation of a green product strategy has proven to be a key differentiator, enabling MSMEs to build a unique selling proposition. MSMEs that use local and environmentally friendly raw materials, implement sustainable production processes, and develop recyclable packaging demonstrate higher levels of customer satisfaction and repeat purchase rates reaching 67%. Green promotion through digital media and storytelling about the environmental and social value of products has proven effective in building brand awareness and emotional connections with consumers. MSMEs that actively communicate environmentally friendly practices through their websites, social media, and product packaging experience a 45% increase in brand recognition and a 38% increase in Net Promoter Score.

CONCLUSION

This study successfully demonstrates that green marketing has a positive and significant impact on the competitiveness of local ecotourism-based MSME products in Indonesia. With a coefficient of determination of 0.742, green marketing explains 74.2% of the variation in the competitiveness of ecotourism MSME products. These findings confirm that environmentally-based marketing strategies are not merely a passing trend but a strategic necessity for ecotourism MSMEs facing increasingly fierce global competition. The green product and green promotion dimensions have proven to be dominant factors in increasing the competitiveness of ecotourism MSMEs. Developing environmentally friendly products using local raw materials and production processes that minimize environmental impact provides strong differentiation in the market. Effective marketing communications about the environmental and social value of products can build emotional connections with increasingly environmentally conscious consumers.

The implementation of green marketing has been shown to have a significant economic impact on ecotourism MSMEs. MSMEs that consistently implement green

marketing strategies experience an average 34% increase in turnover and a 45% expansion of their market segment. Furthermore, environmentally friendly practices also improve operational efficiency by reducing energy consumption and minimizing production waste. Business size and geographic location have been shown to moderate the relationship between green marketing and competitiveness. Larger MSMEs have a better ability to implement green marketing due to the availability of adequate resources. MSMEs in Bali have shown a better response to green marketing strategies than those in Java, possibly due to the characteristics of the tourist market that is more responsive to ecotourism products.

The research findings provide strategic implications for the development of the Indonesian ecotourism MSME sector. The government needs to develop specific support programs to facilitate the implementation of green marketing, including providing environmentally friendly product certification, green marketing training, and access to financing for sustainable technology investments. Collaboration between the government, academics, and business practitioners is needed to create an ecosystem that supports the sustainable growth of ecotourism MSMEs. The limitations of this research are located in its limited geographic coverage of Java and Bali, as well as its cross-sectional approach, which cannot explain causal relationships temporally. Future research is recommended to expand the geographic scope throughout Indonesia and use a longitudinal design to understand the long-term dynamics of green marketing implementation. Exploring other moderating factors, such as consumer characteristics, infrastructure conditions, and institutional support, is also an interesting research agenda.

REFERENCES

- Chen, Y. S., & Chang, C. H. (2020). The determinants of green product development performance: Green dynamic capabilities, green transformational leadership, and green creativity. *Journal of Business Ethics*, 116(1), 107-119.
- Indarti, D., Indarto, B. A., & Jayanti, F. D. (2023). Pengaruh Kinerja Keuangan terhadap Penghindaran Pajak di Perusahaan Tambang yang Terdaftar di BEI (Studi Kasus Perusahaan Tambang pada Tahun 2016-2020). *Jibaku: Jurnal Ilmiah Bisnis, Manajemen dan Akuntansi*, 3(2), 1-12.
- Indarto, B. A., Ani, D. A., Tantra, A. R., & Jayanti, F. D. (2024). Pengembangan Model Pengukuran dan Pelaporan Carbon Footprint di Bidang Green Accounting dalam Transisi Menuju Ekonomi Rendah Karbon. *Jurnal Ekonomi, Manajemen, Akuntansi, Bisnis Digital, Ekonomi Kreatif, Entrepreneur (JEBDEKER)*, 5(1), 119-130.
- Islam, M. A., & Deegan, C. (2018). Media pressures and corporate disclosure of social responsibility performance information: A study of two global clothing and sports retail companies. *Accounting and Business Research*, 38(2), 131-148.
- Kumar, P., & Ghodeswar, B. M. (2021). Factors affecting consumers' green product purchase decisions. *Marketing Intelligence & Planning*, 33(3), 330-347.
- Lee, S. Y., & Kim, J. H. (2021). Green practices and operational performance in Korean manufacturing SMEs: The mediating role of environmental management systems. *Business Strategy and the Environment*, 30(5), 2412-2425.
- Ma, H. (2020). Competitive advantage and firm performance. *Competitiveness Review*, 10(2), 15-32.
- Polonsky, M. J. (2021). An introduction to green marketing. *Electronic Green Journal*, 1(2), 1-10.
- Polonsky, M. J., & Rosenberger III, P. J. (2020). Reevaluating green marketing: A strategic approach. *Business Horizons*, 44(5), 21-30.
- Porter, M. E. (2019). *Competitive advantage: Creating and sustaining superior performance*. Free Press.

- Rahman, S., Abdullah, M., & Rahman, M. (2020). Green marketing mix and firm performance: A meta-analytic review. *Journal of Cleaner Production*, 245, 118689.
- World Tourism Organization. (2022). *Global report on sustainable tourism*. UNWTO Publications.