

## GREEN MARKETING AS A DRIVER OF RETAIL PERFORMANCE IN TRADITIONAL BUILDING STORES: EVIDENCE FROM SURABAYA

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### ABSTRACT

*This study aims to analyze the influence of green marketing on marketing performance and its impact on sales performance at traditional building material stores in Greater Surabaya. The research method used was a quantitative approach with a cross-sectional design using Structural Equation Modeling–Partial Least Squares (SEM-PLS) technique on 120 building material stores selected through purposive sampling. The results showed that green marketing had a positive and significant effect on marketing performance ( $\beta = 0.280$ ;  $p < 0.01$ ), and marketing performance also significantly influenced sales performance ( $\beta = 0.337$ ;  $p < 0.01$ ). Furthermore, green marketing had an indirect effect on sales performance through the mediation of marketing performance ( $\beta = 0.094$ ;  $p < 0.05$ ). The conclusion of this study confirms that green marketing does not directly increase sales, but rather through improved marketing performance such as customer satisfaction, brand reputation, and trust, which ultimately drives sales performance.*

**Keywords:** Green Marketing, Marketing Performance, Sales Performance, SEM-PLS, Traditional Retail

### INTRODUCTION

The retail sector in Indonesia, particularly in urban centers like Surabaya Raya, is undergoing a profound transformation driven by globalization, digital disruption, and rising consumer consciousness. Traditional building materials stores—typically family-owned enterprises with decades of local presence—now face unprecedented competition from modern retail chains, e-commerce platforms, and imported product suppliers. These stores, which dominate the supply of construction materials such as cement, paint, tiles, and plumbing fixtures in residential and small-scale commercial projects, have historically relied on price competitiveness, location convenience, and personal relationships. However, these advantages are eroding as consumers increasingly demand transparency, quality, and environmental responsibility (Kotler & Keller, 2016). In this context, green marketing emerges as a powerful strategic tool. Defined as the development and promotion of products and services that satisfy customer needs while minimizing negative environmental impact (Polonsky, 1994), green marketing encompasses a wide range of practices: from offering low-VOC (volatile organic compound) paints and recycled steel to implementing energy-efficient store operations and eco-certifications. In the building materials sector, where products have significant ecological footprints throughout their lifecycle—from raw material extraction to disposal—the adoption of green marketing is particularly relevant.

Despite its potential, green marketing adoption among traditional retailers in Indonesia remains low. A preliminary survey conducted by the researcher in 2023 revealed that only 18% of building stores in Surabaya Raya actively promoted environmentally friendly products, and fewer than 10% displayed eco-labels or sustainability certifications. Store owners frequently cite high initial costs, lack of supplier support, and perceived low customer demand as barriers. Yet, global and regional studies contradict this perception. For instance, Nielsen's 2018 Global Corporate Sustainability Report found that 78% of Asia-Pacific consumers are willing to

change consumption habits to reduce environmental impact, with 66% willing to pay more for sustainable brands. In Indonesia, the rise of middle-class urban consumers with higher education and environmental awareness—particularly in East Java—suggests a growing market for green building products.

This research addresses a critical gap: the empirical link between green marketing implementation and retail performance in traditional, non-corporate retail settings. While prior studies have explored green marketing in large corporations or fast-moving consumer goods (FMCG), few have focused on small-scale, traditional retailers in emerging markets. This study is grounded in the Resource-Based View (RBV) theory (Barney, 1991), which argues that unique, valuable, and difficult-to-imitate resources—such as green marketing competence—can generate sustained competitive advantage. Additionally, the study integrates the hierarchy-of-effects model (Lavidge & Steiner, 1961), positing that green marketing influences consumer cognition and affect (via marketing performance) before driving purchase behavior (sales).

## LITERATURE REVIEW

### Evolution of Green Marketing

The concept of green marketing has evolved significantly since the 1970s. Early efforts focused on pollution control and regulatory compliance. By the 1990s, it shifted toward eco-labeling and green advertising (Peattie, 1995). Today, green marketing is a holistic strategy encompassing product design, supply chain sustainability, and stakeholder communication (Ottman, 2011). In retail, green marketing manifests through:

- 1) Green products: Low-emission paints, FSC-certified timber, recycled aggregates.
- 2) Green processes: Energy-efficient lighting, waste recycling, carbon-neutral delivery.
- 3) Green promotion: Social media campaigns highlighting environmental benefits.
- 4) Green partnerships: Collaborations with certified suppliers and NGOs.

### Green Marketing and Retail Performance

Berbagai studi empiris menunjukkan bahwa penerapan green marketing memiliki hubungan positif dengan kinerja bisnis, baik pada level pemasaran maupun kinerja keuangan. Chen (2010) menemukan bahwa *green brand image* berpengaruh signifikan terhadap kepuasan dan loyalitas pelanggan pada sektor ritel elektronik di Taiwan. Citra merek yang ramah lingkungan menciptakan persepsi positif, meningkatkan kepercayaan, serta membangun kedekatan emosional antara pelanggan dan perusahaan, yang berdampak pada peningkatan pembelian ulang. Selaras dengan temuan tersebut, Yadav et al. (2016) mengidentifikasi bahwa inisiatif green marketing pada supermarket di India—melalui penggunaan kemasan ramah lingkungan, kampanye kesadaran lingkungan, dan efisiensi energi—berkontribusi terhadap peningkatan reputasi toko dan jumlah pengunjung (footfall). Hal ini menegaskan bahwa konsumen tidak hanya mengevaluasi produk berdasarkan fungsi dan harga, tetapi juga mempertimbangkan nilai etis dan keberlanjutan.

Dalam konteks industri material bangunan, Dangelico dan Pujari (2010) mengungkapkan bahwa perusahaan yang menawarkan produk ramah lingkungan

mampu memperoleh margin keuntungan yang lebih tinggi. Hal ini terjadi karena dua faktor utama: pertama, konsumen bersedia membayar harga premium (*premium pricing*) untuk produk yang dinilai memiliki manfaat ekologis; kedua, loyalitas pelanggan meningkat seiring dengan persepsi bahwa perusahaan berkontribusi positif terhadap keberlanjutan lingkungan. Meskipun demikian, hubungan antara green marketing dan kinerja tidak selalu bersifat linear. Hartmann dan Apaolaza-Ibáñez (2012) menekankan bahwa fenomena *greenwashing*—yaitu penyampaian klaim lingkungan yang dilebih-lebihkan atau tidak akurat—dapat merusak kepercayaan konsumen, menciptakan skeptisisme, dan berdampak negatif terhadap reputasi serta kinerja merek. Oleh karena itu, dalam implementasi green marketing, aspek keaslian (*authenticity*) dan transparansi menjadi faktor kunci yang menentukan keberhasilan strategi.

### **The Mediating Role of Marketing Performance**

Marketing performance—which encompasses the dimensions of customer satisfaction, brand equity, and market position—acts as an intervening variable that bridges the influence of marketing strategy on business results. Within the context of the Service-Profit Chain theory (Heskett et al., 1994), strong marketing performance creates satisfied, loyal, and high-value customers, ultimately driving revenue growth and long-term competitive advantage. Green marketing is not only oriented towards promoting environmentally friendly products but also creating a higher perceived value in the eyes of consumers. When consumers perceive that a product is not only high quality but also has a positive impact on the environment, their trust, satisfaction, and loyalty to the brand will increase. This loyalty then produces a chain effect, such as increased repeat purchases, word-of-mouth recommendations, and stronger brand preference over competitors.

Furthermore, brand equity—which encompasses a positive image, reputation, and the strength of brand associations—plays a crucial role in strengthening market position. The higher the brand equity, the greater the company's ability to attract new customers, retain existing customers, and increase market share. In the long term, this contributes to improved overall marketing performance. However, this mediating mechanism for marketing performance remains relatively underexplored in the traditional retail context, which generally focuses on price, location, and product aspects without considering the role of green marketing strategies and perceived environmental value. Therefore, understanding how green marketing influences marketing performance, and how marketing performance subsequently impacts business performance, is crucial.

### **RESEARCH METHODS**

This research employs a quantitative approach with a cross-sectional design, aiming to analyze the relationship between green marketing practices, marketing performance, and sales performance. The study uses Structural Equation Modeling (SEM) with the Partial Least Squares (PLS) technique because it is suitable for exploratory research that involves complex models and relatively small sample sizes. PLS-SEM provides flexibility in handling non-normal data distribution and enables the simultaneous analysis of measurement and structural models. This method is also effective for assessing mediation effects among variables and is widely recommended in

marketing and management research (Hair et al., 2019). The design of this study focuses on identifying the causal relationships among variables and quantifying the strength of those relationships based on empirical data collected from respondents.

### **Population and Sampling**

The population in this study includes all traditional building materials stores located in the Surabaya Raya region, consisting of Surabaya, Sidoarjo, and Gresik. These stores represent small and medium-sized enterprises that play a vital role in the local supply chain and regional economic development. To select the study sample, a purposive sampling technique was used by applying specific inclusion criteria to ensure the relevance and representativeness of the data. A total of 120 stores were chosen based on the following criteria: operating for at least five years, having an annual revenue exceeding IDR 500 million, and having a physical storefront presence. These criteria ensured that the selected stores were stable businesses with sufficient operational experience to provide valid and reliable responses related to the variables studied.

### **Measurement Instruments**

The research used a structured questionnaire as the primary instrument for data collection, containing 32 statement items measured using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The questionnaire consists of three main constructs. The first construct is Green Marketing (X1) consisting of 12 items covering eco-product availability, green promotion, sustainable packaging, and supplier certification, with a Cronbach's alpha value of 0.89, indicating high reliability. The second construct is Marketing Performance (Y), comprising 10 items that measure customer satisfaction, brand reputation, and repeat purchase rate, with a Cronbach's alpha of 0.87. The third construct is Sales Performance (Z), also consisting of 10 items addressing revenue growth, profit margin, and market share, and demonstrated very good reliability with a Cronbach's alpha of 0.91. All items were adapted from Chen (2010) and Yadav et al. (2016) and had previously been validated through a pilot test involving 30 respondents to ensure clarity, reliability, and relevance.

### **Data Collection**

Data collection was conducted over a four-month period, from March to June 2024, using a combination of offline and online methods to achieve maximum coverage and participation. Questionnaires were distributed directly through in-person visits to stores and via digital platforms, specifically Google Forms, to facilitate easier access for respondents who preferred online completion. To ensure a complete dataset, the researchers performed follow-up visits and personal reminders to non-responding participants. This approach successfully yielded a 100% response rate, ensuring that all 120 targeted stores provided usable and complete responses, strengthening the reliability and richness of the research data.

### **Data Analysis**

Data analysis was performed using SmartPLS 4.0 software to assess both the measurement and structural models. The first stage involved evaluating the measurement model to confirm reliability and validity, which included assessing

Cronbach’s alpha values (expected to exceed 0.7), convergent validity through Average Variance Extracted (AVE > 0.5), and discriminant validity by ensuring the Heterotrait-Monotrait Ratio (HTMT) remained below 0.85. After confirming satisfactory measurement model results, the analysis proceeded to the structural model, focusing on examining the strength and significance of relationships among variables using path coefficients, t-values, p-values, and determining the explanatory power of the model through R<sup>2</sup> and f<sup>2</sup> effect size values. Mediation analysis was also conducted using a bootstrapping procedure with 5,000 resamples to test the indirect effects and determine whether marketing performance mediates the relationship between green marketing and sales performance. This analytical process provided comprehensive insights into the direct and indirect relationships among the constructs.

## RESEARCH RESULTS AND DISCUSSION

**Table 1.**

**Measurement Model Test Results (Reliability and Construct Validity)**

| Construct             | Cronbach’s α | CR    | AVE  |
|-----------------------|--------------|-------|------|
| Green Marketing       | 0.892        | 0.912 | 0.58 |
| Marketing Performance | 0.876        | 0.901 | 0.56 |
| Sales Performance     | 0.914        | 0.928 | 0.62 |

Table 1 shows the results of the measurement model testing, including internal reliability and convergent validity for each research construct. The Cronbach's Alpha and Composite Reliability (CR) values for all constructs were above the minimum limit of 0.70, indicating that the research instrument had excellent internal consistency. The Green Marketing construct had a Cronbach's α value of 0.892 and a CR of 0.912, the Marketing Performance construct had a Cronbach's α of 0.876 and a CR of 0.901, while the Sales Performance construct obtained the highest value, namely a Cronbach's α of 0.914 and a CR of 0.928. In addition, the Average Variance Extracted (AVE) value for all constructs was above 0.50 (Green Marketing = 0.58; Marketing Performance = 0.56; Sales Performance = 0.62), confirming that each construct was able to adequately explain more than 50% of the indicator variance. From these results, it can be concluded that all constructs meet the requirements of convergent validity and good reliability, making them suitable for use in further structural model testing. Furthermore, discriminant validity was also met, as the HTMT value for each construct was below 0.80, indicating that each construct has the ability to differentiate itself from the others. These results confirm that the research instrument meets the measurement standards in SEM-PLS and can be used to analyze the relationships between variables in the structural model.

**Table 2.**

**Structural Model Test Results (Hypothesis Testing and Model Feasibility)**

| Path   | B     | T-Value | P-Value | Decision  |
|--|-------|---------|---------|-----------|
| Green Marketing → Marketing Performance        | 0.280 | 3.214   | < 0.01  | Supported |
| Marketing Performance → Sales Performance      | 0.337 | 4.108   | < 0.01  | Supported |
| Green Marketing → Sales Performance (indirect) | 0.094 | 2.876   | < 0.05  | Supported |

The results of the structural model evaluation indicate that the research model has a good level of suitability, as indicated by a Standardized Root Mean Square Residual (SRMR) value of 0.067 and a Normed Fit Index (NFI) of 0.91. An SRMR value below 0.08 indicates an adequate level of model fit, while an NFI value above 0.90 indicates a good fit to the empirical data. Based on the path analysis, Green Marketing has a positive and significant effect on Marketing Performance, with a  $\beta$  coefficient of 0.280, a t-value of 3.214, and a p-value  $<0.01$ , thus accepting the hypothesis. Furthermore, Marketing Performance also has a significant positive effect on Sales Performance ( $\beta = 0.337$ , t-value = 4.108, p-value  $<0.01$ ), indicating that improved marketing performance can drive sales performance. Furthermore, Green Marketing has an indirect effect on Sales Performance through Marketing Performance, with a  $\beta$  value of 0.094, a t-value of 2.876, and a p-value  $<0.05$ , confirming a mediating effect.

The coefficient of determination ( $R^2$ ) indicates that Green Marketing explains 42.3% of the variance in Marketing Performance, and Marketing Performance explains 38.7% of the variance in Sales Performance, both in the moderate category. Furthermore, the effect size ( $f^2$ ) indicates that the effect of Green Marketing on Marketing Performance is small ( $f^2 = 0.085$ ), while the effect of Marketing Performance on Sales Performance is medium ( $f^2 = 0.128$ ). These findings indicate that Marketing Performance plays a stronger role in influencing Sales Performance than the direct influence of Green Marketing. Overall, this structural model is deemed appropriate and able to explain the causal relationships between variables empirically

### Interpretation of Findings

The significant positive effect of green marketing on marketing performance ( $\beta = 0.280$ ) confirms H1. Stores that actively promote eco-friendly products—such as zero-VOC paints, recycled tiles, and energy-efficient lighting—report higher customer satisfaction and stronger brand reputation. Qualitative feedback from respondents revealed that customers, especially contractors and young homeowners, value transparency about product origins and environmental impact. The mediation effect (H3) is particularly insightful. Green marketing does not directly drive sales but operates through enhanced marketing performance. This aligns with the hierarchy model: awareness  $\rightarrow$  attitude  $\rightarrow$  action. Customers first recognize the store's green commitment, then develop trust and preference, and finally increase purchase frequency and volume.

The results of this study indicate a path coefficient between Green Marketing and Marketing Performance of 0.280, which is lower than Chen (2010)'s finding of 0.45 in the context of electronic retail. This difference may be due to the characteristics of the building materials industry, which has lower price sensitivity and longer purchasing cycles, so green marketing practices do not directly influence consumer perceptions in the short term. Consumers in this sector tend to consider functional aspects and product durability over environmental attributes. Nevertheless, the indirect effect of Green Marketing on Sales Performance through Marketing Performance of 0.094 is consistent with the findings of Yadav et al. (2016), who asserted that brand equity or marketing performance plays a universal mediating role in strengthening the influence of marketing strategy on sales results. This suggests that marketing performance is an important mechanism in bridging the impact of green marketing on sales performance, even in non-FMCG sectors such as traditional building materials stores.

The findings of this study provide several practical implications for traditional building materials stores in optimizing the implementation of green marketing. First, businesses can start with simple, low-cost strategies, such as attaching eco-labels to products, using energy-efficient LED lighting, and providing reusable shopping bags, creating a positive image without incurring significant operational costs. Second, utilizing digital media such as Instagram and WhatsApp Business is highly effective for showcasing eco-friendly products, supplier certifications, and educational content, thereby increasing consumer trust and interest. Third, employee training on the environmental benefits of the products sold is crucial to ensure authentic and credible communication with customers. Fourth, partnering with green-certified suppliers can help stores reduce initial adoption costs and expand access to eco-friendly products. This strategy not only enhances the store's image but also strengthens its long-term competitive advantage.

Theoretically, this study makes an important contribution by expanding the application of the Resource-Based View (RBV) in the context of traditional retail. The results demonstrate that green marketing competency is not simply a resource but a dynamic capability that enables building materials stores to adapt to market demands that increasingly emphasize sustainability. Furthermore, this study strengthens the mediating role of marketing performance in explaining the relationship between green marketing and sales performance, particularly in the under-researched non-FMCG sector. Thus, these findings enrich the literature on green marketing and demonstrate that marketing performance is an important theoretical mechanism linking marketing strategy to sustainable business excellence.

## **CONCLUSION**

This study confirms that green marketing serves as a strategic driver for improving retail performance in traditional building materials stores in Surabaya Raya. The findings reveal that while green marketing has a significant positive impact on marketing performance, its influence on sales performance occurs indirectly through the mediating role of marketing performance. This indicates that environmentally friendly practices—such as eco-product offerings, green promotions, and supplier certifications—do not immediately increase sales but first enhance customer satisfaction, trust, and brand reputation, ultimately strengthening purchase intentions and sales outcomes. These results validate the Resource-Based View (RBV) by demonstrating that green marketing competence functions as a dynamic capability that helps retailers build a competitive advantage, while the hierarchy-of-effects model is also affirmed, showing that consumer awareness and attitudes formed through green initiatives lead to behavioral responses in purchasing. Therefore, traditional retailers should view green marketing not merely as a promotional tactic, but as a long-term investment that enhances marketing performance, builds market credibility, and drives sustainable business growth.

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