

The Impact of the Use of Environmentally Friendly Raw Materials and Green Marketing Communication on Corporate Reputation and Profitability in the Manufacturing Industry in Central Java

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ABSTRACT

This study examines the impact of environmentally friendly raw materials and green marketing communication on corporate reputation and profitability within the manufacturing industry in Central Java. Utilizing a quantitative research approach, data were collected from 140 manufacturing firms, analyzed using a Likert scale ranging from 1 to 5. The data were processed with Structural Equation Modeling-Partial Least Squares (SEM-PLS 3) to evaluate the proposed hypotheses. The findings reveal that both the use of environmentally friendly raw materials and green marketing communication have positive and significant effects on corporate reputation and profitability. These results highlight the strategic importance of sustainability practices in enhancing corporate outcomes. The study underscores the value of integrating environmentally conscious operations and effective communication strategies to achieve competitive advantages in the manufacturing sector. By adopting sustainable practices and promoting these efforts through targeted marketing communications, companies can strengthen their market position and financial performance.

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1. INTRODUCTION

The increasing awareness of environmental issues and the growing demand for sustainable business practices have indeed compelled companies, particularly in the manufacturing industry, to reevaluate their operational strategies. This sector, notorious for its substantial environmental footprint, is now under significant pressure to adopt green

manufacturing techniques and sustainable practices [1], [2]. The adoption of environmentally friendly raw materials and green marketing communication has become pivotal for companies aiming to enhance their corporate reputation and profitability. Green manufacturing techniques not only address ecological degradation but also raise concerns on social, environmental, and economic fronts, thereby influencing organizational

performance positively [3]. To measure and manage these sustainable efforts, firms are developing assessment frameworks that capture resource saving, environmental sustainability, and socio-economic impacts, as demonstrated by a major chemical company in Korea [4]. On an international scale, businesses are integrating sustainability into their operations through strategies like circular economy models, carbon footprint reduction, and ethical sourcing, driven by changing consumer preferences, regulatory pressures, and investor expectations [5]. Green marketing, in particular, has emerged as a source of competitive advantage, enabling companies to differentiate themselves [6], achieve operational efficiency, and attract sustainability-conscious consumers, thereby increasing profitability [7]. Furthermore, the holistic approach to sustainable business practices, which includes principles of circular economy, energy efficiency, waste reduction, and supply chain optimization, highlights the ethical dimensions of consumer education and transparent marketing, thereby contributing to the development of a sustainable corporate culture [8].

Central Java, as a significant industrial hub in Indonesia, faces the dual challenge of maintaining economic competitiveness while addressing environmental concerns. The shift towards environmentally friendly raw materials is a strategic move that can help manufacturing companies reduce their ecological footprint and contribute to the sustainability agenda. This approach is particularly relevant given the increasing consumer awareness and demand for sustainable business practices [9]. The manufacturing sector in Indonesia, which contributes significantly to the economy, has shown optimism in facing future economic conditions, emphasizing the importance of strategic orientation, including customer care and technology orientation [10]. However, the selection of green-based suppliers remains a challenge, as traditional criteria such as cost, quality, and delivery time often take

precedence over environmental factors. A framework integrating multicriteria decision-making techniques, such as the best-worst method (BWM) and Višekriterijumsko Kompromisno Rangiranje (VIKOR), can aid in evaluating and selecting green suppliers, as demonstrated in a case study of an Indonesian metal manufacturing company [11]. Additionally, the pharmaceutical industry in Indonesia faces challenges due to its reliance on imported raw materials and lack of government support for local production. Policies that prioritize domestic products, increase health spending, and provide incentives for research and development are crucial for the industry's growth and sustainability [12]. The craft industry, including furniture manufacturing, also highlights the importance of sustainable resource management and innovation to maintain competitiveness in international markets [13]. By adopting environmentally friendly raw materials and sustainable practices, Central Java's manufacturing companies can not only enhance their market differentiation but also align with global sustainability trends, ensuring long-term economic and environmental benefits.

Green marketing communication has indeed emerged as a powerful tool for companies to convey their commitment to sustainability, significantly impacting their relationships with various stakeholders, including consumers, investors, and regulatory bodies. By effectively promoting their environmental initiatives, companies can enhance their corporate reputation and build stronger emotional connections with consumers, which in turn fosters brand loyalty and provides a competitive advantage [14]. The strategic use of green marketing not only aligns a company's values with those of its customers but also helps in reducing operational costs and ensuring compliance with environmental regulations [15]. This alignment is crucial as a significant portion of consumers, approximately 73%, are willing to pay a premium for environmentally friendly products, indicating that green marketing can positively influence consumer purchasing

decisions and ultimately impact profitability [15]. Additionally, green marketing methods contribute to the conservation of natural resources and the reduction of harmful emissions, which both contribute to the promotion of sustainable development and the increase of public awareness about environmental concerns [16]. The role of media and communication in this context is also vital, as they shape public perceptions and understanding of sustainable practices, influencing market demands and consumer behavior [17]. Successful businesses make use of a wide variety of media outlets in order to successfully convey their sustainability activities, ultimately enhancing their brand equity and effectively engaging stakeholders [17]. Furthermore, green marketing supports the adoption of environmentally friendly methods and the offering of sustainable alternatives to customers, both of which are crucial for attaining long-term sustainable growth [18].

This study aims to explore the impact of the use of environmentally friendly raw materials and green marketing communication on corporate reputation and profitability in the manufacturing industry in Central Java.

2. LITERATURE REVIEW

2.1 *Environmentally Friendly Raw Materials*

The adoption of environmentally friendly raw materials is a pivotal aspect of sustainable manufacturing, significantly reducing environmental impacts and enhancing resource efficiency. These materials, often derived from renewable sources, exhibit a lower carbon footprint and reduced toxicity compared to conventional materials [19]. The transition to sustainable materials is driven by regulatory pressures, consumer demand, and potential cost savings, which collectively encourage

companies to adopt greener practices [3], [20]. Research indicates that the use of eco-friendly raw materials can confer a competitive advantage to companies by integrating environmental concerns into market strategies, thereby enabling differentiation and operational efficiency [7]. This competitive edge is further bolstered by certifications such as ISO 14001, which demonstrate a commitment to sustainability and attract consumers who are increasingly engaged with eco-conscious products [7]. The incorporation of sustainable materials into a company's goods typically results in an improved brand image and an increase in customer loyalty. This is because customers are more willing to support businesses that are in line with their principles of environmental responsibility [7], [19]. Additionally, these practices can lead to operational efficiencies and reduced waste, contributing to improved financial performance [3], [21]. For instance, in the construction industry, the use of sustainable building materials not only addresses the environmental impact of resource exploitation but also ensures the longevity and efficiency of buildings throughout their lifecycle [21]. The ongoing research and development in eco-materials, such as bioplastics and recycled composites, highlight their potential to meet or exceed the performance of traditional materials while fostering a harmonious coexistence with the planet [19]. Thus, the strategic adoption of environmentally

friendly raw materials is not only a response to ecological concerns but also a pathway to achieving long-term business success and sustainability.

2.2 *Green Marketing Communication*

Green marketing communication is a strategic approach that involves promoting a company's environmental initiatives and sustainability practices to its stakeholders, aiming to enhance corporate reputation and build consumer trust. This strategy encompasses various activities such as product modifications, changes to production processes, packaging alterations, and advertising modifications to highlight the environmental benefits of products and services [22]. Effective green marketing communication can significantly improve a company's brand reputation, reduce expenses, and ensure compliance with regulations, while also aligning the company's values with those of its customers [15]. By transparently communicating their environmental efforts, companies can build trust and credibility with consumers, which is crucial in today's market where 73 percent of consumers are willing to pay more for environmentally friendly products [15]. This approach not only differentiates a company from its competitors but also attracts environmentally conscious consumers, leading to increased market share [15]. In India, for instance, the shift towards green marketing is driven by growing societal and environmental consciousness, with businesses adopting eco-

friendly practices to meet market demands and create a positive brand image [23]. However, the implementation of green marketing strategies can pose challenges such as increased production costs and the need for innovation in sustainable product development [23]. Green marketing, in spite of these limitations, has a beneficial influence on the global market, advocating for the conservation of natural resources and protecting the environment for the benefit of future generations [18]. It is a comprehensive approach that integrates traditional marketing practices with a priority on environmental protection, applicable across various industrial sectors [24]. By leveraging green marketing communication, companies can navigate the shift towards sustainability, align their marketing efforts with environmental responsibility, and contribute to a more sustainable and ecologically conscious business environment [23], [24].

2.3 *Corporate Reputation*

Corporate reputation, as defined by stakeholders' perceptions of a company's values, integrity, and contributions to society, is a multifaceted construct influenced by various factors. As evidenced by a study conducted on telecom service providers in Lagos, Nigeria, which discovered a significant positive relationship between stakeholder engagement and corporate reputation, accounting for 19.9% of the variations in corporate reputation, the involvement of stakeholders

plays a crucial role in shaping the reputation of a corporation [25]. Additionally, Corporate Social Responsibility (CSR) initiatives are pivotal in enhancing organizational reputation. Companies that prioritize CSR activities, such as environmental sustainability and ethical practices, are perceived more favorably by stakeholders, which underscores the importance of transparent communication and strong leadership in fostering a positive reputation [26]. In the context of crisis management, a good corporate reputation can initially exacerbate the negative impact on stock value but ultimately helps in quickly alleviating the crisis's effects, leading to positive abnormal returns in the long run [27]. Effective stakeholder management and communication strategies are essential for constructing and preserving a positive corporate reputation. Public relations experts emphasize the importance of mutual trust and strategic decision-making in building strong stakeholder relationships, which in turn enhance corporate reputation [28], [29].

2.4 Profitability

Profitability is indeed a crucial performance indicator that reflects a company's ability to generate earnings relative to its expenses and overall financial health. Various factors influence profitability, including cash turnover, receivables turnover, inventory turnover, liquidity, and company size. For example, research conducted on manufacturing businesses in the food and beverage sub-sector

that were listed on the Indonesia Stock Exchange between the years 2018 and 2021 reveals that both cash turnover and receivables turnover have a substantial influence on profitability, either partially or concurrently [30]. However, another study examining a broader range of factors found that while inventory turnover negatively affects profitability, liquidity has a positive impact, and working capital turnover, cash turnover, and accounts receivable turnover do not significantly influence profitability [31]. Additionally, in the container and packaging industry, the cash conversion cycle negatively impacts profitability, whereas liquidity positively affects it, and company size shows no significant effect [32]. Analyzing Chinese listed companies, it was found that poor collection ability and weak profit generation necessitate strategies like diversification, product development, and optimized inventory management to enhance profitability [33]. Furthermore, profitability is a critical measure for investors and stakeholders as it signifies investment returns and growth potential, making it a focal point in financial analysis and corporate valuation [34].

Theoretical Framework

This study is based on the Resource-Based View (RBV) of the company, which proposes that businesses may create a sustained competitive advantage by utilizing their distinctive resources and capabilities [35]. This view serves as the theoretical foundation that

underpins this study. Furthermore, according to [36], the incorporation of environmentally friendly raw materials and green marketing communication constitutes important resources that have the potential to improve both the

reputation of the company and its profitability. This study builds on previous research by empirically examining the relationships between these variables in the manufacturing industry in Central Java.

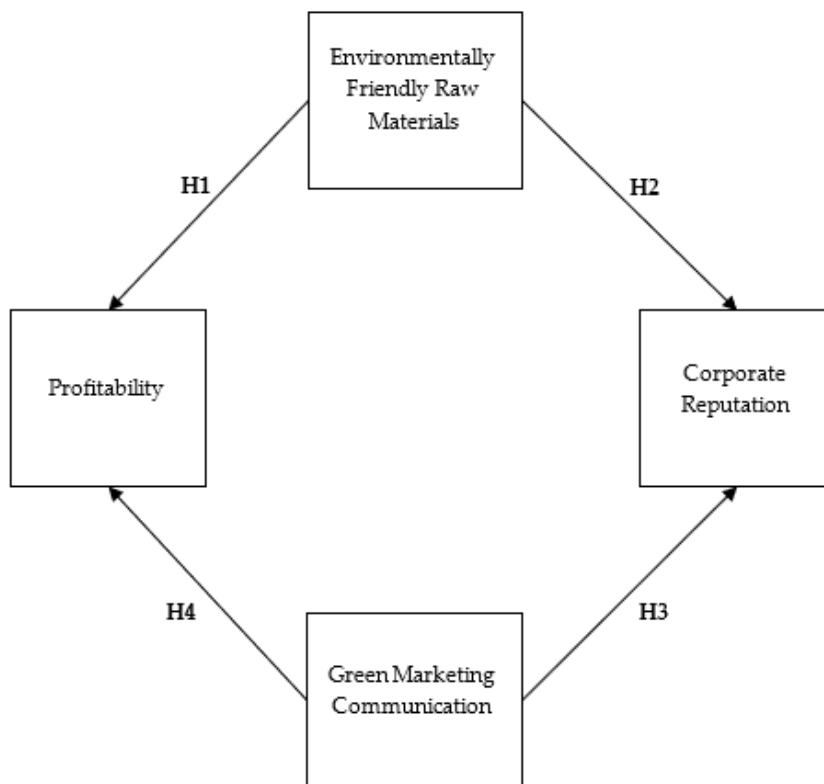


Figure 1. Conceptual Framework

3. METHODS

3.1 Research Design

The study adopts a quantitative research design to examine the relationships between the variables of interest. A survey method was employed to collect data from manufacturing companies in Central Java, allowing for the assessment of perceptions and attitudes towards sustainable practices and their effects on corporate reputation and profitability. The use of a structured questionnaire facilitated the collection of standardized data, enabling the application of statistical analysis to test the research hypotheses.

3.2 Sample and Sampling Technique

The study sample consisted of 140 manufacturing companies operating in Central Java. A purposive sampling technique was used to select participants, ensuring that the sample included firms that have implemented environmentally friendly raw materials and green marketing communication strategies. This approach was chosen to capture the perspectives of companies actively engaged in sustainable practices, thus enhancing the relevance and validity of the findings.

3.3 Data Collection

The data were obtained by means of a standardized questionnaire that was sent out to managers and key decision-makers inside the organizations that were chosen. The questionnaire was developed with the purpose of gathering information on the utilization of environmentally friendly raw materials, green marketing communication efforts, the reputation of the company, and the profitability of the business. According to a Likert scale that ranged from 1 (strongly disagree) to 5 (strongly agree), respondents were asked to assess the degree to which they agreed or disagreed with a number of different assertions. The Likert scale was used because of its capacity to accurately evaluate attitudes and perceptions, hence facilitating a more nuanced comprehension of the variables that were observed in the research.

3.4 Data Analysis

Structural Equation Modeling-Partial Least Squares (SEM-PLS 3) is a sophisticated analytical approach that is ideal for complicated models that contain numerous constructs and indicators. This technique was used to analyze the data that was obtained. A comprehensive understanding of the causal pathways and interactions between constructs may be obtained via the utilization of this technique, which enables the analysis of simultaneous connections between independent and dependent variables. The study was carried out in two stages: first, the measurement model was evaluated to confirm its reliability and construct validity. This was accomplished by evaluating the composite reliability, the average variance extracted (AVE), and the discriminant validity of the model. Second, the structural model was put to the test in order to investigate the hypothesized connections between green raw materials, green marketing communications, corporate reputation, and profitability. This was accomplished by calculating path coefficients, t values, and R2 values in order to evaluate the significance and strength of these connections.

4. RESULTS AND DISCUSSION

4.1 Demographic Sample

The demographic characteristics of the sample provide context for understanding the diversity and representation of the participating manufacturing companies in Central Java. The sample included 140 companies, with data collected on key demographic variables such as company size, industry type, and years of operation. Small companies (fewer than 50 employees) accounted for 35% of the sample, medium companies (50 to 249 employees) represented 40%, and large companies (250 or more employees) made up 25%. The industry types included food and beverage (30%), textiles and apparel (25%), electronics and electrical (20%), chemicals and pharmaceuticals (15%), and other manufacturing sectors (10%). Regarding years of operation, 20% of the companies had been operating for less than 5 years, 40% for 5 to 15 years, and 40% for more than 15 years, reflecting a mix of newer and more established firms.

Descriptive statistics were calculated to provide an overview of the respondents' perceptions of environmentally friendly raw materials, green marketing communication, corporate reputation, and profitability among 140 manufacturing companies in Central Java. Using a Likert scale from 1 (strongly disagree) to 5 (strongly agree), the mean scores and standard deviations for each construct were analyzed. The mean score for environmentally friendly raw materials was 4.12 (SD = 0.56), indicating strong agreement that companies use sustainable materials in their production processes. Green marketing communication had a mean score of 4.25 (SD = 0.61), reflecting positive perceptions of the effectiveness of green marketing efforts in communicating sustainability initiatives. The corporate reputation scored 4.18 (SD = 0.59), suggesting a belief in a positive reputation resulting from sustainability practices. Profitability had a mean score of 4.10 (SD = 0.64), indicating a perception of a favorable impact of sustainability practices on financial performance.

4.2 Measurement Model

For the purpose of determining the reliability and validity of the constructs that were utilized in this investigation, the measurement model was evaluated. In order

to do this, it was necessary to investigate the loading factors, Cronbach's alpha, composite reliability, and average variance extracted (AVE) for each of the following constructs: profitability, green marketing communication, environmentally friendly raw materials, and corporate reputation. A summary of the findings may be seen in the table that follows.

Table 1. Measurement Model Assessment

Variable	Code	Loading Factor	Cronbach's Alpha	Composite Reliability	Average Variant Extracted
Environmentally Friendly Raw Materials	EFR.1	0.853	0.859	0.914	0.780
	EFR.2	0.935			
	EFR.3	0.860			
Green Marketing Communication	GMC.1	0.807	0.785	0.874	0.699
	GMC.2	0.875			
	GMC.3	0.826			
Corporate Reputation	CPR.1	0.772	0.809	0.874	0.635
	CPR.2	0.830			
	CPR.3	0.842			
	CPR.4	0.740			
Profitability	PFB.1	0.840	0.823	0.880	0.647
	PFB.2	0.821			
	PFB.3	0.822			
	PFB.4	0.729			

Source: Data Processing Results (2024)

At the time of the reliability analysis, Cronbach's alpha and composite reliability were utilized to evaluate consistency. According to Nunnally (1978), values that were more than 0.70 indicated that the internal consistency was satisfactory. There was a high level of dependability demonstrated by the Environmentally Friendly Raw Materials, which had a Cronbach's alpha of 0.859 and a composite reliability of 0.914. According to Cronbach's alpha, Green Marketing Communication has a value of 0.785, and its composite reliability was 0.874, both of which were higher than the criteria. The Cronbach's alpha for Corporate Reputation was 0.809, and the composite dependability was 0.874, which indicates that the reliability of the composite was satisfactory. There was a high level of dependability demonstrated by the fact that profitability had a Cronbach's alpha of 0.823 and a composite reliability of 0.880. For the

purpose of validity study, the average variance extracted (AVE) and loading factors were analyzed. According to Fornell and Larcker (1981), a convergent validity is considered to be satisfactory when the AVE is more than 0.50. Strong validity was demonstrated by the fact that environmentally friendly raw materials had an average value of 0.780 and loading factors ranging from 0.853 to 0.935. Green Marketing Communication had an AVE of 0.699 and loading factors between 0.807 and 0.875, demonstrating satisfactory validity. Corporate Reputation had an AVE of 0.635 and loading factors from 0.740 to 0.842, indicating adequate validity. Profitability had an AVE of 0.647 and loading factors from 0.729 to 0.840, demonstrating good validity.

4.3 Discriminant Validity

A crucial component of construct validity is known as discriminant validity,

which guarantees that the constructs contained inside the model are different and uncorrelated with one another. In order to evaluate it, the square root of the average variance extracted (AVE) for each construct is compared with the correlations that exist

between the constructs. For the purpose of establishing discriminant validity, it is necessary for the square root of the average variance extracted (AVE) for each construct to be higher than the correlations with other constructs [37].

Table 2. Discriminant Validity

	Corporate Reputation	Environmentally Friendly Raw Materials	Green Marketing Communication	Profitability
Corporate Reputation	0.797			
Environmentally Friendly Raw Materials	0.717	0.883		
Green Marketing Communication	0.788	0.713	0.836	
Profitability	0.570	0.485	0.563	0.804

Source: Data Processing Results (2024)

A comparison was made between the square root of the average variance extracted (AVE) for each construct and its correlations with other constructs in order to validate the discriminant validity of the constructs. A high level of discriminant validity was shown by the fact that the square root of the AVE for Corporate Reputation was 0.797, which was greater than its correlations with Environmentally Friendly Raw Materials (0.717), Green Marketing Communication (0.788), and Profitability (0.570). Environmentally Friendly Raw Materials had a square root of AVE of 0.823, exceeding its correlations with Corporate Reputation

(0.717), Green Marketing Communication (0.713), and Profitability (0.485), demonstrating satisfactory discriminant validity. Green Marketing Communication had a square root of AVE of 0.836, higher than its correlations with Corporate Reputation (0.788), Environmentally Friendly Raw Materials (0.713), and Profitability (0.563), confirming good discriminant validity. Lastly, Profitability had a square root of AVE of 0.804, greater than its correlations with Corporate Reputation (0.570), Environmentally Friendly Raw Materials (0.485), and Green Marketing Communication (0.563), indicating adequate discriminant validity.

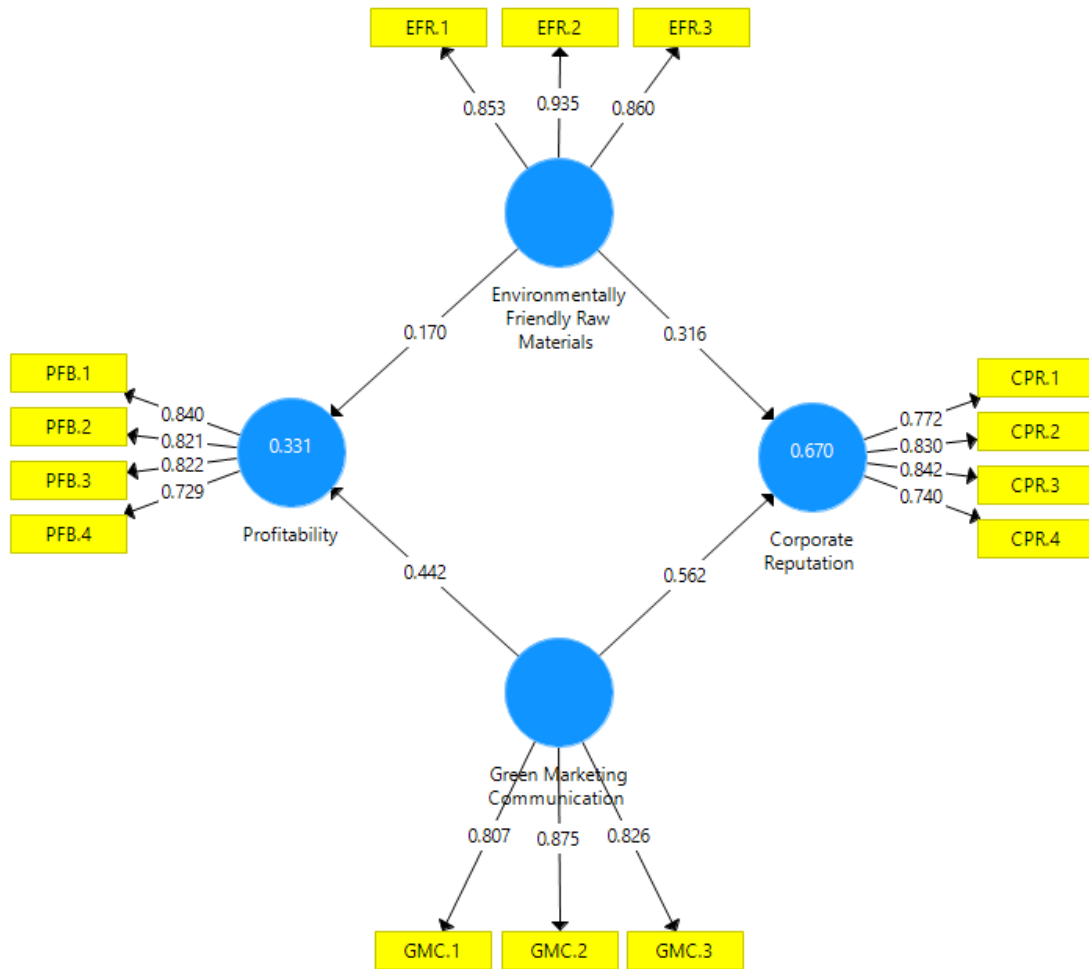


Figure 1. Model Results

Source: Data Processed by Researchers, 2024

4.4 Model Fit

Assessing the model fit is a crucial step in validating the structural equation model, as it indicates how well the theoretical model represents the observed data. Several fit indices are used to evaluate the adequacy

of the model, including the Standardized Root Mean Square Residual (SRMR), d_ULS, d_G, Chi-Square, and Normed Fit Index (NFI). The table below presents these indices for both the saturated and estimated models.

Table 3. Model Fit Results Test

	Saturated Model	Estimated Model
SRMR	0.099	0.101
d_ULS	1.027	1.067
d_G	0.525	0.533
Chi-Square	449.271	454.335
NFI	0.695	0.691

Source: Process Data Analysis (2024)

The adequacy of the model was evaluated using many metrics. The Standardized Root Mean Square Residual (SRMR), which is an absolute measure of fit, has values of 0.099 for the saturated model

and 0.101 for the estimated model. These values are somewhat higher than the recommended fit threshold of 0.08 (Hu & Bentler, 1999), but they are still considered acceptable for complicated models. The

values of the d_{ULS} (Unweighted Least Squares discrepancy) and d_G (Geodesic discrepancy) were 1.027 and 1.067 for d_{ULS} , and 0.525 and 0.533 for d_G in the saturated and estimated models, respectively. These values suggest that there is a fair degree of agreement between the observed and model-implied matrices. The Chi-Square score, which assesses the overall fit of the model, was 449.271 for the saturated model and 454.335 for the estimated model. This indicates that the model fits well, despite its complexity and sensitivity to sample size. Finally, the Normed Fit Index (NFI), which compares the Chi-Square of the model to that of a null model, was 0.695 for the saturated model and 0.691 for the estimated model. This

suggests that the fit of the model is reasonable considering the exploratory nature of the study, although it is not optimal as values closer to 1 and above 0.90 are preferred [38].

The R Square (R^2) and predictive relevance (Q^2) values are crucial metrics for assessing the explanatory capacity and predictive precision of the structural model in Partial Least Squares Structural Equation Modeling (PLS-SEM). The R^2 value quantifies the amount of variability in the dependent variable that can be accounted for by the independent variables. On the other hand, Q^2 evaluates the prediction accuracy of the model by employing a blindfolding technique.

Table 4. Coefficient Model

	R Square	Q2
Corporate Reputation	0.670	0.666
Profitability	0.431	0.423

Source: Data Processing Results (2024)

The R^2 analysis revealed that the R^2 value for Corporate Reputation is 0.670, meaning 67% of the variance in corporate reputation is explained by the use of environmentally friendly raw materials and green marketing communication, demonstrating the model's strong explanatory power regarding the impact of these sustainable practices. For Profitability, the R^2 value is 0.431, indicating that 43.1% of the variance in profitability is explained by the same variables, suggesting a moderate explanatory power, with other factors possibly influencing profitability. The Q^2 analysis showed a Q^2 value of 0.666 for Corporate Reputation, exceeding the threshold of 0, indicating good predictive relevance and confirming the model's accuracy in predicting corporate reputation.

The Q^2 value for Profitability is 0.423, indicating that the model also has predictive relevance for profitability, though less so than for corporate reputation, still reflecting reasonable predictive accuracy.

4.5 Path Coefficients and Significance Testing

The hypothesis testing in this study was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM). The relationships between the independent variables (environmentally friendly raw materials and green marketing communication) and the dependent variables (corporate reputation and profitability) were evaluated based on path coefficients, t-statistics, and p-values.

Table 5. Hypothesis Testing

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics	P Values
Environmentally Friendly Raw Materials -> Corporate Reputation	0.316	0.316	0.069	4.592	0.000

Environmentally Friendly Raw Materials -> Profitability	0.270	0.275	0.102	2.663	0.003
Green Marketing Communication -> Corporate Reputation	0.562	0.565	0.068	8.290	0.000
Green Marketing Communication -> Profitability	0.442	0.444	0.094	4.680	0.000

Source: Process Data Analysis (2024)

The analysis indicates a positive relationship between environmentally friendly raw materials and corporate reputation, with a path coefficient of 0.316, a t-statistic of 4.592, and a p-value of 0.000, supporting the hypothesis that such materials positively impact corporate reputation. Similarly, environmentally friendly raw materials have a positive effect on profitability, as shown by a path coefficient of 0.270, a t-statistic of 2.663, and a p-value of 0.003, confirming the hypothesis. Green marketing communication strongly influences corporate reputation, with a path coefficient of 0.562, a t-statistic of 8.290, and a p-value of 0.000, indicating high significance. This supports the hypothesis that green marketing communication positively impacts corporate reputation. Additionally, green marketing communication positively affects profitability, evidenced by a path coefficient of 0.442, a t-statistic of 4.680, and a p-value of 0.000, affirming the significance of this relationship.

Discussion

The Role of Environmentally Friendly Raw Materials

The findings reveal a positive and significant relationship between the use of environmentally friendly raw materials and corporate reputation. This result is consistent with previous studies, such as those by [3] and [20], which emphasize the importance of sustainable sourcing in building a positive brand image. The adoption of environmentally friendly raw materials not only reduces the ecological footprint of manufacturing processes but also signals a company's commitment to sustainability, thereby enhancing its reputation among stakeholders.

Moreover, the significant impact of environmentally friendly raw materials on profitability highlights the financial benefits of sustainable practices. This aligns with research by [7], [19], [21], which suggest that sustainable practices can lead to cost savings, increased efficiency, and greater consumer appeal. By integrating sustainable materials into their operations, companies can differentiate themselves in the marketplace and capture the growing demand for environmentally conscious products.

The Influence of Green Marketing Communication

Green marketing communication was found to have a strong positive impact on corporate reputation. This supports the findings of [22] and [15], who emphasize the role of transparent and effective communication in building trust and credibility with stakeholders. Companies that effectively communicate their green initiatives are more likely to be perceived as responsible and ethical, enhancing their reputation and competitive positioning.

The positive relationship between green marketing communication and profitability further underscores the strategic value of communicating sustainability efforts. According to the findings of studies [18], [23], [24], green marketing has the potential to appeal to customers who are environmentally sensitive, resulting in higher sales and a larger market share. Companies may enhance their company image and boost financial performance by utilizing marketing channels to showcase their sustainability activities.

Implications for the Manufacturing Industry

The findings of this research have significant ramifications for manufacturing

firms aiming to improve their company reputation and profitability by implementing sustainable practices. The results indicate that enterprises should give priority to the use of eco-friendly raw materials and establish strong green marketing communication strategies in order to take advantage of the increasing demand for sustainable products.

For practitioners, these results underscore the importance of integrating sustainability into corporate strategies and operations. Companies should consider investing in sustainable sourcing and leveraging digital and traditional marketing channels to communicate their environmental efforts effectively. By doing so, they can build stronger relationships with stakeholders, improve their market standing, and achieve long-term financial success.

Limitations and Future Research

Although this study offers vital insights about the influence of sustainable policies on company performance, it is important to acknowledge its limitations. The emphasis on manufacturing enterprises in Central Java may restrict the applicability of the results to other areas or sectors. Subsequent investigations might broaden the scope by including a wider array of sectors and geographic regions in order to authenticate the findings.

Furthermore, this study predominantly depends on data that is provided by the individuals themselves, which might potentially be influenced by

biases. Incorporating objective measurements of sustainable practices and financial success in future study would strengthen the reliability of the results. Examining the moderating impacts of additional variables, such as the size of the company or the kind of business, might offer a more profound understanding of the relationships between sustainability measures and corporate results.

5. CONCLUSION

This study demonstrates that the utilization of ecologically sustainable raw materials and eco-conscious marketing communications has a favorable influence on the reputation and financial performance of manufacturing firms in Central Java. Companies that implement sustainability practices and communicate them effectively can improve their reputation and financial performance. Green raw materials and green marketing not only support environmental goals but also provide competitive and financial benefits. These findings are important for companies that want to compete in a market with growing environmental considerations. However, this study is limited to companies in Central Java, so further research is needed in other regions and industries. Using objective measures of sustainability and considering variables such as firm size and industry type may provide a more thorough understanding of the relationship between sustainability practices and firm performance.

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