

Strategic Sustainability Marketing Framework: Integrating Marketing Capability and Environmental Analysis in Indonesia's Glass Industry

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Abstract: The increasing emphasis on sustainability has encouraged manufacturing firms to reconsider how they formulate marketing strategies to support long-term organizational performance. Rather than viewing sustainability as a separate corporate initiative, firms are increasingly expected to integrate environmental considerations into strategic marketing decisions. Drawing on empirical evidence from a qualitative single-case study of a leading Indonesian glass manufacturer, this study proposes a Strategic Sustainability Marketing Framework that integrates marketing capability and strategic environmental analysis. Data were collected through semi-structured interviews, direct observation, and document analysis, complemented by strategic assessment tools including SWOT, PESTEL, and Porter's Five Forces. The findings suggest that integrating marketing capability with systematic environmental analysis provides a conceptual basis for managerial decision-making in formulating sustainability-oriented marketing strategies. The resulting framework offers a conceptual basis for aligning internal marketing capabilities with external environmental dynamics, which may contribute to organizational adaptability, stakeholder responsiveness, and the pursuit of sustainable business performance. This study contributes to the strategic marketing and sustainability literature by offering a case-derived integrative framework for understanding sustainability-oriented marketing strategies within a dynamic manufacturing context. As the framework is derived from a single-case context, further empirical validation across diverse manufacturing sectors, geographical contexts, and methodological approaches is recommended to assess its broader applicability.

Keywords: *strategic sustainability marketing framework, marketing capability, strategic environmental analysis, sustainable business performance, manufacturing industry.*

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INTRODUCTION

Manufacturing organizations now compete amid persistent instability, in which energy price volatility, supply chain discontinuities, unpredictable demand, and escalating environmental expectations interact to reshape the basis of competition (Akude et al., 2025; Demessie & Shukla, 2024). These pressures are particularly salient in resource-intensive sectors. In glass production, the combination of high furnace energy intensity, tightening emission and efficiency regulations, and heightened stakeholder scrutiny places growing pressure on firms to reconsider how sustainability is incorporated into business strategy (Colangelo, 2024; UNCTAD, 2025; Energy Agency, 2024). Sustainability has shifted from a compliance obligation to a strategic consideration

that increasingly shapes competitive positioning, organizational resilience, and long-term performance (Udeh & Dugba, 2025).

This shift places sustainability closer to the core of strategic marketing. Rather than treating it as a peripheral communication theme or stand-alone corporate responsibility program, firms increasingly incorporate sustainability into value creation, differentiation, and long-term market development (Akude et al., 2025; Chen & Cao, 2023). Strategic sustainability marketing therefore involves embedding environmental considerations within marketing decisions, linking economic objectives with environmental and stakeholder expectations (Nguyen-Viet, 2022; Papadas, 2020). In manufacturing contexts, this orientation becomes particularly relevant where competitive intensity intersects with regulatory and resource constraints. It provides a strategic basis for examining how marketing capabilities can respond to sustainability pressures while maintaining customer and stakeholder value (Alrajhi, 2025; Hossain et al., 2022; Moinzad & Akbarzadeh, 2022).

The Resource-Based View (RBV) provides the theoretical anchor for understanding marketing capability as an internal source of strategic value. RBV attributes differences in firm performance to how organizations develop and deploy valuable, difficult-to-imitate resource bundles, with marketing capability representing an important organizational capability within this perspective (Desi Novelayanti et al., 2024; Homburg, 2020; Hunt & Madhavaram, 2020). This tradition defines marketing capability as the organization's capacity to coordinate product, price, place, and promotion to create customer value and respond to market conditions (Kotler & Keller, 2021; Wulandari, 2024; Wulandari & Mulyanto, 2019). This view establishes marketing capability as a resource base whose strategic relevance depends on how effectively it is deployed and configured.

Contemporary scholarship increasingly conceptualizes the marketing mix as a system of interdependent capabilities rather than discrete tactical instruments (Darmawan & Grenier, 2021; Xia, 2023). Its strategic value lies in how product, price, place, and promotion are coordinated and deployed as a coherent capability in response to changing market conditions (Homburg, 2020). In sustainability-oriented contexts, such coordination also incorporates environmental and stakeholder expectations into marketing decisions, extending the role of the mix beyond conventional sales objectives (Hasanah et al., 2024; Kamyabi et al., 2025; Setyaningrum & Wulandari, 2024). This perspective suggests that marketing mix capability is not a fixed resource, but one that may be configured as conditions change (Muchsam et al., 2025).

RBV, however, has limitations in explaining sustainability-oriented adaptation. While this perspective helps explain the strategic value of internal resource bundles, it offers less insight into how such capabilities may be reconfigured as external conditions change (Hunt & Madhavaram, 2020; Supriyanto & Wulandari, 2026). Sustainability pressures, including regulatory tightening, stakeholder expectations, energy volatility, and market uncertainty, represent precisely such external dynamics. Treating marketing capability primarily as an internal resource therefore leaves the process of adapting these capabilities to changing environmental conditions insufficiently explained. This theoretical tension calls for a complementary mechanism that can interpret external environmental signals and provide a basis for understanding how internal marketing capabilities may be aligned and reconfigured in response.

A parallel shift is evident in green marketing research. Earlier studies largely approached green marketing as environmental communication or as an antecedent of

consumer-level outcomes, including purchase intention, satisfaction, and brand perception (Sharma, 2021). More recent research has positioned green marketing as a strategic orientation that embeds sustainability across product development, operations, distribution, and communication (Bhardwaj et al., 2023). From this perspective, green marketing orientation can be understood as a firm-level capability that gives sustainability direction to marketing activities and resource configuration (González-Viralta et al., 2023; Nguyen-Viet, 2022). However, its strategic role remains underdeveloped in manufacturing and B2B contexts, particularly in relation to how environmental conditions inform capability adaptation (Ratinah Anna, 2023) (Papadas et al., 2019).

Strategic environmental analysis provides the external sensing and interpretation needed to complement internal marketing capabilities. Rather than treating SWOT, PESTEL, and Porter's Five Forces as separate diagnostic exercises, their combined insights can reveal how regulatory developments, stakeholder expectations, competitive pressures, and market shifts shape the strategic environment (Belsare, 2025; Madsen & Grønseth, 2022; Wilasto & Wening, 2025). Taken together, these analyses provide a basis for connecting external environmental signals with managerial judgment and strategic marketing decisions (Kiyak & Grigolienė, 2023; Raspati et al., 2026; Supriyanto & Wulandari, 2026). Their theoretical relevance therefore lies less in diagnosis itself than in helping firms interpret external conditions that may inform adaptations in internal marketing capabilities.

The theoretical contribution of this study lies in positioning strategic environmental analysis as an alignment mechanism between RBV-based marketing capabilities and external sustainability dynamics. Environmental signals identified through SWOT, PESTEL, and Porter's Five Forces are interpreted as contextual inputs that may inform the configuration of marketing mix capability. In contrast, green marketing orientation provides a sustainability direction for these strategic responses. This logic allows product, price, place, and promotion capabilities to be considered in relation to changing regulatory, competitive, resource, and stakeholder conditions rather than as fixed internal resources. The resulting alignment process provides a conceptual basis for understanding capability reconfiguration and adaptive sustainability-oriented marketing strategies, extending the RBV perspective towards environmental responsiveness (Alrajhi, 2025; Hunt & Madhavaram, 2020).

Despite these developments, important conceptual gaps remain across the three perspectives. Marketing capability research, largely grounded in RBV, explains the value of internal resources but offers less insight into how they are reconfigured under changing sustainability pressures. Green marketing research remains predominantly oriented towards consumer-level outcomes, leaving its role as a firm-level strategic capability in manufacturing and B2B contexts insufficiently developed. Strategic environmental analysis, meanwhile, is often used as a diagnostic approach rather than as a means of connecting external environmental signals with internal marketing capabilities. Taken together, these limitations leave insufficient explanation of how firms align marketing mix capability and green marketing orientation with changing environmental conditions to formulate adaptive sustainability-oriented strategies. This gap is particularly relevant to resource-intensive manufacturing, including Indonesia's glass industry, where market competition, environmental regulation, energy intensity, and stakeholder expectations intersect (Kiyak & Grigolienė, 2023; Nguyen-Viet, 2022; Raspati et al., 2026).

The novelty of the proposed framework lies not in the additive combination of established constructs and analytical tools, but in the explanatory alignment process connecting them. Strategic environmental analysis is positioned as the mechanism through which external environmental signals are interpreted and aligned with marketing mix capability. In contrast, green marketing orientation provides the sustainability direction for capability reconfiguration. This process provides a conceptual basis for understanding how firms may formulate adaptive, sustainability-oriented marketing strategies and pursue competitive advantage and sustainable business performance. Accordingly, this study aims to develop and explore a Strategic Sustainability Marketing Framework through a qualitative single-case study in Indonesia's glass manufacturing industry.

Drawing on the preceding theoretical synthesis, the proposed framework conceptualizes marketing mix capability and green marketing orientation as internal capability inputs, while strategic environmental analysis functions as the mechanism through which external environmental signals are interpreted and translated into capability reconfiguration. This process gives rise to adaptive sustainability-oriented marketing strategies that may contribute to competitive advantage and sustainable business performance.

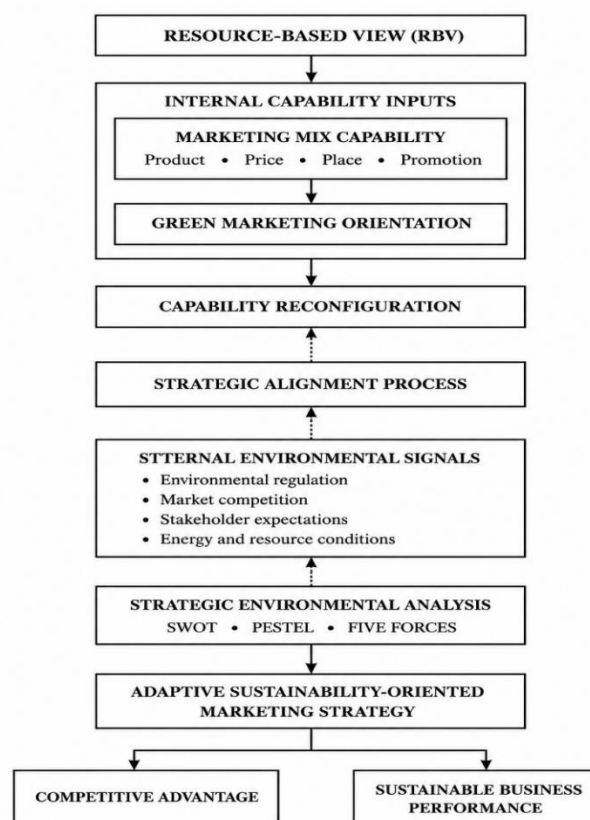


Figure 1. The Analytical Framework

Figure 1 illustrates the analytical framework developed in this study. The framework positions Resource-Based View (RBV) as the theoretical foundation for explaining internal marketing capabilities, while strategic environmental analysis serves as the mechanism for interpreting external environmental dynamics. Through a strategic alignment process, internal capabilities are reconfigured into adaptive sustainability-

oriented marketing strategies that may contribute to competitive advantage and sustainable business performance.

RESEARCH METHODS

This study employed a qualitative single-case study design to explore how sustainability-oriented marketing strategies are formulated and implemented within Indonesia's glass manufacturing industry.(Chakrabarty, 2024; Tang et al., 2018). A single-case design was appropriate because the study sought to investigate a contemporary organizational phenomenon in its real-world context, where the boundaries between strategic marketing, sustainability practices, and environmental adaptation are inherently interconnected. This approach enabled an in-depth examination of how marketing mix capability, green marketing orientation, and strategic environmental analysis shape sustainability-oriented strategic decisions.

The study was conducted at PT Mulia Industrindo Tbk, one of Indonesia's largest glass manufacturers, operating in flat glass, automotive safety glass, glass block, and packaging glass production(Mulaiindustrindo, 2025). The company was selected through purposive case selection because it represents a critical case within a resource-intensive manufacturing sector characterized by high energy consumption, increasing environmental regulation, evolving market demands, and growing stakeholder expectations. The case boundary was limited to sustainability-related marketing and strategic decision-making processes within the organization during the January–June 2025 research period, encompassing preliminary observation, data collection, analysis, and interpretation(Mulaiindustrindo, 2025).

The unit of analysis was the organizational process through which marketing capabilities, sustainability-oriented practices, and environmental analysis were translated into strategic marketing decisions. Informants were selected using purposive sampling because the study sought information from organizational members directly involved in marketing, sustainability, operations, and strategic planning (Bouncken et al., 2025). Five key informants were considered sufficient because they represented the principal managerial functions responsible for formulating, implementing, and evaluating sustainability-oriented marketing strategies within the organization.

Table 1. Research Informants

Code	Position	Primary Responsibility	Role in the Study
I1	Marketing Manager	Marketing strategy development	Exploring marketing mix capability and strategic marketing decisions
I2	Sales and Distribution Manager	Sales and distribution management	Examining pricing and distribution strategies
I3	Operations Manager	Production and operational management	Identifying operational adaptation and capability reconfiguration
I4	Sustainability Officer	Sustainability program implementation	Investigating green marketing orientation and sustainability practices
I5	Strategic Planning Manager	Corporate strategic planning	Examining environmental analysis and long-term strategic alignment

Data collection continued until thematic saturation was achieved, as later interviews produced recurring explanations and no substantially new categories emerged regarding marketing capability, green marketing orientation, environmental analysis, capability reconfiguration, and strategic decision-making(Saunders et al., 2018). Direct observation

focused on marketing activities, sustainability initiatives, operational adaptation, and strategic planning processes. Documentary evidence included annual reports, sustainability reports, marketing plans, company publications, and other organizational documents produced between 2023 and 2025. Using multiple data sources supported methodological triangulation and strengthened the credibility and auditability of the findings (Ahmed, 2024).

The analytical framework was developed from the literature review and the proposed conceptual model. Rather than serving as measurement variables, marketing mix capability, green marketing orientation, and strategic environmental analysis functioned as analytical dimensions that guided data organization and interpretation (Yin, 2018). Marketing mix capability was examined through four dimensions: product, price, place, and promotion (Kotler & Keller, 2021). Green marketing orientation was explored through environmentally responsible products, sustainable operational practices, environmental communication, and stakeholder engagement (Papadas, 2020). Strategic environmental analysis was examined through SWOT analysis, PESTEL analysis, and Porter's Five Forces (Gurel, 2017; Porter, 2022). These dimensions served as sensitizing concepts for identifying and classifying empirical evidence obtained from interviews, observations, and organizational documents (Sale, 2022).

Data analysis followed the interactive qualitative analysis model consisting of data reduction, data display, and conclusion drawing. The analytical process was conducted iteratively throughout the study. Interview transcripts and documentary evidence were first subjected to open coding to identify meaningful concepts related to sustainability-oriented marketing practices. The resulting codes were subsequently grouped through axial coding to establish relationships among emerging categories. These categories were then synthesized through thematic categorization, resulting in broader themes associated with marketing capability, green marketing orientation, strategic environmental analysis, capability reconfiguration, and adaptive marketing strategy.

Following the coding process, SWOT analysis, PESTEL analysis, and Porter's Five Forces were applied to examine internal organizational capabilities, external environmental conditions, and industry-level competitive pressures (Eryogla et al., 2024; Gurel, 2017; Porter, 2022). Rather than being used as independent diagnostic tools, these analytical approaches were integrated with the thematic findings to identify the environmental signals influencing strategic marketing decisions. The analytical synthesis subsequently enabled the identification of strategic alignment patterns between internal marketing capabilities and external sustainability pressures. These patterns formed the empirical basis for constructing the proposed Strategic Sustainability Marketing Framework.

Several procedures enhanced research rigor and trustworthiness. Methodological triangulation was achieved by integrating interviews, direct observations, and documentary evidence. Member checking verified the accuracy of data interpretation, while continuous comparison across multiple sources strengthened the credibility and consistency of the findings. Ethical considerations were maintained throughout the research process by ensuring voluntary participation, protecting informant confidentiality, and limiting the use of organizational information exclusively to academic purposes.

RESULTS AND DISCUSSION

Indonesia's glass manufacturing industry has experienced substantial changes since the post-pandemic recovery period, particularly in response to fluctuations in construction activity, supply chain disruptions, rising energy costs, and shifting customer expectations (Energy Agency, 2024). These changes have altered the competitive environment in which manufacturing firms operate. Interviews revealed that environmental regulation, market uncertainty, and increasing stakeholder expectations have become important considerations in strategic decision-making.

The coding process began with open coding, during which interview transcripts, observations, and documentary evidence were systematically reviewed to identify recurring concepts associated with sustainability-oriented marketing practices (Mohajan & Mohajan, 2022). Similar concepts were subsequently grouped through axial coding to establish conceptual relationships among the identified categories. The final stage involved thematic categorization, resulting in three overarching themes: marketing mix capability, green marketing orientation, and strategic environmental analysis.

Table 2. Coding Structure and Theme Development

Open Codes	Axial Categories	Final Themes
Product quality improvement	Product capability	Marketing Mix Capability
Eco-design	Product capability	Marketing Mix Capability
Pricing flexibility	Pricing capability	Marketing Mix Capability
Distribution efficiency	Distribution capability	Marketing Mix Capability
Digital promotion	Promotional capability	Marketing Mix Capability
Sustainable production	Green operations	Green Marketing Orientation
Environmental communication	Sustainability communication	Green Marketing Orientation
Stakeholder engagement	Sustainability relationships	Green Marketing Orientation
Environmental regulation	Regulatory pressure	Strategic Environmental Analysis
Energy cost volatility	Economic pressure	Strategic Environmental Analysis
Customer expectations	Market pressure	Strategic Environmental Analysis
Industry competition	Competitive pressure	Strategic Environmental Analysis

Beyond the three predefined themes, the analysis revealed an additional pattern that was not explicitly incorporated into the initial analytical framework: capability reconfiguration. This emergent theme captured the organizational process through which managers translated environmental signals into strategic adjustments across product development, pricing policies, distribution systems, and promotional activities. Rather than functioning as a separate capability, reconfiguration represented the mechanism through which internal marketing capabilities were adapted to changing environmental conditions. This finding provided the empirical basis for developing the proposed Strategic Sustainability Marketing Framework. Figure 2 illustrates the analytical pathway through which initial open codes were systematically synthesized into axial categories, consolidated into final themes, and subsequently integrated to identify patterns, explain capability reconfiguration, and develop the proposed Strategic Sustainability Marketing Framework.

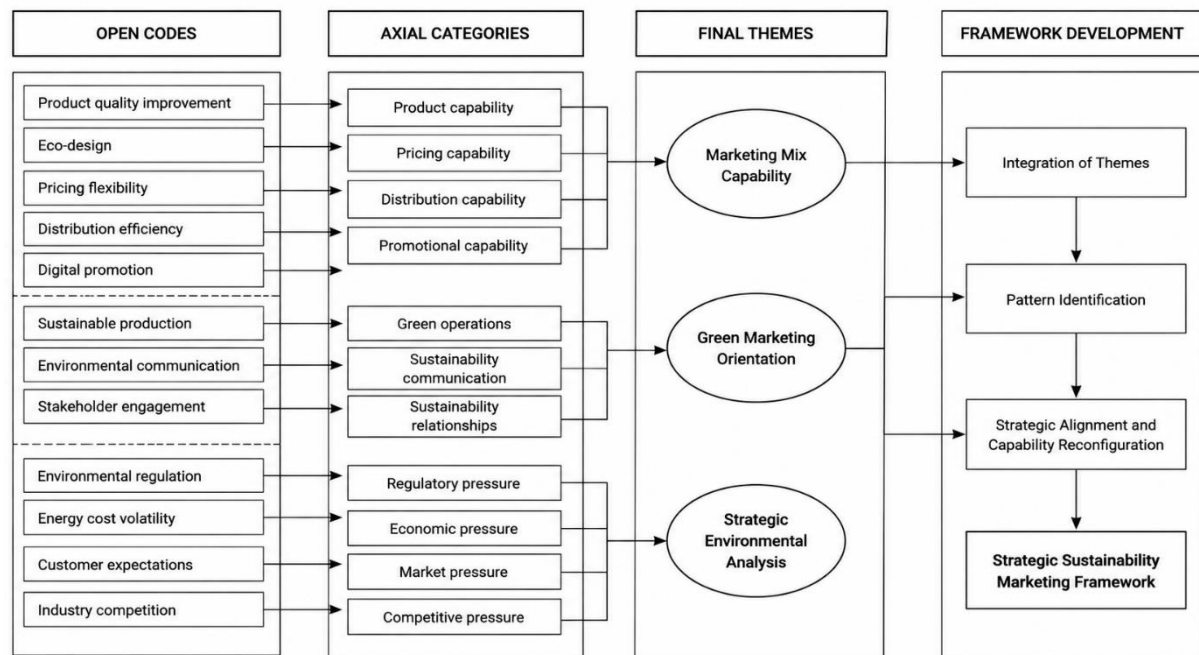


Figure 2. Coding and Analytical Process

The findings indicate that marketing mix capability played a central role in the company's efforts to maintain competitiveness during a period of market uncertainty. Rather than being implemented as separate managerial functions, product development, pricing, distribution, and promotion were coordinated to improve market responsiveness and strengthen customer value. Product quality improvement and pricing flexibility emerged as the most frequently discussed strategic priorities, while distribution efficiency and digital promotion supported broader market adaptation. As one informant explained, *"We can no longer rely on product quality alone. Pricing, distribution, and communication must be adjusted simultaneously because market conditions change very quickly"* (I1). Another manager added, *"Marketing decisions are now made through cross-functional coordination rather than within individual departments"* (I2).

The findings suggest that green marketing orientation has evolved beyond environmental communication and has become increasingly embedded in the company's strategic decision-making. Sustainability considerations influenced product development, production practices, stakeholder relationships, and marketing activities, particularly in response to growing customer awareness and regulatory expectations. Informants emphasized that sustainability initiatives were no longer treated as supplementary programs but as an integral component of business strategy. As one participant noted, *"Customers increasingly expect products that meet both quality and environmental standards, so sustainability has become part of our value proposition"* (I4). Another explained, *"Environmental responsibility now influences how we design products, communicate with customers, and maintain long-term business relationships"* (I5).

The findings demonstrate that strategic environmental analysis functioned as a managerial mechanism for interpreting external pressures and guiding strategic adaptation. SWOT, PESTEL, and Porter's Five Forces were used not merely to evaluate market conditions but to identify regulatory changes, anticipate energy cost fluctuations, assess competitive dynamics, and respond to evolving stakeholder expectations. This process enabled the organization to align internal capabilities with external market

signals. As one informant stated, *"Changes in energy costs and environmental regulations directly influence our strategic decisions because they affect both production and market competitiveness"* (I3). Another explained, *"Environmental analysis helps us anticipate market changes rather than simply react to them"* (I5).

The integration of the three themes revealed that sustainability-oriented marketing strategies emerged through a continuous alignment process between internal capabilities and external environmental conditions. Environmental analysis provided the information required to interpret regulatory, market, and stakeholder pressures, while green marketing orientation guided the adaptation of marketing mix capabilities toward sustainability objectives. This interaction generated a process of capability reconfiguration, in which existing marketing practices were continuously adjusted to maintain competitiveness. As one informant explained, *"We regularly review market conditions and then adjust our product, pricing, distribution, and promotional strategies accordingly"* (I1). Another stated, *"Sustainability considerations now influence almost every strategic marketing decision we make"* (I4).

Internal Factor Analysis Summary (IFAS)

The IFAS analysis in Table 3 indicates that PT Mulia Industrindo Tbk has a relatively strong internal position, reflected in a total weighted score of 3.29. The company's principal strengths include high product quality, stable production capacity, a diversified product portfolio, extensive market coverage, and substantial industry experience. Interviews and company documents consistently supported these findings, emphasizing the importance of manufacturing capability and market reach in maintaining competitiveness.

However, several internal constraints were also identified, including high production costs, dependence on imported raw materials, limited digital marketing capability, less effective promotional activities, and relatively limited product innovation. Interview evidence suggested that these factors reduced organizational flexibility in responding to changing market conditions and sustainability-related challenges. Overall, the findings indicate that the company possesses a solid internal resource base, although further capability reconfiguration remains necessary to strengthen adaptive sustainability-oriented marketing strategies.

Table 3. Summary of Internal Factor Analysis (IFAS)

No Internal Factors		Weight Rating Weighted Score		
Strengths				
1	High product quality	0.15	4	0.60
2	Stable production capacity	0.14	4	0.56
3	Product diversification	0.12	3	0.36
4	Extensive market coverage (domestic and export markets)	0.13	3	0.39
5	Strong industry experience	0.11	3	0.33
Subtotal Strengths		0.65		2.24
Weaknesses				
6	High production costs	0.10	3	0.30
7	Dependence on imported raw materials	0.08	3	0.24
8	Limited digital marketing capability	0.07	3	0.21
9	Less effective promotional strategy	0.05	3	0.15
10	Limited product innovation	0.05	3	0.15

No Internal Factors	Weight Rating	Weighted Score
Subtotal Weaknesses	0.35	1.05
TOTAL IFAS	1.00	3.29

External Factor Analysis Summary (EFAS)

The EFAS results in Table 4 indicate that PT Mulia Industrindo Tbk operates in a relatively favorable external environment, as reflected in a total weighted score of 3.28. Opportunities associated with construction and property sector growth, increasing sustainability awareness, export market expansion, technological development, and post-pandemic market recovery generated the highest cumulative score (2.28). However, interview findings and documentary evidence also identified several external threats, including intense price competition, imported products, energy price volatility, substitute products, and increasingly stringent environmental regulations. These findings suggest that sustainability-oriented marketing strategies should be continuously aligned with external environmental dynamics to maintain organizational competitiveness.

Table 4. Summary of External Factor Analysis (EFAS)

No	External Factors	Weight Rating		Weighted Score	Source of Evidence
A. Opportunities					
1	Increasing demand in the construction and property sectors	0.18	4	0.72	Interviews (I1, I5); company reports
2	Green building and sustainability trends	0.15	4	0.60	Interviews (I4); sustainability documents
3	Export market expansion opportunities	0.12	3	0.36	Interviews (I1, I2); annual reports
4	Industrial technological development	0.10	3	0.30	Interviews (I3); direct observation
5	Post-pandemic market growth	0.10	3	0.30	Interviews (I1, I5); market reports
Subtotal Opportunities		0.65		2.28	
B. Threats					
6	Intense price competition	0.12	3	0.36	Interviews (I1, I2)
7	Imported products	0.08	3	0.24	Interviews (I2); market documents
8	Energy and raw material price volatility	0.07	3	0.21	Interviews (I3); operational reports
9	Substitute products	0.05	2	0.10	Interviews (I1); market observations
10	Stringent environmental regulations	0.03	3	0.09	Interviews (I4); regulatory documents
Subtotal Threats		0.35		1.00	
TOTAL EFAS		1.00		3.28	

Each external factor included in the EFAS matrix was identified through triangulation of interview transcripts, organizational documents, market reports, and direct observations, enhancing the transparency and auditability of the analytical process.

SWOT Matrix and Strategic Alternatives

The SWOT matrix indicates that PT Mulia Industrindo Tbk can leverage its strong production capability, diversified product portfolio, and extensive distribution network to capitalize on emerging opportunities in sustainability-oriented markets. Growth in the construction and property sectors, increasing environmental awareness, and technological development provide favorable conditions for expanding sustainability-based products and strengthening market competitiveness (Mulia Industrindo, 2025).

At the same time, the company must address internal weaknesses related to production costs, digital marketing capability, and product innovation while responding to external threats such as intense competition, imported products, energy price volatility, and stricter environmental regulations. Therefore, strategic alternatives should focus on integrating sustainability-oriented marketing practices, operational efficiency, digital transformation, and market expansion initiatives.

Marketing Mix Capability and Sustainable Sales Performance

The findings show that marketing mix capability is a central organizational resource supporting sustainable sales performance. Interview data revealed that product quality, product diversification, pricing flexibility, distribution efficiency, and relationship-oriented promotion were not implemented as independent marketing activities but as interconnected strategic capabilities. Documentary evidence from company reports and marketing records further indicated that product adaptation and market diversification became increasingly important during the post-pandemic recovery period.

As explained by the Marketing Manager (I1), *"Customers are no longer concerned only with product specifications. They also expect product consistency, supply reliability, and evidence that our production processes comply with sustainability requirements."* Similarly, the Sales and Distribution Manager (I2) emphasized that *"Pricing policies must remain flexible because fluctuations in energy costs and changing market demand directly influence customer purchasing decisions."* Observational findings also showed that distribution networks and long-term industrial partnerships played an important role in maintaining market accessibility, while promotional activities increasingly incorporated sustainability-related messages into customer communication.

These findings suggest that the coordinated deployment of product, price, place, and promotion capabilities enhances customer value creation, strengthens market responsiveness, and supports sustainable sales performance, thereby providing empirical support for Research Assumption 1.

Green Marketing Orientation and Competitive Advantage

The findings indicate that green marketing orientation contributes to customer trust, corporate credibility, product differentiation, and stronger market positioning. Interview and documentary evidence revealed that sustainability communication and stakeholder engagement have become increasingly important in maintaining relationships with industrial customers. As the Sustainability Officer (I4) noted, *"Sustainability has become part of our corporate message, but integrating it into all operational activities remains an ongoing process."*

However, the findings also identified a gap between sustainability communication and substantive operational implementation. Sustainability initiatives were more visible in communication activities than in product development and marketing system integration. The Strategic Planning Manager (I5) stated that *"Customers increasingly*

consider environmental responsibility when selecting long-term business partners.” These findings suggest that competitive advantage is more likely to emerge when sustainability is embedded in organizational practices rather than communicated primarily through promotional activities, thereby supporting Research Assumption 2.

SWOT Matrix

The SWOT matrix demonstrated that the company's strategic position was characterized by strong production capability and favorable market opportunities, particularly the growing demand for sustainable construction materials and expanding export markets. Together, these factors supported strategies focused on product differentiation, market expansion, and sustainability-oriented product development.

However, the analysis also identified several strategic challenges, including limited digital marketing capability, dependence on imported materials, rising energy costs, and increasing competitive pressure. These findings suggest that integrating marketing capability, green marketing orientation, and environmental analysis is essential for transforming internal strengths into adaptive and sustainable competitive strategies.

Table 5. SWOT Matrix and Strategic Alternatives

Strategy	Strategic Alternatives	Empirical Basis
SO (Strengths Opportunities)	Utilize strong production capability, product quality, and extensive market coverage to expand environmentally friendly products and strengthen export market penetration.	High product quality, diversified products, green building trends, export opportunities
WO (Weaknesses Opportunities)	Improve digital marketing capability, accelerate product innovation, and adopt digital technologies to capitalize on sustainability-oriented market growth.	Limited digital marketing, limited product innovation, technological development
ST (Strengths Threats)	Leverage operational capability, industrial experience, and established distribution networks to strengthen differentiation and respond to increasing market competition and regulatory pressure.	Strong production capability, industry experience, price competition, environmental regulations
WT (Weaknesses Threats)	Reduce dependence on imported raw materials, improve operational efficiency, and redesign conventional marketing practices to minimize vulnerability to energy price volatility and changing customer preferences.	Import dependency, high production costs, energy price volatility, dynamic customer preferences

SWOT Quadrant

The SWOT quadrant was constructed by integrating the weighted scores obtained from the IFAS and EFAS analyses. The internal coordinate (X-axis) was calculated by subtracting the total weighted score of weaknesses from that of strengths ($2.81 - 2.77 = +0.04$), while the external coordinate (Y-axis) was obtained by subtracting the total weighted score of threats from that of opportunities ($2.83 - 2.30 = +0.53$). The resulting coordinates (+0.04, +0.53) positioned the company in Quadrant I, indicating that internal strengths slightly exceeded internal limitations, whereas external opportunities substantially outweighed external threats.

This position suggests that the company should prioritize a growth-oriented strategy by leveraging its production capability, product diversification, and market coverage to capture opportunities associated with sustainability trends, technological advancement, construction sector growth, and export market expansion. Figure 3 presents the strategic positioning derived from the IFAS and EFAS analyses, while Table

3 translates this position into specific strategic alternatives. The SWOT quadrant was generated using the following formulas: $X = (\text{Strengths} - \text{Weaknesses})$, $Y = (\text{Opportunities} - \text{Threats})$, $X = 2.81 - 2.77 = +0.04$, $Y = 2.83 - 2.30 = +0.53$

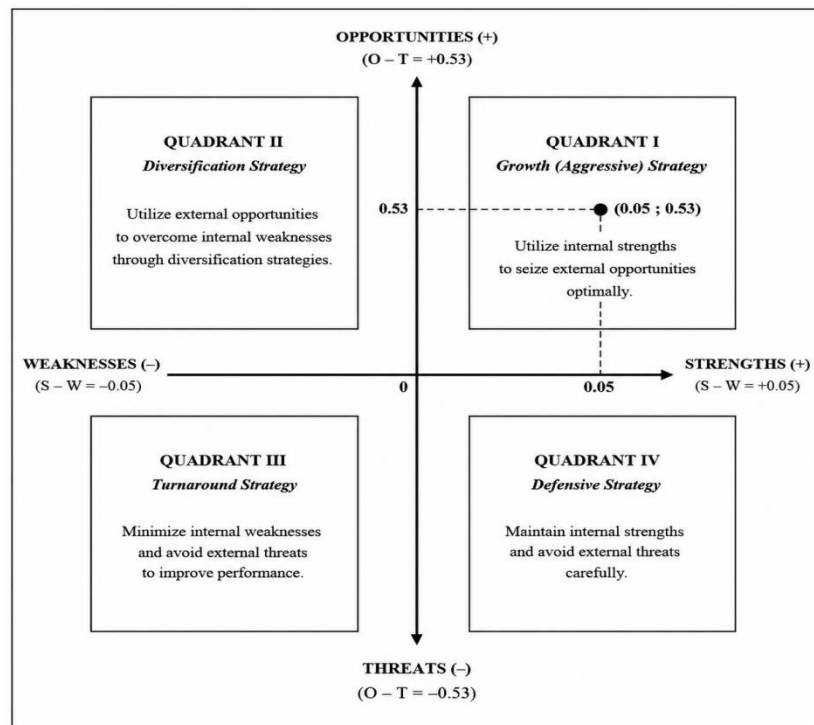


Figure 3. SWOT Quadrant

PESTEL Analysis

Triangulating interview data, organizational documents, and direct observations developed the PESTEL analysis presented in Table 6. Rather than serving solely as a descriptive environmental assessment, the analysis identified external factors that influenced the organization's sustainability-oriented marketing decisions. The findings suggest that economic, environmental, and legal factors exerted the strongest influence on strategic decision-making. Interview data indicated that energy price volatility, market uncertainty, and increasingly stringent environmental regulations directly affected product development, pricing decisions, and operational planning. Documentary evidence from company reports further confirmed the growing organizational emphasis on sustainability and production efficiency.

Collectively, these findings suggest that external environmental dynamics have become an important consideration in adapting marketing strategies within the post-pandemic manufacturing environment.

Table 6. PESTEL Analysis of PT Mulia Industrindo Tbk

Dimension	Empirical Evidence	Data Source	Strategic Implications
Political	Government policies increasingly encourage industrial sustainability and environmental compliance.	Company documents, sustainability reports	Integration of sustainability into strategic planning

Dimension	Empirical Evidence	Data Source	Strategic Implications
Economic	Market fluctuations, declining demand, energy price volatility, and inflation influenced operational and marketing decisions.	Interviews (I1, I2, I3), annual reports	Adaptive pricing, cost efficiency, and market diversification
Social	Customers and stakeholders increasingly expect environmentally responsible products.	Interviews (I1, I4), observations	Sustainability-oriented communication and stakeholder engagement
Technological	The company adopted automation, production efficiency technologies, and digital marketing tools.	Interviews (I3), company documents	Improved operational efficiency and market responsiveness
Environmental	Energy efficiency and environmental impact reduction became strategic priorities.	Interviews (I3, I4), sustainability reports	Sustainable production and green marketing implementation
Legal	Environmental regulations increasingly influenced operational and marketing decisions.	Interviews (I4, I5), regulatory documents	Compliance-based strategic adaptation

Porter's Five Forces Analysis

Triangulating interview data, organizational documents, and field observations developed the Porter's Five Forces analysis presented in Table 7. The analysis was not intended to provide a purely theoretical assessment of industry structure, but to examine how competitive conditions influenced strategic decision-making within the case organization. The findings suggest that competitive rivalry and buyer bargaining power represented the most influential industry forces affecting marketing decisions. Interview data indicated that product quality, pricing, distribution capability, and customer relationships were the primary determinants of market competition. Documentary evidence further highlighted the importance of operational efficiency and product differentiation in maintaining competitiveness within the post-pandemic business environment.

Table 7. Porter's Five Forces Analysis

Force	Empirical Evidence	Data Source	Intensity	Strategic Implications
Competitive Rivalry	Competition was largely influenced by product quality, pricing, distribution capability, and responsiveness to customer requirements.	Interviews (I1, I2), company documents	High	Continuous differentiation and market adaptation
Bargaining Power of Buyers	Customers had multiple supplier alternatives and increasingly demanded higher quality and sustainability standards.	Interviews (I1, I2), observations	High	Customer-oriented marketing and relationship management
Bargaining Power of Suppliers	Supplier relationships were generally stable, although fluctuations in raw material and energy costs affected production planning.	Interviews (I3), company reports	Moderate	Cost efficiency and long-term supplier collaboration
Threat of Substitute Products	Alternative construction materials were available, although glass continued to dominate many industrial applications.	Interviews (I3), market reports	Low Moderate	Product innovation and value-added differentiation

Force	Empirical Evidence	Data Source	Intensity	Strategic Implications
Threat of New Entrants	High capital requirements, technological complexity, and production infrastructure created substantial barriers to entry.	Interviews (15), industry documents	Low	Protection of existing market positions

Strategic Alignment and Development of the Strategic Sustainability Marketing Framework

The empirical findings demonstrate that sustainability-oriented marketing strategies do not emerge from isolated managerial decisions but from a continuous process of aligning internal capabilities with changing environmental conditions. Evidence from interviews, SWOT analysis, PESTEL analysis, and Porter's Five Forces indicates that managerial decisions regarding products, pricing, distribution, and promotion were consistently influenced by regulatory changes, market competition, technological developments, energy-related challenges, and evolving stakeholder expectations. This process led to the reconfiguration of existing capabilities to improve organizational responsiveness and sustainability integration.

Importantly, the final framework developed in this study differs from the initial analytical framework presented in Figure 1. The analytical framework was derived from the literature and proposed a conceptual relationship among marketing mix capability, green marketing orientation, and strategic environmental analysis. In contrast, the empirical framework presented in Figure 7 was constructed inductively from the research findings. The framework identifies three sequential processes: strategic alignment, capability reconfiguration, and adaptive sustainability-oriented marketing strategy. These processes transform internal capabilities and environmental signals into strategic actions that contribute to competitive advantage and sustainable business performance.

The resulting framework extends previous studies by demonstrating that strategic environmental analysis functions not merely as a diagnostic tool but as an external sensing mechanism that facilitates capability adaptation and sustainability-oriented strategic decision-making.

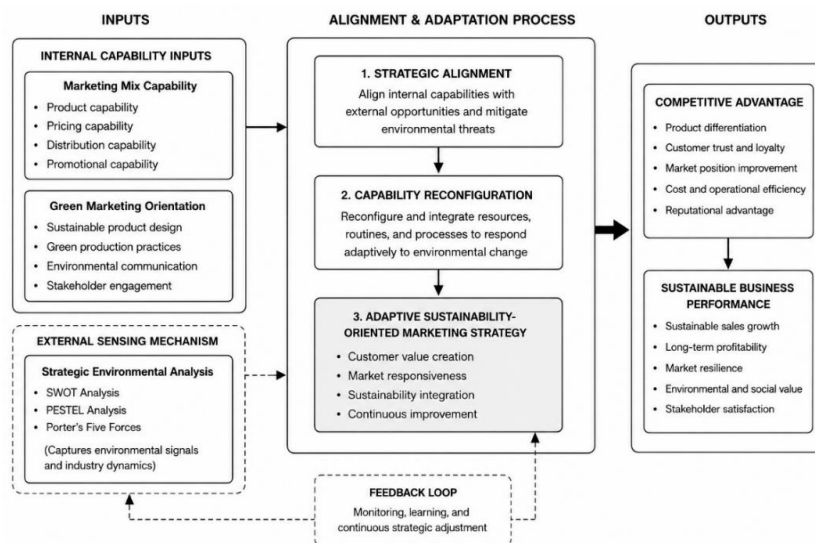


Figure 4. Strategic Sustainability Marketing Framework

CONCLUSION AND RECOMMENDATIONS

This study concludes that sustainability-oriented marketing has become an important strategic response within Indonesia's glass manufacturing industry. The findings demonstrate that marketing mix capability, including product quality, adaptive pricing, distribution efficiency, and promotional activities, strengthens market responsiveness and customer value creation. In addition, green marketing orientation contributes to customer trust, corporate credibility, and competitive differentiation by incorporating sustainability considerations into marketing activities. Rather than directly demonstrating comprehensive sustainability performance, the findings primarily highlight the company's capacity to adapt strategically to changing environmental and market conditions.

Within the case studied, the findings suggest that sustainability-oriented marketing practices are closely associated with strategic environmental analysis. The combined use of SWOT, PESTEL, and Porter's Five Forces helped managers interpret environmental regulations, market competition, technological developments, and stakeholder expectations when formulating marketing decisions. Rather than demonstrating a direct causal relationship, the findings indicate that environmental analysis provided an important reference for aligning internal capabilities with changing external conditions, encouraging strategic adaptation through continuous adjustments to marketing activities and sustainability-related initiatives.

This study contributes to the strategic marketing literature by proposing an empirically derived Strategic Sustainability Marketing Framework that clarifies the relationship between internal marketing capability, green marketing orientation, and strategic environmental analysis. Rather than treating these constructs as independent factors, the framework identifies strategic alignment and capability reconfiguration as the mechanisms through which environmental signals are translated into adaptive marketing responses. This perspective extends existing research by explaining how sustainability considerations become embedded within strategic decision-making processes in a resource-intensive manufacturing context.

From a managerial perspective, the findings suggest that sustainability-oriented marketing should be embedded within broader strategic and operational processes rather than being treated solely as a communication activity. Within the case studied, product development, pricing decisions, distribution systems, and promotional activities were continuously adjusted in response to environmental regulations, market dynamics, and stakeholder expectations. These findings indicate that manufacturing firms may benefit from integrating sustainability considerations into both marketing decisions and organizational planning.

This study has several limitations. First, the findings are derived from a single qualitative case involving one company in Indonesia's glass manufacturing industry, which limits transferability to other industrial settings. Second, the analysis was based on five managerial informants, placing greater emphasis on internal organizational perspectives. Third, the limited involvement of external stakeholders may have reduced the breadth of data triangulation. Finally, the proposed framework has not yet undergone external empirical validation.

Future studies could examine the proposed framework across multiple manufacturing sectors using comparative case studies, quantitative approaches, or mixed-method designs. Greater involvement of customers, suppliers, distributors, and

regulatory stakeholders may provide a more comprehensive understanding of sustainability-oriented marketing practices. Future research may also investigate how digital transformation, sustainability innovation, and dynamic organizational capabilities influence capability reconfiguration and adaptive marketing strategies. In addition, external validation of the proposed framework would strengthen its theoretical and practical applicability.

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REFERENCES

- Ahmed, S. K. (2024). The pillars of trustworthiness in qualitative research. *Journal of Medicine, Surgery, and Public Health*, 2, Article 100051. <https://doi.org/10.1016/j.glmedi.2024.100051>
- Akude, D. N., Akuma, J. K., Kwaning, E. A., & Asiama, K. A. (2025). Green marketing practices and sustainability performance of manufacturing firms: Evidence from emerging markets. *Nature Environment and Pollution Technology*, 24(1), 1–16. <https://doi.org/10.46488/NEPT.2025.v24i01.D1673>
- Alrajhi, A. S. (2025). The impact of marketing change capabilities on marketing strategic change. *Decision Science Letters*, 14(2), 393–400. <https://doi.org/10.5267/j.dsl.2024.12.014>
- Belsare, H. V. (2025). PESTLE analysis. *International Journal of Advanced Research*, 13(2), 608–612. <https://doi.org/10.21474/IJAR01/20411>
- Bhardwaj, S., Nair, K., Tariq, M. U., Ahmad, A., & Chitnis, A. (2023). The state of research in green marketing: A bibliometric review from 2005 to 2022. *Sustainability*, 15(4), Article 2988. <https://doi.org/10.3390/su15042988>
- Bouncken, R., Czakon, W., & Schmitt, F. (2025). Purposeful sampling and saturation in qualitative research methodologies: Recommendations and review. *Review of Managerial Science*, 20, 579–615. <https://doi.org/10.1007/s11846-025-00881-2>
- Chakrabarty, B. (2024). SWOT analysis in modern business: A qualitative study. *IOSR Journal of Business and Management*, 26(11), 5–8. <https://doi.org/10.9790/487X-2611120508>
- Chen, R., & Cao, L. (2023). How do enterprises achieve sustainable success in green manufacturing era? The impact of organizational environmental identity on green competitive advantage in China. *Kybernetes*, 54(1), 71–89. <https://doi.org/10.1108/K-04-2022-0597>
- Colangelo, S. (2024). Reducing the environmental footprint of glass manufacturing. *International Journal of Applied Glass Science*, 15, 350–366. <https://doi.org/10.1111/ijag.16674>

- Darmawan, D., & Grenier, E. (2021). Competitive advantage and service marketing mix. *Journal of Social Science Studies*, 1(2), 75–80. <https://doi.org/10.56348/jos3.v1i2.9>
- Demessie, G. T., & Shukla, A. (2024). Drivers and outcomes of sustainable marketing strategy in the African context: The role of competitive advantage and strategic proactivity as mediating and moderating variables. *Cogent Business & Management*, 11(1), Article 2348442. <https://doi.org/10.1080/23311975.2024.2348442>
- Desi Novelayanti, M., Wulandari, A., & Yahya, A. (2024). The effect of promotions and online customer reviews on purchase decisions mediated by brand image on Erigo products on Shopee e-commerce. *Indonesian Interdisciplinary Journal of Sharia Economics*, 7(2), 3991–4004.
- International Energy Agency. (2024). *Renewables 2024*. IEA. <https://www.iea.org/reports/renewables-2024>
- Eryogia, K. N., Utami, K. D. C., Sundari, D. S. A., Bintang, A. N., & Wibisana, W. D. (2024). Penerapan Porter five forces dan analisis SWOT dalam perencanaan strategi PT Roves Global Food. *EBISMAN: EBisnis Manajemen*, 2(2), 105–118. <https://doi.org/10.59603/ebisman.v2i2.403>
- González-Viralta, D., Veas-González, I., Egaña-Bruna, F., Vidal-Silva, C., Delgado-Bello, C., & Pezoa-Fuentes, C. (2023). Positive effects of green practices on the consumers' satisfaction, loyalty, word-of-mouth, and willingness to pay. *Heliyon*, 9(10), Article e20353. <https://doi.org/10.1016/j.heliyon.2023.e20353>
- Gürel, E. (2017). SWOT analysis: A theoretical review. *Journal of International Social Research*, 10(51), 994–1006. <https://doi.org/10.17719/jisr.2017.1832>
- Hasanah, W., Rohmah, N., Firdausyiah, N., M, A. F., Hermawati, R., Risye, C. M., Berliawan, F. B., Fadillah, S., & Nevia, Y. I. (2024). Marketing mix strategy (4P) and its impact on sales volume of Angkringan Taman Kota Situbondo products. *International Journal of Economics, Finance and Management Studies*, 8(5), 3054–3059. <https://ijefm.co.in/v8i5/47.php>
- Homburg, S. (2020). Reply to Robra and Felder (2020). *The Economist's Voice*, 17. <https://doi.org/10.1515/ev-2020-0021>
- Hossain, M. A., Agnihotri, R., Rushan, M. R. I., Rahman, M. S., & Sumi, S. F. (2022). Marketing analytics capability, artificial intelligence adoption, and firms' competitive advantage: Evidence from the manufacturing industry. *Industrial Marketing Management*, 106, 240–255. <https://doi.org/10.1016/j.indmarman.2022.08.017>
- Hunt, S., & Madhavaram, S. (2020). Adaptive marketing capabilities, dynamic capabilities, and renewal competences: The "outside vs. inside" and "static vs. dynamic" controversies in strategy. *Industrial Marketing Management*, 89, 129–139. <https://doi.org/10.1016/j.indmarman.2019.07.004>
- Kamyabi, M., Özgüt, H., & Ahmed, J. N. (2025). Sustaining digital marketing strategies to enhance customer engagement and brand promotion: Position as a moderator. *Sustainability*, 17(7), Article 3270. <https://doi.org/10.3390/su17073270>
- Kiyak, D., & Grigolienė, R. (2023). Analysis of the conceptual frameworks of green marketing. *Sustainability*, 15(21), Article 15630. <https://doi.org/10.3390/su152115630>
- Kotler, P., & Keller, K. (2021). *Marketing management* (16th ed.). Pearson.
- Madsen, D., & Grønseth, B. (2022). Five forces model. In *Encyclopedia of tourism management and marketing*. Edward Elgar Publishing. <https://doi.org/10.4337/9781800377486.five.forces.model>

- Mohajan, D., & Mohajan, H. (2022). Exploration of coding in qualitative data analysis: Grounded theory perspective. *Research and Advances in Education*, 1(6), 50–60. <https://doi.org/10.56397/RAE.2022.12.07>
- Moinzad, H., & Akbarzadeh, M. H. (2022). How to improve information technology strategic planning effectiveness using balanced scorecard, risk and maturity analysis, case study health information technology? A qualitative study. *Health Science Reports*, 5(6), Article e926. <https://doi.org/10.1002/hsr2.926>
- Muchsam, Y., Raspati, G., Yuningsih, Y. Y., & Rumaisa, F. (2025). Exploring the impact of green marketing, brand image, and purchase intent on consumer decisions for Bogasari flour products. *International Journal of Multidisciplinary Sciences and Arts*, 4(1), 1–8. <https://doi.org/10.47709/ijmdsa.v4i1.5808>
- Mulia Industrindo. (2025). *PT Mulia Industrindo Tbk company profile*. <https://muliaindustrindo.com/id>
- Nguyen-Viet, B. (2022). The impact of green marketing mix elements on green customer-based brand equity in an emerging market. *Asia-Pacific Journal of Business Administration*, 15(1), 96–116. <https://doi.org/10.1108/APJBA-08-2021-0398>
- Papadas, K. (2020). Green marketing strategy. In W. Leal Filho, A. M. Azul, L. Brandli, A. Lange Salvia, & T. Wall (Eds.), *Industry, innovation and infrastructure* (pp. 1–12). Springer International Publishing. https://doi.org/10.1007/978-3-319-71059-4_121-1
- Papadas, K.-K., Avlonitis, G. J., Carrigan, M., & Piha, L. (2019). The interplay of strategic and internal green marketing orientation on competitive advantage. *Journal of Business Research*, 104, 632–643. <https://doi.org/10.1016/j.jbusres.2018.07.009>
- Porter, M. E. (2022). *The five competitive forces that shape strategy*. Harvard Business School Publishing.
- Raspati, G., Yuningsih, Y. Y., Maulana, A., Yuda, M. S., & Muchsam, Y. (2026). Marketing mix and green marketing effects on MSME customer loyalty through value and satisfaction. *International Journal of Multidisciplinary Sciences and Arts*, 5(1), 20–30.
- Ratinah, & Anna, R. W. (2023). Kualitas produk sebagai anteseden kepuasan fungsional dan kepercayaan dalam meningkatkan pembelian ulang produk Scarlet [Product quality as an antecedent of functional satisfaction and trust in increasing repurchases of Scarlet products]. *EKOMABIS: Jurnal Ekonomi Manajemen Bisnis*, 4(1), 25–36. <https://journal.lppmpelitabangsa.id/index.php/ekomabis/article/view/302/342>
- Sale, J. E. M. (2022). The role of analytic direction in qualitative research. *BMC Medical Research Methodology*, 22, Article 66. <https://doi.org/10.1186/s12874-022-01546-4>
- Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H., & Jinks, C. (2018). Saturation in qualitative research: Exploring its conceptualization and operationalization. *Quality & Quantity*, 52(4), 1893–1907. <https://doi.org/10.1007/s11135-017-0574-8>
- Setyaningrum, R. P., & Wulandari, A. (2024). The influence of green human resource management, green product development in the mediation of green innovation strategy on innovation performance. *Quality – Access to Success*, 25(199), 84–93. <https://doi.org/10.47750/QAS/25.199.10>

- Sharma, A. (2021). Consumers' purchase behavior and green marketing: A synthesis, review and agenda. *International Journal of Consumer Studies*, 45(6), 1217–1238. <https://doi.org/10.1111/ijcs.12722>
- Supriyanto, & Wulandari, A. (2026). Pendekatan optimasi dalam pengambilan keputusan produksi dan pembiayaan pada industri manufaktur: Sebuah systematic literature review. *Jurnal Ekonomi Syariah Pelita Bangsa*, 11(1), 119–126. <https://doi.org/10.37366/jespb.v11i01.3196>
- Tang, G., Chen, Y., Jiang, Y., Paillé, P., & Jia, J. (2018). Green human resource management practices: Scale development and validity. *Asia Pacific Journal of Human Resources*, 56(1), 31–55. <https://doi.org/10.1111/1744-7941.12147>
- Udeh, E., & Dugba, A. (2025). An analysis of the potential integrations of sustainability into marketing strategies by companies. *European Journal of Management and Marketing Studies*, 9(3). <https://doi.org/10.46827/ejmms.v9i3.1887>
- United Nations Conference on Trade and Development. (2025). *Global economic developments and prospects: Annual report 2025*.
- Wilasto, K. A., & Wening, N. (2025). SWOT analysis in determining performance improvement strategies. *Jurnal Ekuisci*, 3(1), 44–53. <https://doi.org/10.62885/ekuisi.v3i1.842>
- Wulandari, A. (2024). *Manajemen rantai pasokan*.
- Wulandari, A., & Mulyanto, H. (2019). *Manajemen strategik*.
- Xia, Y. (2023). The 4Ps of marketing and applications in various brands. *Journal of Education, Humanities and Social Sciences*, 16, 165–170. <https://doi.org/10.54097/ehss.v16i.9601>
- Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). SAGE Publications.