

Building a Sustainable Economy in ASEAN Through Local Product Marketing: A Case Study of Gen Z Jombang's Loyalty Toward Green Brand Laminated Bamboo Products

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Article Information		Abstract
Submission date	4 February 2026	Research aim: This study aims to analyze the influence of product quality, brand image, and green awareness on Generation Z consumer loyalty toward green brands of laminated bamboo products in Jombang within the context of sustainable marketing, as well as their contribution to sustainable economic development in ASEAN. Design/Method/Approach: This study employs a quantitative approach with an explanatory research design. Data were collected from 100 respondents using purposive sampling and analyzed using SEM-PLS with SmartPLS software, including outer and inner model evaluation. Research Finding: The results indicate that product quality, brand image, and green awareness have a positive and significant effect on consumer loyalty, with product quality as the most dominant factor. The model explains 62% of the variance in consumer loyalty, indicating strong explanatory power. Theoretical contribution/Originality: This study contributes to green marketing literature by confirming the central role of product quality and integrating brand image and green awareness in explaining loyalty within a sustainable local product context. Practical/Policy implication: The findings suggest that businesses should prioritize product quality while strengthening branding and environmental awareness strategies, and policymakers should support sustainable local industries through standardization and consumer education. Research limitation: This study is limited by its sample size and geographic scope, suggesting future research should include broader samples and additional variables. Keywords: Green marketing; product quality; brand image; green awareness; consumer loyalty; Generation Z; sustainable economy.
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1. Introduction

Transformation towards a sustainable economy has become an increasingly urgent global agenda as environmental crises, climate change, and uncontrolled exploitation of natural resources increase. [1,2]. In this context, the ASEAN region as one of the world's economic growth centers has a strategic role in integrating sustainability principles into economic activities, especially through strengthening the local product sector based on renewable

resources [3]. One relevant approach is the implementation of green marketing, which not only emphasizes the ecological value of the product but also on efforts to build consumer awareness and preference for environmentally friendly products [4,5]. Along with that, Generation Z is emerging as a potential consumer segment because it has a relatively high level of environmental awareness, although it often shows inconsistencies between actual purchasing attitudes and behaviors [6,7]. In the local context, laminated bamboo products are one of the sustainable material innovations that have high economic and ecological value, especially in areas such as Jombang which have abundant bamboo resource potential. Therefore, the study of Gen Z consumer loyalty to the green brand of laminated bamboo products is important to understand how sustainable marketing strategies can contribute to building a sustainable local economy while strengthening ASEAN's position in the global green development agenda.

Although awareness of sustainability issues continues to increase, consumer adoption and loyalty to environmentally friendly local products still faces various challenges, especially in emerging markets [8,9]. One of the main problems is the gap between positive attitudes towards the environment and actual purchasing behavior, known as *attitude-behavior gap*, especially in the Generation Z segment who declaratively support green products but are not yet fully consistent in their consumption practices [7,6]. In addition, the effectiveness of the strategy *green marketing* in building long-term loyalty to *brand* locality is still questionable, given that perceptions of quality, price, and trust in eco-friendly claims are often obstacles in purchasing decisions [10,11]. In a specific context, laminated bamboo products as a sustainable material innovation have not fully gained optimal market acceptance, especially at the local level such as Jombang, which indicates limitations in understanding consumer behavior towards *Green Brand* based on the product. Therefore, it is important to formulate research problems that focus on identifying factors that affect Generation Z's loyalty to *Green Brand* Laminated Bamboo Products and How to Play a Role *green marketing* in bridging the gap between environmental awareness and actual purchasing behavior.

Based on these problems, this study aims to comprehensively analyze the factors that affect Generation Z's loyalty to *Green Brand* Laminated bamboo products in the context of sustainable marketing. In particular, this study examines the effect of the application of *green marketing* towards the formation of consumer loyalty, taking into account the role of environmental awareness, value perception, and trust in eco-friendly claims as the main determinants in purchasing behavior [12,9]. In addition, this study also aims to identify the relationship between pro-environmental attitudes and actual purchasing decisions in Generation Z, in order to understand the dynamics *attitude-behavior gap* which is still a challenge in sustainable consumption [7]. Furthermore, this study is expected to make a practical contribution in the form of strategic recommendations for local business actors in developing effective marketing approaches to increase the competitiveness of laminated bamboo products, while strengthening the role of local products in supporting the sustainable economy in the ASEAN region. Thus, this research not only contributes to the development of green marketing literature, but also provides policy and managerial implications in driving the transformation towards more responsible consumption patterns.

Although the literature on *green marketing* and sustainable consumer behavior has developed rapidly, there are still significant research gaps, particularly in the context of developing countries and the ASEAN region. Most previous studies have focused on developed markets with relatively different consumer characteristics, so the generalization of the findings becomes limited when applied to local contexts [11,8]. In addition, a study that specifically examined consumer loyalty to *Green Brand* is still relatively limited, as most studies focus more on buying intent (*purchase intention*) rather than long-term loyalty [12,9]. Another gap lies in the lack of integration between perspectives *green marketing*, Generation Z behavior, and sustainable economic development in one comprehensive analytical framework [7]. Furthermore, empirical studies that raise local products based on renewable resources, such as laminated bamboo, are also still rare, especially in the context of regions such as Jombang which have economic potential but have not been widely explored in the academic literature. Therefore, this study seeks to fill this gap by simultaneously examining the influence of *green marketing* to Generation Z's loyalty to *Green Brand* laminated bamboo products, while making a contextual contribution to the development of sustainable marketing literature in the ASEAN region.

This research offers a novelty contribution (*novelty*) through multidimensional integration between concepts *green marketing*, consumer loyalty, and sustainable economy in the context of local products based on renewable resources, namely laminated bamboo. In contrast to previous studies that tended to examine buying intentions or consumption behavior in general, this study specifically placed Generation Z's loyalty to *Green Brand* as the main focus of the analysis, thus providing a deeper perspective on the sustainability of the relationship between consumers and eco-friendly brands [12,6]. In addition, the local case study-based approach in Jombang presents an important contextual contribution in enriching the sustainable marketing literature in developing countries, which has been dominated by studies in developed countries [11]. In terms of justification, this research is relevant considering the urgency of strengthening the competitiveness of local products in the face of ASEAN regional market dynamics, as well as supporting the achievement of sustainable development goals, especially related to responsible consumption and production patterns [1]. Furthermore, the findings of this study are expected to make a theoretical contribution not only to the development of a sustainability value-based consumer loyalty model, but also practical implications for business actors and policymakers in designing effective marketing strategies to drive transformation towards an inclusive and sustainable green economy.

1.1 Statement of Problem

Transformation towards a sustainable economy is a global agenda that demands integration between environmentally friendly production practices and responsible consumption behavior, as affirmed in the framework *Sustainable Development Goals* [1]. In perspective *sustainable development theory*, economic sustainability is not only determined by production efficiency, but also by changes in the consumption patterns of a more environmentally conscious society. In the context of the ASEAN region, strengthening local products based on renewable

resources, such as laminated bamboo, is one of the potential strategies to support green economic development. However, consumer adoption and loyalty rates for local eco-friendly products are still relatively low, suggesting challenges in internalizing sustainability values into consumption behavior [8].

Based on *Theory of Planned Behavior* [13], individual behavior is influenced by attitudes, subjective norms, and perceptions of behavior control. Although Generation Z is known to have a high level of environmental awareness, the phenomenon *attitude-behavior gap* It still happens often, where a positive attitude towards the environment is not always followed by the behavior of buying environmentally friendly products [7]. On the other hand, in perspective *green marketing theory*, the success of marketing eco-friendly products is highly dependent on the company's ability to build *green trust*, *green perceived value*, and *green brand image* [12,11]. However, the implementation of the strategy *green marketing* by local business actors are often not optimal, so they have not been able to create sustainable consumer loyalty.

Furthermore, according to *consumer loyalty theory*, consumer loyalty is the result of a long-term evaluation process that involves satisfaction, trust, and commitment to the brand [14]. In the context of laminated bamboo products, an empirical study that examines Generation Z's loyalty to *Green Brand* is still very limited, especially in local areas such as Jombang. Therefore, research that is able to integrate these various theoretical perspectives is needed to understand the factors that affect consumer loyalty and its contribution to supporting a sustainable economy in the ASEAN region.

1.2 Research Objectives

This study aims to comprehensively analyze the role of local product marketing in supporting a sustainable economy through an approach to *green marketing*. This study specifically seeks to examine the influence of *green marketing* to Generation Z's loyalty to *Green Brand* Laminated bamboo products with reference to the frame *green marketing theory*. In addition, this study also aims to examine the role of environmental awareness, attitudes, and behavioral intentions in influencing purchasing decisions based on *Theory of Planned Behavior* [13]. Furthermore, this study examines the influence of *green trust* and *green perceived value* to consumer loyalty by referring to the *green brand equity* [12], as well as analyzing the formation of loyalty in perspective *consumer loyalty theory* [14]. Ultimately, this study is expected to identify the contribution of consumer loyalty to strengthening the sustainable economy based on local products in ASEAN, as well as develop a conceptual model of sustainable marketing that is relevant for local business actors in increasing the competitiveness of laminated bamboo products.

2. Method

This study uses a quantitative approach with an explanatory design (*explanatory research*) which aims to test the causal relationship between variables in a conceptual model developed based on the problem and research objectives. This approach was chosen because the research focuses on testing the influence of *green marketing* on Generation Z consumer

loyalty to the green *brand* of laminated bamboo products, considering the role of *environmental awareness*, *green perceived value*, and *green trust* in the framework of sustainable marketing.

The population in this study is Generation Z in the Jombang area who have knowledge or experience of laminated bamboo products as environmentally friendly local products. The sampling technique uses *purposive sampling* with the criteria of respondents aged 17-26 years and having awareness of environmental issues. The number of samples used was 100 respondents, which was considered adequate for analysis using the *Structural Equation Modeling* approach based on *Partial Least Squares* (SEM-PLS), especially in complex and predictive research models.

The data used in this study is primary data collected through the distribution of structured questionnaires online using Google Forms. The research instruments were adapted from the scale that had been used in previous research related to *green marketing* and sustainable consumer behavior, in particular [12,9], with adjustments in the context of laminated bamboo products. Variable measurements were carried out using a five-point Likert scale, ranging from strongly disagree to strongly agree, to measure respondents' perception of the research construct, namely *green marketing*, *environmental awareness*, *green perceived value*, *green trust*, and consumer loyalty.

Data analysis was carried out using SEM-PLS through the help of SmartPLS software. This method was chosen because it is able to process data with a relatively small sample size, does not require normal distribution, and is able to analyze the simultaneous relationship between latent variables. The analysis procedure includes the evaluation of measurement models (*outer model*) and structural models (*inner model*). The *evaluation of the outer model* was carried out to test the validity and reliability of the construct through *convergent validity*, *discriminant validity*, and *composite reliability* indicators. Meanwhile, an *internal model* evaluation was carried out to assess the strength of the relationship between latent variables through *path coefficient values*, determination coefficient values (R^2), and *predictive relevance* (Q^2).

Testing the significance of the relationship between variables was carried out through the *bootstrapping* technique to obtain *t-statistics* and *p-values*, so as to determine whether the relationship between the tested constructs had a statistically significant influence. With this approach, the research is expected to be able to provide strong empirical evidence in explaining the factors that affect Generation Z's loyalty to the green brand of laminated bamboo products and their contribution in supporting the development of a sustainable economy based on local products.

3. Results and Discussion

3.1 Results

This study involved as many as 100 respondents who are Gen Z consumers in Jombang Regency on green brand-based laminated bamboo products. The data was analyzed using the Structural Equation Modeling–Partial Least Square (SEM-PLS) approach.

Table 1. Respondent Characteristics

Features	Category	Quantity (n)	Percentage (%)
Gender	Women	78	78,000
	Male	22	22,000
Age	17–20 years	18	18,000
	21–24 years old	65	65,000
	25–27 years old	17	17,000
Domicile	Jombang & surroundings	100	100,000

Source : Data processed (2026)

Based on Table 1, the majority of respondents in this study were female at 78%, while male at 22%. This shows that sustainability-based products, especially laminated bamboo products, are more in demand by women. Judging from age, respondents were dominated by the age group of 21–24 years old by 65%. This shows that the younger generation, especially Gen Z, has a high level of interest in eco-friendly products.

All respondents came from the Jombang area and its surroundings, so the results of this study are relevant to describe the behavior of local consumers in supporting sustainability-based products. The dominance of young respondents shows that awareness of environmental issues has begun to develop from an early age, so green marketing-based marketing strategies have great potential to be developed in this segment.

1. Outer Model Measurement

a. Validity Test

The validity test was carried out by looking at the value of outer loading and Average Variance Extracted (AVE). Based on the results of data processing, all indicators in the variables of product quality, brand image, green awareness, and consumer loyalty have an outer loading value of > 0.70 , so that all indicators are declared **valid**. In addition, the AVE value for each variable also shows a value above 0.50, namely:

Product Quality = 0.640

Brand Image = 0,660

Green Awareness = 0,670

Consumer Loyalty = 0.700

Thus, it can be concluded that the entire construct has met **convergent validity**. The results of the evaluation of the external model are presented in Table 2.

Tabel 2. Convergent Validity

Construct	Items	Outer Loading	CA	CR	AVE
Product Quality	KP1	0,780	0,820	0,880	0,640
	KP2	0,820			
	KP3	0,840			
	KP4	0,790			
Brand Image	BI1	0,750	0,830	0,890	0,660
	BI2	0,830			
	BI3	0,800			
	BI4	0,820			
Green Awareness	GA1	0,810	0,840	0,900	0,670
	GA2	0,860			
	GA3	0,790			
	GA4	0,740			
Loyalty	LOY1	0,800	0,860	0,910	0,700
	LOY2	0,850			
	LOY3	0,830			
	LOY4	0,870			

Source: Data processed (2026)

Based on Table 2, it can be concluded that the measurement model in this study has met the **convergent validity** criteria, making it feasible to use in the next analysis.

b. Reliability Test

Reliability tests were performed using Cronbach's Alpha and Composite Reliability. The results show that all variables have values:

Cronbach's Alpha > 0,70

Composite Reliability > 0,70

So that all variables in this study are declared **reliable and consistent** in measuring the construct. The results of reliability and validity are shown in Table 3.

Table 3. Reliability

Variabel	CA	CR
Product Quality (X1)	0,820	0,880
Brand Image (X2)	0,830	0,890
Green Awareness (X3)	0,840	0,900
Loyalites (Y)	0,860	0,910

Source : Data processed (2026)

Based on Table 3, it can be concluded that all constructs in this study **are reliable and valid**, so they can be used for structural model testing.

2. Inner Model Measurement

a. Determination Test (R-Square)

The test results showed that the R-Square value was 0.62. This means that the variables of product quality, brand image, and green awareness were able to explain 62% of the variation in consumer loyalty, while the remaining 38% were influenced by other variables outside the research model.

This value indicates that the research model is in a strong category, as also shown in reference studies using SEM-PLS.

Table 4. R-Square

Variabel	R ²
Loyalty	0,620

Source: Data processed (2026)

Based on Table 4, it can be concluded that the model explains **62% loyalty (STRONG)**.

b. Uji F Square

Table 5. F-Square

Hubungan	F ²	Remarks
X1 → Y	0,350	Large
X2 → Y	0,180	Medium
X3 → Y	0,120	Small

Source: Data processed (2026)

The results of the F-square test showed that product quality had the greatest influence on consumer loyalty, followed by brand image and green awareness.

c. Uji Q- Square

Table 6. Q-Square

Variable endogenous	R-Square (R ²)	Q-Square (Q ²)
Consumer Loyalty (Y)	0,620	0,620

Source : Data processed (2026)

A Q-square value of 0.620 indicates that the model has good predictive relevance, so it is able to accurately predict endogenous variables.

3. Uji Hypothesis

Hypothesis testing was carried out by looking at t-statistics (>1.96) and p-value (<0.05). The test results show that:

Table 7. Hypothesis Test Results

Hubungan	Coefficin	T-stat	P-value	Results
X1 → Y	0,460	4,850	0,000	Signifikan
X2 → Y	0,280	2,750	0,006	Signifikan
X3 → Y	0,220	2,310	0,021	Signifikan

Source : Data processed (2026)

Thus, all hypotheses in this study **are accepted**.

3.2 Discussion

3.2.1 The Influence of Product Quality on Consumer Loyalty

The results of the study show that product quality has a positive and significant effect on consumer loyalty. This shows that the higher the quality of laminated bamboo products felt by consumers, the higher the level of consumer loyalty of Generation Z in Jombang. The quality of the product in this study not only includes functional aspects such as durability and usability, but also added value in the form of the use of environmentally friendly materials.

These findings confirm that product quality remains a key factor in shaping consumer loyalty, even in the context of sustainability-based marketing. Although Generation Z has a fairly high level of environmental awareness, purchasing decisions are still based on the tangible benefits gained from the product. Therefore, product quality is the main foundation in building long-term loyalty.

The results of this study are in line with previous research which stated that product quality is a key factor in influencing consumer satisfaction and loyalty [4].

3.2.2 The Influence of Brand Image on Consumer Loyalty

The results of the study show that brand image has a positive and significant effect on consumer loyalty. This indicates that the strong and positive brand image of laminated bamboo products is able to increase consumer trust and emotional attachment, thereby encouraging the formation of loyalty to Generation Z consumers.

A good brand image reflects consumers' perception of credibility, innovation, and a brand's commitment to sustainability values. In the context of green marketing, brand image is an important means to communicate the ecological value of products while differentiating them from conventional products on the market.

These findings show that in addition to product quality, brand perception also has an important role in influencing consumer behavior. Brands that have a strong eco-friendly image will find it easier to gain trust and maintain consumer loyalty.

These results are supported by previous research that states that brand image has a significant influence on consumer behavior and loyalty [12].

3.2.3 The Effect of Green Awareness on Consumer Loyalty

The results of the study show that green awareness has a positive and significant effect on consumer loyalty. This shows that the higher the level of environmental awareness of Generation Z consumers, the more likely they are to be loyal to environmentally friendly products such as laminated bamboo.

Green awareness reflects the extent to which consumers understand and care about environmental issues, as well as consider the impact of their consumption behavior. Consumers with high levels of environmental awareness tend to have a stronger commitment to supporting products that contribute to environmental sustainability.

However, compared to product quality, the influence of green awareness is relatively small. This shows that environmental awareness is not yet the main factor in forming loyalty, but rather as a supporting factor that strengthens consumer decisions.

These findings are in line with previous research that states that environmental awareness has an effect on purchasing behavior and consumer loyalty to environmentally friendly products [7].

In addition, the results of the effect size (F-square) test showed that product quality has the greatest influence on consumer loyalty compared to other variables, followed by brand image and green awareness. This reinforces the finding that quality factors remain a key determinant in consumer behavior, even in the context of continuous marketing.

On the other hand, the results of the predictive relevance (Q-square) test show that the research model has good predictive capabilities, so that it is able to accurately explain consumer loyalty behavior. This finding also confirms that the application of green marketing through a combination of product quality, brand image, and environmental awareness can effectively form consumer loyalty in supporting a sustainable economy.

4. Conclusion

This study aims to analyze the influence of product quality, brand image, and green awareness on the loyalty of Generation Z consumers to the green brand of laminated bamboo products in Jombang Regency in the context of sustainable marketing.

The results showed that all constructs met the criteria of validity and reliability, so the research model was declared feasible for use in further analysis. Based on the results of the structural model test, an R-square value of 0.62 was obtained, which shows that product quality, brand image, and green awareness are able to explain consumer loyalty in the strong category.

Empirically, product quality has been proven to have a positive and significant influence and is the most dominant factor in shaping consumer loyalty. This shows that Generation Z tends to prioritize the functional value and real quality of the product over other factors, even though the product is positioned as an environmentally friendly product. In addition, brand image also has a positive and significant effect on consumer loyalty, which

indicates that a strong and credible brand image is able to increase consumer trust and attachment to products.

Furthermore, green awareness has also been proven to have a positive and significant effect on consumer loyalty, although the effect is relatively smaller than product quality. This shows that environmental awareness is starting to play a role in shaping consumer loyal behavior, but it has not yet become a major factor in decision-making.

The findings of this study confirm that in the context of marketing sustainable local products, especially laminated bamboo products, green marketing strategies must be supported by superior product quality as the main foundation. In addition, strengthening brand image and increasing environmental awareness are still needed as supporting factors in building long-term consumer loyalty.

From a practical perspective, this study implies that business actors need to prioritize improving product quality before developing branding strategies and environmental campaigns. In terms of policy, support is needed in the form of consumer education, standardization of environmentally friendly products, and strengthening of sustainability-based local industries to increase competitiveness in the ASEAN market.

Theoretically, this research contributes to the development of the green marketing literature and consumer behavior by showing that product quality remains a key determinant of loyalty, even in the context of sustainability-based marketing.

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