The Influence of Green Marketing, Green Awareness and Green Product Innovation on Purchasing Decisions at Green Coffee Shop

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ABSTRACT

This study aims to analyze the effect of Green Marketing, Green Awareness, and Green Product Innovation on purchase decisions. The research employs a quantitative approach, with the population consisting of customers of Anomali Coffee Shop in Kemang, South Jakarta. A total of 200 respondents were selected as the research sample. Data was collected through a survey method using a Google Form questionnaire. The sampling technique applied was purposive sampling, and the data was analyzed using the Partial Least Square (PLS) analytical tool. The findings of this study indicate that Green Marketing has a positive and significant effect on purchasing decisions. Similarly, Green Awareness and Green Product Innovation also positively and significantly influence purchasing.

Keywords: *Green Marketing; Green Awareness; Green Product Innovation; Purchase Decisions.*

INTRODUCTION

Waste has become one of the major issues faced by many countries worldwide, including Indonesia, due to its non-biodegradable nature, which continues to increase each year. If this rise in waste is not balanced with environmentally friendly management, it will lead to environmental pollution. The large amount of waste, consisting of various types, can cause serious environmental problems if not properly managed. Its impact is not limited to the waste itself but also affects other environmental aspects, such as groundwater pollution caused by waste accumulation. The decomposition process of organic and inorganic compounds dissolving in water and seeping through waste piles can further worsen environmental pollution levels.Waste continues to grow in line with the increasing human population. It remains a major issue in environmental pollution, affecting both land and marine ecosystems. Due to its non-biodegradable properties, waste processing can produce toxic and carcinogenic substances, requiring hundreds of years to decompose naturally (Prayitno, 2023).

In 2020, Indonesia ranked fifth among the world's largest waste-producing countries, generating around 65.2 million tons of waste, according to The Atlas of Sustainable Development Goals 2023 by the World Bank. It followed China (395 million tons), the United States (265 million tons), India (189 million tons), and Brazil (79 million tons).

The World Bank noted that waste production correlates with income levels, as high- income countries with higher consumption rates generate more waste. While developed nations currently dominate waste generation, middle-income countries are expected to contribute more in the future. Waste volume is influenced not only by population size but also by consumption habits and lifestyle.Plastic waste, particularly plastic bags, is a major environmental concern due to its widespread use and improper disposal. It can pollute soil and water, harm marine ecosystems, and introduce microplastics into the food chain, posing health risks (Utomo & Dwiyanto, 2022).

Plastic waste not only pollutes land but also threatens Indonesia's marine environment. Databooks (2020) reports that plastic is the most dominant and harmful type of waste, as its high consumption leads to increasing waste volumes. Due to its non-biodegradable nature, plastic poses serious environmental risks, especially with industrial growth contributing to rising waste levels. The accumulation of unmanaged plastic waste heightens environmental and health concerns, highlighting the need for efficient waste management solutions (Liana et al., 2023; Riandis et al., 2021).

Teguh Handoko, Founder of The Earthkeeper Indonesia, cites UNEP's prediction that by 2050, plastic in the ocean could exceed fish. The excessive use of plastic packaging, particularly in food and beverage industries, accelerates environmental degradation (Sofiano & Yulia, 2024).Growing environmental awareness has led to a rise in green consumer behavior, where individuals prefer eco-friendly products and companies that adopt sustainable practices. This shift fosters a new environmental ethic, shaping consumption patterns and promoting sustainability (Putri et al., 2021; Nurkhalida & Kurniawati, 2023; Fahrizal, 2024).

One of the industries affected by this behavioral change is the coffee industry, especially coffee shops. Coffee consumption in Indonesia continues to increase every year. According to data from the International Coffee Organization (ICO), coffee consumption in Indonesia reached its highest record in the 2020/2021 period. The figure is the fifth largest in the world. Coffee is a popular drink in Indonesia. From young people to old people like this drink. This has driven domestic coffee consumption to be quite large. According to data from the International Coffee Organization (ICO), coffee consumption in Indonesia reached 5 million 60-kilogram bags in the 2020/2021 period. This number increased by 4.04% compared to the previous period which was 4.81 million 60-kg bags. Coffee consumption in Indonesia in 2020/2021 was also the highest in the last decade.

Based on the market share data of non-green coffee shops in Indonesia from 2020 to 2023, it can be seen that some brands experienced stable growth, while others experienced a slight decline. Lain Hati showed an increase from 31.7% in 2020 to 32.2% in 2023, while Janji Jiwa also experienced an increase from 28.3% to 30.7% in the same period. On the other hand, Kenangan experienced a decline in market share from 32.6% in 2020 to 29.7% in 2023. Meanwhile, Point Coffee has a smaller market share compared to other brands, with figures fluctuating between 7% and 9%. This data shows that non-green coffee shops still dominate the

market with quite tight competition. Changes in market share figures reflect the dynamics of consumer preferences that continue to develop, where marketing strategies, product innovation, and customer loyalty are the main factors in maintaining and improving positions in the increasingly competitive coffee industry.

The rise of eco-friendly coffee shops has accelerated in recent years, with Starbucks maintaining its lead despite a market share decline from 51.9% in 2020 to 47.3% in 2023. Meanwhile, Fore Coffee and Kopi Nako grew steadily, both reaching 21.2%, while Anomali Coffee remained stable at around 10% (Wahyudi et al., 2023). This trend highlights increasing consumer preference for sustainability.Anomali Coffee exemplifies Green Marketing by minimizing environmental impact and promoting sustainability. Through the #NgopiMembumi initiative, it has shifted to plastic-free, recyclable, and compostable packaging, replacing styrofoam with eco-friendly alternatives like Foopak from PT Indah Kiat Pulp & Paper Tbk. (Fitriani et al., 2021).

The revenue data for Anomali Coffee Kemang shows the highest earnings in January and December, reaching Rp160,000,000.00, likely due to increased spending during the holiday season. Conversely, the lowest revenue was recorded in July at Rp100,000,000.00, possibly influenced by rising green awareness and the market's adaptation to sustainable products. Monthly revenue fluctuates between Rp110,000,000.00 and Rp150,000,000.00, impacted by market demand, competition, and local events. Further research is needed to optimize green marketing strategies for revenue growth.

Several studies highlight factors affecting purchasing decisions. Wahyudi et al. (2023) and Maulidia & Putri (2023) found that green marketing and brand image significantly influence consumer choices. Similarly, Utomo & Dwiyanto (2022) and Sionika et al. (2023) confirmed the positive impact of green awareness and eco-friendly products. Apriliani & Aqmala (2021) and Lestari (2020) emphasized the role of environmental concern, green knowledge, and brand perception. Amrullah (2022) also noted the importance of green product innovation and advertising. These findings underscore the multifaceted nature of purchasing decisions, where various green marketing factors, consumer awareness, and brand perception collectively shape consumer preferences. Understanding these influences is crucial for businesses aiming to enhance their sustainability strategies and appeal to environmentally conscious consumers.

LITERATURE REVIEW

Consumer Behavior
Hakim et al. (2022) define consumer behavior as the decision-making process individuals or groups undergo when selecting, purchasing, using, or disposing of products to fulfill their needs. Kotler and Armstrong (2018) describe it as the buying behavior of individuals and households for personal consumption, influenced by cultural, social, personal, and psychological factors. Understanding these aspects helps businesses tailor marketing strategies effectively.

Purchase Decision
A purchasing decision occurs when consumers choose a product based on quality, value, and brand recognition (Apriliani & Aqmala, 2021). Kotler and Keller (2016) outline the decision-making process, including evaluating alternatives before selecting a preferred brand.

Companies must identify consumer needs to develop effective marketing strategies (Leksono, 2021).

Green Marketing

Green marketing focuses on producing eco-friendly products that benefit both businesses and communities (Rosyada & Dwijayanti, 2023). It enhances brand image and consumer trust but faces challenges due to varying environmental awareness (Ginting et al., 2023). According to Kotler & Keller (2016), the green marketing mix (product, price, promotion, place) integrates environmental sustainability, distinguishing it from conventional marketing.

Green Awareness

Apriliani & Aqmala (2021) describe green awareness as societal efforts to preserve the environment, influenced by norms emphasizing human responsibility as stewards of nature. Lestari et al. (2021) highlight its role in shaping eco-conscious behavior, such as preferring sustainable products and adopting environmentally friendly lifestyles.

Green product Innovation

Green products minimize environmental harm, conserve resources, and avoid unethical practices (Fatimah & Chrismardani, 2022). Product innovation enhances value and competitiveness by integrating eco-friendly features (Syahra, 2021). Asriah et al. (2023) note that sustainable innovation mitigates regulatory risks while creating new market opportunities.

METHOD

This study employs a causal analysis with a quantitative approach to examine the impact of green marketing (X1), green awareness (X2), and green product innovation (X3) on purchase decisions (Y) for Foopak Bio Natura products at Anomali Coffee. Conducted at Anomali Coffee Kemang, South Jakarta, data collection spans June 2024 to January 2025.The population includes DKI Jakarta residents aware of Anomali Coffee's eco-friendly initiatives, with a purposive sampling method selecting 200 respondents based on Hair et al. (2021). A structured questionnaire using a Likert scale gathers data, analyzed via Partial Least Squares (PLS) SEM using SmartPLS 3.0. This method evaluates measurement (outer model) and structural models (inner model) while handling small samples, missing data, and multicollinearity (Ghozali, 2021).

RESULTS AND DISCUSSION

The SEM-PLS method assesses relationships between latent variables (Ghozali, 2021) through two models: the measurement model (outer model) and the structural model (inner model). The outer model evaluates indicator relationships using AVE for convergent validity, while discriminant validity is tested with cross-loading, Fornell-Larcker, and HTMT. Reliability is assessed using Cronbach's alpha and composite reliability. Loading factor values, calculated using PLS, should ideally be ≥ 0.7 for validity (Sugiyono, 2020), though values ≥ 0.5 are acceptable, with some experts tolerating 0.4. Indicators below 0.4 must be removed. The results of the convergent validity test for Green Marketing, Green Awareness, Green Product Innovation, and Purchase Decisions are presented below.

Table 1. Loading Factor Result

Variable	Indicator	Outer Loading	Information
Green Marketing	GM1	0.766	Pass the Test
	GM2	0.852	Pass the Test
	GM3	0.771	Pass the Test
	GM4	0.781	Pass the Test
	GM5	0.766	Pass the Test
	GM6	0.731	Pass the Test
	GM7	0.767	Pass the Test
	GM8	0.784	Pass the Test
Green Awareness	GA2	0.410	Pass the Test
	GA3	0.573	Pass the Test
	GA4	0.619	Pass the Test
	GA5	0.633	Pass the Test
	GA6	0.618	Pass the Test
	GA7	0.729	Pass the Test
	GA8	0.775	Pass the Test
	GA9	0.752	Pass the Test
	GA10	0.742	Pass the Test
Green Product Innovation	GPI1	0.768	Pass the Test
	GPI2	0.817	Pass the Test
	GPI3	0.756	Pass the Test
	GPI4	0.762	Pass the Test
	GPI5	0.797	Pass the Test
	GPI6	0.851	Pass the Test
	GPI7	0.854	Pass the Test
	GPI8	0.745	Pass the Test
Purchase Decision	KP1	0.742	Pass the Test
	KP2	0.736	Pass the Test
	KP7	0.445	Pass the Test
	KP8	0.641	Pass the Test
	KP9	0.592	Pass the Test
	KP10	0.432	Pass the Test

The results of the Loading Factor test in Figure 9 and Table 2 show that all indicators have met convergent validity because they have a loading factor value ≥ 0.4.

Convergent validity is related to the principle that the measuring indicators (manifest variables) of a construct should be highly correlated (Ghozali, 2021). According to Ghozali (2021), the rule of thumb commonly used to assess convergent validity is that the average variance extracted (AVE) value must be greater than 0.50.

Table 2. Average Variance Extracted (AVE)

Variable	Average Variance Extracted (AVE)	Information
Green Marketing	0.605	Valid
Green Awareness	0.510	Valid
Grenn Product Innovation	0.632	Valid
Purchase Decision	0.580	Valid

Based on the table above, it can be concluded that the Green Marketing variable and the Green Product Innovation, Green Awareness and Purchasing Decision variables all have AVE values above 0.5, so the variable values have good convergent validity.

Discriminant validity test uses the Fornell-Larcker Criterion value. If the square root value of AVE for each construct is greater than the correlation value between constructs with other constructs in the model, then the model is said to be good. The following are the results of the Fornell-Larcker Criterion test:

Table 3. Fornell Lacker Criterium

Variable	Green Marketing	Green Awareness	Green Product Innovation	Purchase Decisions
Green Marketing	0.778			
Green Awareness	0.610	0.708		
Green Product Innovation	0.785	0.611	0.795	
Purchase Decisions	0.646	0.559	0.616	0.762

Based on the table above, all the roots of the AVE (Fornell Larcker Criterion) of each construct are greater than their correlation with other variables so that they are declared valid, but the correlation value of green product innovation is slightly better with green marketing. The next discriminant validity test is to use the Heterotrait-Monotrait Ratio (HTMT) value, the purpose of assessing discriminant validity is to verify that a reflective construct shows a stronger relationship with its own indicators compared to the relationship of other constructs in the model. If the HTMT value is <0.9, it has good discriminant validity (Hair et al., 2021). The following are the results of the Heterotrait-Monotrait Ratio (HTMT) test:

Table 4. Heterotrait-Monotrait Ratio

	Green Marketing	Green Awareness	Grenn Product Innovation	Purchase Decision
Green Marketing				
Green Awareness	0.649			
Grenn Product Innovation	0.856	0.672		
Purchase Decision	0.787	0.819	0.759	

Based on the table above, the value of each relationship with other constructs in the model is below 0.9, so the Heterotrait-Monotrait Ratio value has good discriminant validity.

Reliability testing is carried out using a composite reliability test aimed at testing the reliability of instruments in a research model. The construct is stated to have good reliability or the questionnaire used as a research tool is consistent, if in all variables the composite reliability

value and Cronbach alpha ≥ 0.7 all constructs can be said to be reliable (Hair et al., 2021). In this study, the results of the composite reliability test showed the following output:

Table 5. Composite Reliability & Cronbach's Alpha

Variable	Composite Reliability	Cronbach's Alpha	Information
Green Marketing	0.924	0.906	Reliable
Green Awareness	0.874	0.832	Reliable
Grenn Innovation Product	0.932	0.916	Reliable
Keputusan Pembelian	0.805	0.736	Reliable

The composite reliability and Cronbach's alpha values for all latent variables exceed 0.70, confirming measurement consistency. This indicates that all indicators meet reliability standards, making the tested variables suitable for further analysis.Inner model testing examines the relationship between exogenous and endogenous variables based on the conceptual framework. The R-Square value assesses model fit, with values categorized as weak (0.25–0.50), moderate (0.51–0.75), or strong (>0.75). A higher R-Square indicates better explanatory power in the PLS model.

Table 6. R Square

Variabel	R Square	R Square Adjusted
Keputusan Pembelian	0.515	0.508

The R-square value for the purchasing decision variable is 0.515, indicating a moderate effect. This means 51.5% of purchasing decisions are influenced by green marketing, green awareness, and green product innovation, while the remaining 48.5% is explained by other factors. The effect size test (f^2) measures the impact of exogenous variables on endogenous variables by assessing R^2 changes (Hair et al., 2017). Effect sizes are categorized as large (≥0.35), moderate (0.15–0.34), small (0.02–0.14), and negligible (<0.02).

Tabel 7. F-Square

Variable	Green Marketing	Green Awareness	Green Product Innovation	Purchase Decision
Green Marketing				0.083
Green Awareness				0.053
Green Product Innovation				0.030
Purchase Decision				

The f^2 values indicate that Green Marketing (0.083), Green Awareness (0.053), and Green Product Innovation (0.030) all have a low impact on Purchase Decision. Despite their

significance, their structural influence remains minimal.Cross-validated redundancy (Q^2) assesses the model's predictive relevance. According to Hair et al. (2021), a Q^2 value above 0 confirms predictive relevance. A Q^2 between 0.02 and 0.15 indicates small predictive power, while 0.15 to 0.35 signifies medium predictive power.

Table 8. Q Square

Variable	Q-Square or Q^2
Keputusan Pembelian	0.179

The model has medium predictive relevance and is suitable for further analysis. To test the relationships between exogenous and endogenous variables, the hypothesis is evaluated using the path coefficient, T-Statistic, and p-value through bootstrapping. Hair et al. (2021) recommend the Bias-Corrected and Accelerated (BCa) Bootstrap method to assess path coefficient significance. Alternatively, a p-value < 0.05 confirms significance. Path coefficients range from -1 to +1, where values near +1 indicate a strong positive relationship, and -1 represents a strong negative relationship. A hypothesis is accepted if the T-Statistic is ≥ 1.96.

Table 9. Hypothesis Test

Relationship between Variables	Original Sample	Std Deviation	T-Statistics	P-Values	Result
Green Marketing -> Purchase Decision	0.348	0,095	3.681	0.000	Positive and Significant
Green Awareness -> Purchase Decision	0.218	0,067	3.262	0.001	Positive and Significant
Green Product Innovation -> Purchase Decision	0.210	0,082	2.561	0.011	Positive and Significant

Hypothesis testing results indicate that Green Marketing, Green Awareness, and Green Product Innovation positively and significantly influence purchase decisions at Anomali Coffee. For Green Marketing (H1), the T-statistic is 3.681, the original sample value is 0.348, and the P-value is 0.000, confirming a significant positive impact. This aligns with studies by Maulidia et al. (2023), Rosyada & Dwijayanti (2023), and Wahyudi et al. (2023), which also found Green Marketing enhances purchase decisions.

Green Awareness (H2) shows a T-statistic of 3.262, an original sample value of 0.218, and a P-value of 0.001, supporting its positive and significant influence. These findings are consistent with Lestari (2020), Sionika et al. (2023), and Iswanti et al. (2022), who reported similar results. Green Product Innovation (H3) has a T-statistic of 2.561, an original sample value of 0.210, and a P-value of 0.011, confirming its significant effect on purchase decisions. This supports research by Putri et al. (2023), Amrullah (2022), and Novitasari et al. (2021), highlighting the role of eco-friendly innovations in consumer choices.

CONCLUSION

The findings confirm that Green Marketing, Green Awareness, and Green Product Innovation significantly and positively influence purchase decisions at Anomali Coffee. Effective Green Marketing enhances consumer preference through eco-focused promotions, while strong Green Awareness encourages consumers to choose environmentally responsible products. Additionally, innovative green products increase consumer interest and drive purchases. Practically, coffee shops should integrate sustainability into operations, from sourcing to eco-friendly packaging. Strengthening sustainability campaigns and continuous innovation, such as biodegradable packaging and efficient production, can boost customer loyalty and brand image. Theoretically, this study reinforces sustainable marketing theories by highlighting consumer preference for eco-conscious products. Future research could explore mediating factors like brand trust or perceived value to further refine green marketing strategies in the F&B industry.

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