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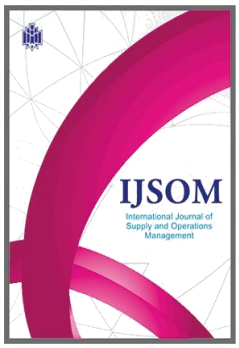

Bottled Water Purchase Decisions: A Study of Brand Image as a Green Marketing Medium in Purchase Decisions

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Abstract

This study aims to examine the direct influence of green marketing on the purchase choices of packaged drinking water (AMDK). Furthermore, the study seeks to analyze the immediate effect of green marketing on the brand image of bottled water goods as well as the direct correlation between brand image and consumers' purchase choices of bottled water products. The study seeks to examine the indirect impact of green marketing on brand image-mediated purchase choices for bottled drinking water products. The influence of green marketing on the consumer's choice to purchase bottled drinking water (AMDK) is both direct and indirect, with the brand image serving as a mediating factor. The present study employs a quantitative/positivistic research approach, which is grounded in the belief that symptoms can be categorized and that their relationships can be understood in terms of cause and effect. Consequently, researchers may effectively investigate the phenomenon by concentrating on a limited number of factors. The research shows green marketing has a positive and significant effect on brand image, green marketing has a positive and significant effect on buyer satisfaction, and brand image has a positive and significant effect on buyer satisfaction. The perception of a firm plays a crucial role in influencing purchasing decisions through green marketing. When a company uses good green marketing, it will not only affect people's decisions to buy, but it will also affect how people think of the brand, which will have an indirect effect on people's decisions to buy. This study investigates how green marketing theory and brand image affect customers' bottled drinking water (AMDK) purchases, which is important for theoretical understanding. This guideline helps AMDK producers embrace green marketing methods to maintain their product brand image. The value of the study lies in the research object, namely bottled drinking water products, especially those that have implemented environmentally friendly products and green marketing as their marketing strategy. Brand image is placed as a mediating variable, which is also a novelty of research, especially for environmentally friendly product brands.

Keywords: Green Marketing; Brand Image; Keputusa Pembelian; Air Minum Dalam Kemasan (AMDK).

1. Introduction

Plastic waste contributes to the largest type of waste in the environment (Yahya, 2022). The basic material for making plastic is petroleum, so it takes a long time to completely decompose, which is around 1000 years, while plastic bag waste takes 10-1000 years and plastic bottles of Bottled Drinking Water (AMDK) can decompose naturally within 450 years. Based on data from the National Waste Management Information System (SIPSN) for 2022, in Central Java plastic waste contributes 18.63% of all types of waste, presented in the following figure.

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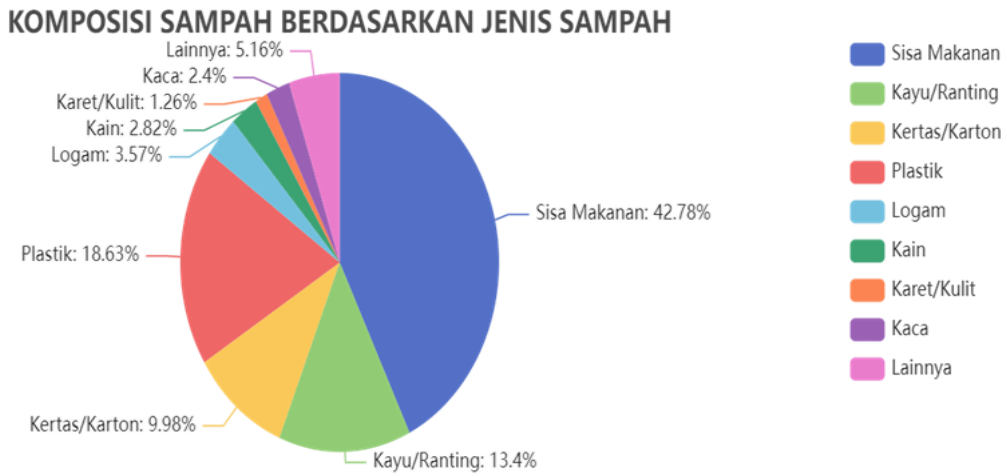

Figure 1. Waste Composition Based on Waste Type
Source :https://sipsn.menlhk.go.id/sipsn/public/data/komsisi

There are several causes of plastic bottle waste which is quite high, one of which is the demand for bottled water which continues to increase every year. There are various brands of AMDK marketed in supermarkets. Based on the results of the Opinion Poll aka JakPat survey, Aqua is the most preferred mineral water brand in Indonesia. Aqua drink brand is preferred by 74.9% of respondents. Le Minerale is ranked as the second most favorite mineral water brand in the country with a percentage of 62.1%. Next, Nestle and Vit are in third and fourth place. The two products have a respective percentage of 23.6% and 21.6%. Then, Crystalline and Cleo have percentages of 17.3% and 17.2%, respectively. Meanwhile, Ades was ranked lowest with a percentage of 15.3%. This survey was conducted through the JakPat application on September 26, 2022. There was 1.

Merek Air Mineral dalam Kemasan Botol Paling Disukai di Indonesia (2022)

databoks

No	Nama	Nilai / %
1	Aqua	74,9
2	Le Minerale	62,1
3	Nestle	23,6
4	Vit	21,6
5	Crystalline	17,3
6	Cleo	17,2
7	Ades	15,3

Figure 2. Most Preferred AMDK Brands in Indonesia in 2022
Source :https://databoks.katadata.co.id/datapublish/2022/12/01/

The high consumption of AMDK by the community is not accompanied by a recycling management process by companies, causing a lot of AMDK bottle waste in the environment (Islam, 2018). As a result of plastic waste that has accumulated, people end up burning the plastic and causing environmental damage. Data from BPS (2022) regarding household consumers' actions regarding the waste produced is that 66.8% of waste is burned and only 1.2% of waste is recycled. The growing public knowledge about environmental issues and readiness to accept environmentally friendly products requires the implementation of new marketing techniques by companies. Green Marketing is an

approach for marketers to incorporate environmental issues into their marketing strategy. Green marketing is the process of developing a product marketing mix that is environmentally friendly by utilizing consumer knowledge about environmental issues and reducing the negative effects of a product (Stevanie, 2015; Wang et al., 2022; Nguyen-Viet, 2023). Currently, many bottled water products have implemented the green concept, namely the concept of thin disposable packaging bottles that are easy to squeeze and can be recycled (L. Chen et al., 2021). Several bottled water companies have incorporated green marketing into their product lines. For example, in 2018 Aqua introduced the first environmentally friendly bottled drinking water product in Indonesia which uses 100% recycled plastic raw materials and can be recycled again. Aqualife has received FSSC 2000 certification, which means that plastic bottles that have been repeated are safe for consumption.

The use of green marketing strategies enables the development of ecologically sustainable products, thereby yielding many advantages. One such advantage is the fulfilment of customer demands for eco-friendly products, which significantly impacts their purchasing behaviour (Nekmahmud & Fekete-Farkas, 2020; (Widyastuti et al., 2019). Previous research has shown that green marketing can influence purchasing decisions (Szabo & Webster, 2021) and is in accordance with Widodo, (2020) which shows that green marketing has a considerable impact on purchasing decisions.

Increasing the brand image of a company is one of the goals of marketing strategy (Olson et al., 2021). Brand image is the most important thing for a company and is a priority for the company. Brand image is the way consumers perceive and perceive a particular brand based on other brands with the same products (Kim & Chao, 2019; Hien et al., 2020).

The incorporation of green marketing into a company's marketing plan has the potential to boost its brand image. The incorporation of the green marketing mix, comprising green goods, green pricing, green promotion, and green places, exerts a substantial influence on brand image (Gelderman et al., 2021; Nguyen-Viet, 2023). Another study draws the conclusion that green marketing can form a positive brand image for consumers in the midst of environmental problems carried out by companies (Tripathi & Sharma, 2023). There are studies which are similar studies and find that green marketing can improve brand image (Devi Juwaheer et al., 2012; Chalimatuz et al., 2017).

Researchers are interested in conducting this research, many bottled water products have an environmentally friendly concept and are easy to obtain at the nearest retail store or online store. This research has problem limitations which aim to focus on the main problem that you want to research so that it is more focused in the discussion. The study's weaknesses arise from its limited scope (Akanle et al., 2020). Young consumers aged 18-24 years are the limit in this study. The main reason young consumers are the sample for this research is because young consumers are aware of consuming environmentally friendly products and young consumers can influence the surrounding environment to consume environmentally friendly products.

This research provides a distinctive viewpoint on the dynamics of the bottled water business in Indonesia by integrating marketing theory, customer behavior, and environmental sustainability. This article aims to provide industry stakeholders with clear knowledge of the significance of incorporating environmental factors into marketing strategies. Additionally, it serves as a valuable contribution to the existing body of literature on green marketing research for academics.

2. Literature Reviews

Green marketing has become a vital strategy in the business industry, particularly in the bottled water sector, due to the current period of globalization and heightened environmental consciousness. This article analyzes the impact of a brand's green marketing-focused image on customer buying choices. The research was motivated by a growing trend where buyers take into account not just the product's quality but also the environmental value associated with the brand.

The bottled water sector in Indonesia is confronted with the task of not only competing in terms of quality and price but also establishing an ecologically conscious brand image in accordance with worldwide patterns. Hence, the objective of this study is to ascertain the degree to which a brand's environmentally conscious image might impact the choices made by Indonesian customers when purchasing bottled water.

Take care of the environment, everyone knows that their products are safe for the environment, so that people can identify and decide to buy a product. Purchasing decisions are a major step in the buyer's decision-making process

when consumers buy an item or service (H. Ali et al., 2021). The decision to buy is a decision because of someone's interest in a product and wants to buy, try, use, or own the product under (Nurhayati & Hendar, 2020).
The purchasing decision is a pivotal stage within the decision-making process when customers engage in the acquisition of items manufactured by a certain firm. Decision making is generally a process of choosing a product among the various options available (Panwar et al., 2019). Decisions are individual activities that directly contribute to the identification of what items to buy and use. Compared to this, the company needs to know why and how consumers accept it decide to buy a product so that the company can design a marketing strategy that is in accordance with the wishes of consumers in terms of increasing sales (Mahraz et al., 2022). The marketing strategy that prioritizes environmental conditions and preservation is green marketing. Green marketing is a strategic planning process within the marketing mix that capitalises on heightened consumer consciousness regarding environmentally friendly products or services. This is achieved through the modification of products, production methods, and packaging to align with environmental sustainability, thereby addressing consumer demands and mitigating adverse environmental effects. Additionally, green marketing endeavours to encourage consumers to adopt more environmentally conscious behaviours. It is important to direct one's focus towards the surroundings (Stevanie, 2015). Product marketing strategies are aimed at improving the company's brand image (Mahraz et al., 2022). Theo (Kotler et al., 2021) The concept of branding refers to the practice of creating and establishing a unique and recognisable identity for Ensuring this matter receives the utmost attention is a crucial concern for all enterprises. The implementation of manufacturing and packaging techniques that prioritise environmental sustainability is crucial in order to satisfy customer demands, minimise detrimental effects on the environment, and encourage consumers to adopt a more environmentally conscious mindset (Stevanie, 2015). The product marketing strategy is aimed at enhancing the company's brand image. Theo (Brennan et al., 2020) The concept of branding refers to the practice of creating a unique and identifiable image or identity for Ensuring this matter is of utmost importance for all businesses The implementation of manufacturing and packaging techniques that prioritise environmental sustainability is crucial in order to satisfy consumer demands, minimise detrimental effects on the environment, and encourage customers to prioritise environmental concerns (Stevanie, 2015). Product marketing strategies are aimed at improving the company's brand image. Theo (Boisen et al., 2018) Branding This is an important priority for every business.
Brand image is formed by the evaluation and impression of consumers regarding a certain brand, which is influenced by their evaluations and comparisons with other brands within the same product category (Chakraborty & Bhat, 2018). Consumers will use the brand image as a reference before deciding to buy a product. Brand image is the result of a consumer's point of view or perception of a particular brand, based on reviews and comparisons with several other brands, the same product category. Consumers will take the brand image as a reference before making a decision to buy a product (Y.-S. Chen et al., 2020).
Brand image is used to educate potential customers and attract customers who have never used (Putri & Yasa, 2022). The concept of "brand" A favourable brand image is likely to exert a stronger influence on customers, whereas a negative brand image is unlikely to have a direct impact on consumers and may result in their indifference towards making purchases.

3. Data And Methodology

The present study employs a quantitative/positivistic research approach, which is characterised by its reliance on quantitative data and positivist assumptions. Specifically, the quantitative research paradigm assumes that symptoms can be categorised and that there exists a causal link between these symptoms (cause and effect), so researchers can conduct research by focusing on just a few variables (Amirullah, 2015; Sugiyono, 2017ª; Priatna et al., 2023). The pattern of relationship between the variables to be studied is hereinafter referred to as the research paradigm or research model. Quantitative research is research that focuses on the measurement and analysis of causal relationships for each variable (Sugiyono, 2017b).

In the process of collecting data, researchers focused on consumers or buyers of drinking water in Central Java. The methodology employed for data collection involves the dissemination of questionnaires. The population under investigation is considered to be limitless, while the precise number of users of bottled drinking water in Central Java remains unknown to researchers. The number of samples in this study was determined based on the opinion of Hair (Hair et al., 2010) It was determined that the optimal sample size was within the range of 100 to 200. Additionally, it was elucidated that a minimum of five observations was required for each estimated parameter, while a maximum of

ten observations was permissible for each estimated parameter (Ferdinand, 2020). The research questionnaire in this study consisted of 30 questions, resulting in a sample size of 300 responses, which is ten times the number of questions. Thus the sample size of 300 people, namely young consumers aged 18-24 years in the Central Java region, is a limitation in this study. The main reason young consumers are the sample of this study is because young consumers are aware of consuming environmentally friendly products and young consumers can influence their surroundings to consume environmentally friendly products. The sampling technique is purposive sampling, which is a form of non-probability sampling where the data collection procedure takes into account certain factors (Sugiyono., 2018; Sugiyono, 2017a). The following considerations were used in selecting the sample for this study:

a. Respondents are consumers who have purchased AMDK products at least once
b. Respondents are young consumers aged between 18-24 years.

The data analysis was conducted utilising the Partial Least Squares (PLS) approach with the aid of SmartPLS version 3 software. The Partial Least Squares (PLS) method is a preferred approach for addressing the challenges associated with structural equation modelling (SEM) in this particular context, exhibiting advantages over alternative SEM approaches. Partial Least Squares (PLS) is considered a robust analytical tool because of its low reliance on assumptions. The data is not required to follow a multivariate normal distribution, as indicators with categorical, ordinal, interval, and ratio scales can be included in the same model. Additionally, there is no requirement for the sample size to be large (H. I. Ghozali, 2006; I. Ghozali, 2017).

Validity testing is conducted on all question items pertaining to each variable. Multiple levels of testing will be conducted, namely convergent validity, average variance extracted (AVE), and discriminant validity tests. In order to assess the dependability of a variable, one may employ the concept of composite reliability. A variable can be deemed dependable if its composite reliability value is equal to or greater than 0.7 (Sekaran, 2007). Hypothesis testing employs structural equation modelling (SEM) analysis with the use of smartPLS. In the context of a comprehensive structural equation modelling framework, the primary objective is to validate the underlying theoretical constructs while concurrently elucidating the presence or absence of associations among latent variables (I. Ghozali, 2017). The hypothesis is evaluated by examining the computed value of the path coefficient in the inner model test.
A hypothesis is considered accepted when the calculated T value exceeds the critical T value of 1.96 at a significance level of 5%. This implies that if the calculated T value for each hypothesis is above the critical T value, the hypothesis can be deemed accepted or supported.

Research Model :

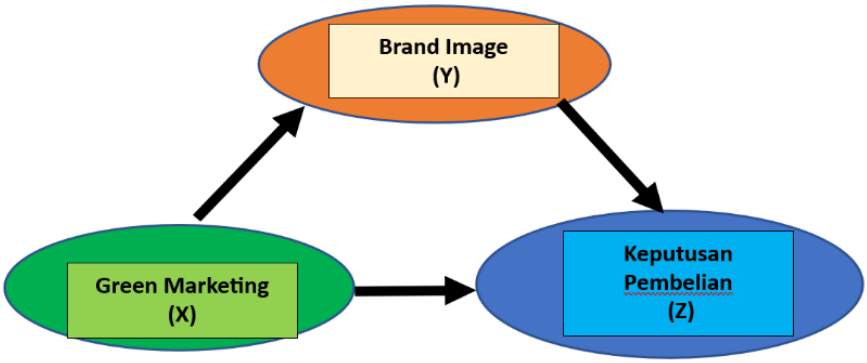

Figure 3. Research Model

4. Results And Discussion

Table 1. Characteristics of Respondents

No	Identity Variable	Classification	Number of people	Percentage (%)
1	Gender	Man	101	33.67
		Woman	199	66,33
	Amount		300	100
2	Age	18-20 Years	176	58,67
		21-24 Years	124	41.33
	Amount		300	100
3	Last education	SENIOR HIGH SCHOOL	107	36
		diploma three	100	33
		Bachelor	69	23
		Masters	24	8
	Amount		300	100
4	AMDK brands that are often consumed	AQUA	20	6.67
		CLEO	89	29,67
		ADES	77	25.67
		LE MINERALS	38	12.67
		PRISTINE	33	11
		NESTLE	25	8.33
		VIT	18	6
	Amount		300	100
5	Intensity of purchase of AMDK products	1 time	59	20
		2-5 times	111	37
		More than 5 times	139	46
	Amount		300	100

Source: Primary data processed, 2023

The study sample consisted primarily of female respondents, at 66.33% of the total, while male respondents accounted for 33.67% of the sample. The respondents selected were consumers in the age range 18 to 24 years and the distribution of respondents who filled in the data was for the 18-20 year age range there were 58.67% or 176 consumers and for the 21-24 range there were 124 consumers or 41.33%. This is in line with the most recent education of respondents who were dominated by respondents with high school education (36% or 107 people) and Diploma Three (33% or 100 people). Respondents with a Bachelor's degree were 69 people and only 8% or 24 had a Master's degree.
There are seven (7) brands of bottled drinking water (AMDK) consumed, including Aqua, Cleo, Ades, Le Mineral, Pristin, Nestle and Vit. Of the seven brands, the ones that are most widely and frequently consumed are the Cleo brands (89 consumers or 29.67%) and Ades with 77 respondents (25.67%). For other brands, the data distribution is as follows: Le Mineral was chosen by 38 people or 12.67%, Pristine was chosen by 33 people or 11%, Nestle was chosen by 25 people or 8.33%, Aqua was chosen by only 20 people or 6.67% and the least chosen was Vit by 18 people or 6%. Meanwhile, regarding purchasing intensity, the majority or a total of 139 people (46%) made repeat purchases more than 5 times.

4.1 Data Quality Test

a. Validity test

The validity test is used to determine whether a research questionnaire can be said to be valid or not (Ghozali & Latan, 2015).

The data presented in Table 2 represents the outcomes of the preliminary examination conducted to assess the accuracy and reliability of the data obtained from AMDK customers. This assessment was carried out using the SPSS version 25 software programme. The statistical test employed in this study is a bivariate Pearson two-tailed (two-way) test with a significance level of 5%. Consequently, the critical value for the correlation coefficient (r) in the table is 0.113. This choice is based on a pre-test sample size of 300, resulting in degrees of freedom (df) equal to 298 (calculated as 300 minus 2). All questions pertaining to the indicator variables for green marketing (X), brand image (Y), and

purchase decisions (Z) have values exceeding 0.361. It may be inferred that there exists a correlation among the indicator variables, suggesting their validity.

Table 2. Validity Test Results for Indicator Variable Questions

NO	Indicator Variables	N	RTable (N300=298) sig. 5% two tales	*Pearson Correlation* (t count)	Information
1	**GM1**	300	0.113	0.644	**VALID**
2	**GM2**	300	0.113	0.814	**VALID**
3	**GM3**	300	0.113	0.660	**VALID**
4	**GM4**	300	0.113	0.631	**VALID**
5	**KP1**	300	0.113	0.757	**VALID**
6	**KP2**	300	0.113	0.660	**VALID**
7	**KP3**	300	0.113	0.662	**VALID**
8	**KP4**	300	0.113	0.820	**VALID**
9	**KP5**	300	0.113	0.787	**VALID**
10	**KP6**	300	0.113	0.629	**VALID**
11	**BI1**	300	0.113	0.791	**VALID**
12	**BI2**	300	0.113	0.744	**VALID**
13	**BI3**	300	0.113	0.806	**VALID**

Source: Processed Primary Data, 2023

b. Reliability Test

Reliability testing is one way to measure how reliable the indicator variable questions are. Questions in a questionnaire can be said to be reliable if respondents answer consistently and stably from the beginning to the end of the question. Reliability testing is used to test the consistency of all respondents' answers to repeated questions.

Table 3. Variable Reliability Level

Variable	***Cronbach's Alpha***	***Number of Items***
GM	**0.624**	4
KP	**0.811**	6
BI	**0.678**	3

Source: Processed Primary Data, 2023

Based on table 3 of the reliability test results on 300 samples with 30 questions, the results obtained were GM = 0.624, KP = 0.811, and BI = 0.678. All 300 sample questions have a Cronbach's alpha value of more than 0.60, so it can be concluded that the data is reliable.

4.2 Data Analysis and Discussion

a. Structural Model Design (Inner Model)

Inner models are used as a methodological approach to examine the relationship of causation between latent variables that are not immediately observable. The construction of the structural model in this particular investigation is

grounded in the definition of the research problem and the underlying research hypothesis. The design of the inner model uses the SmartPLS application version 3.3.3 in Figure 1.

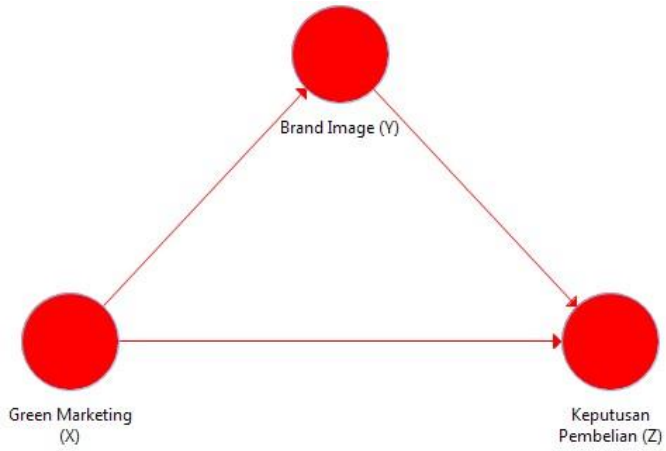

Figure 4. Structural Model Design (Inner Model)

b. Measuring Model Design (Outer Model)

*Outer model*aims to describe simple coefficients between indicator variables and latent variables. There are several ways to link indicator variables with their latent variables, namely reflective, formative, and MMIC (Multi Effect Indicators for Multiple Causes). In this research itself, formative construct variables are used for each construct variable. Formative relationships assume that each indicator variable forms a construct variable (Hair, et al, 2017). According to Chin (2010), in a formative relationship, every change in a construct variable results from a change in indicators. Figure 2 is the outer model design using the SmartPLS application version 3.3.3.

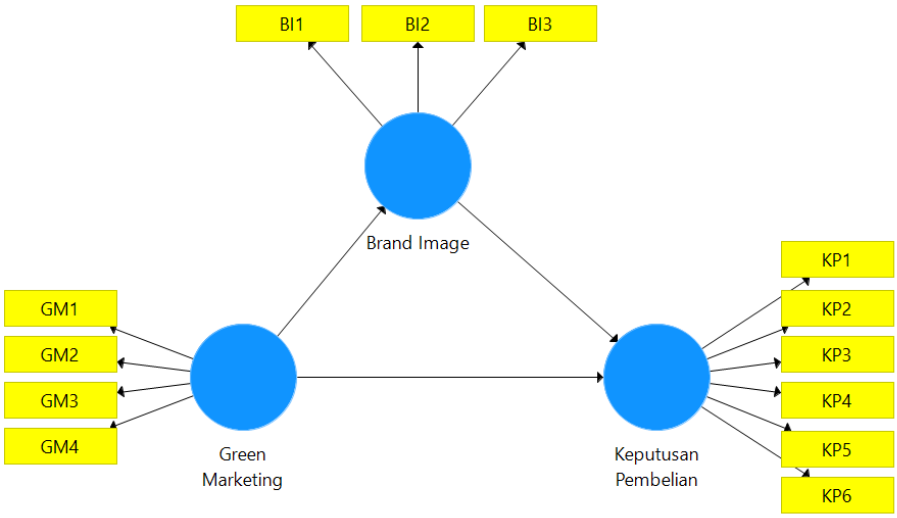

Figure 5. Design of the Measurement Model (Outer Model)

c. Estimation Model

The present study used outer loading values as a means to assess the association between indicators and latent variables. Hair et al. (2017) assert that an outer loading factor with a value beyond 0.7 is considered strong, indicating its ability to represent a construct variable. Conversely, an outer loading value below 0.4 is seen as too weak and hence should be eliminated from the indicator variable. In the context of composite reliability, it may be beneficial to examine the removal of outer loading values falling within the range of 0.4 to 0.7. This is particularly relevant when their elimination would result in an improvement in composite reliability, particularly if the average variance extracted (AVE) value surpasses the predetermined threshold (Hair, et al, 2017). Measurements were carried out using the SmartPLS application version 3.3.3. The following are the results of the PLS algorithm.

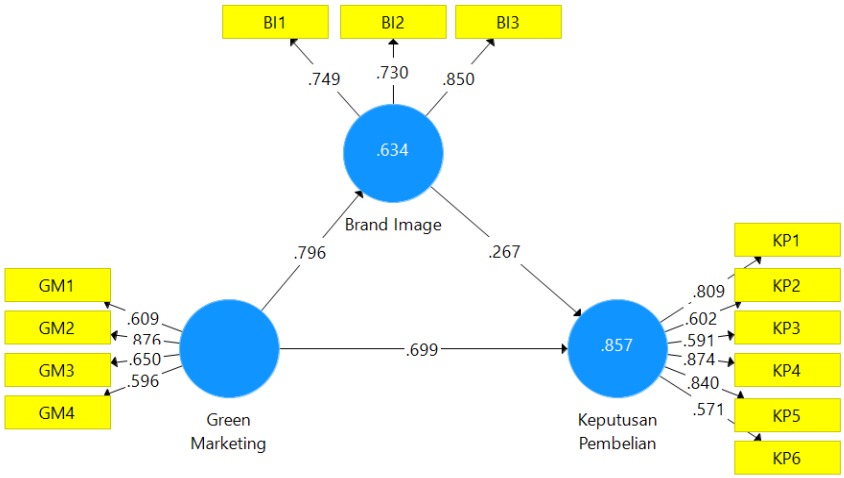

Figure 6. Model Estimation

d. Model Evaluation

1) Testing the Measurement Model (Outer Model)

According to Hair, et al (2017) The measuring model elucidates the association between indicators and latent variables. The outer model may be evaluated based on three key criteria, which include convergent validity, discriminant validity, and composite reliability.

a) Convergent Validity

*Convergent validity*is to measure the extent to which the positive correlation between indicators and latent variables. Hair, et al (2017) argue that to measure convergent validity in a reflective construct, outer loading and AVE values can be used. The following are the results of outer loading and AVE in this study.

The value of the outer loading data table 4 is in accordance with the opinion of Hair, et al (2017) which explains that an indicator variable with a loading factor value <0.4 must be removed, then a loading factor value > 0.7 is a strong value, so it must be maintained and the value between 0.4 and 0.7 can be considered to be maintained but must look at the composite reliability value and especially the AVE threshold value. AVE or Average Variance Extracted which is the average value of the square of the indicators associated with the construct. The AVE value can be said to be good if it fulfills the rule of thumbs > 0.5. The following is the AVE value of this study.

Table 4. Outer Loading

Indicator Variables	*Green Marketing* (X)	*Brand Image* (Y)	Decision Purchases (Z)
GM1	0.609		
GM2	0.876		
GM3	0.650		
GM4	0.596		
BI1		0.749	
BI2		0.730	
BI3		0.850	
KP1			0.809
KP2			0.602
KP3			0.591
KP4			0.874
KP5			0.840
KP6			0.571

Source: Results of 2023 Primary Data Processing

Table 5. Average Variance Extracted

Variable	AVE
Green marketing(X)	0.61
Brand image(Y)	0.51
Purchase Decision (Z)	0.53

Source: Results of 2023 Primary Data Processing

The AVE results can be seen in table 5 that the values of all variables are > 0.5. Thus, it can be concluded that the indicator variables represent construct variables.

b) Discriminant Validity

*Discriminant*Validity is an assessment of how far a construct truly represents that construct variable compared to other construct variables with empirical standards (Hair, et al, 2017). According to Hair, et al (2017) argue that there are several approaches to measuring the reflective discriminant validity model, namely Fornell-Larcker criterion, cross-loading, And *Heterotrait-Monotrait* (HTMT). The following are the calculation results*discriminant validity*in this research.

Table 6. Cross-Loading

	Green marketing	*Brand image*	Buying decision
GM1	0.61	0.42	0.56
GM2	0.88	0.76	0.87
GM3	0.65	0.53	0.49
GM4	0.60	0.42	0.52
BI1	0.49	0.75	0.56
BI2	0.55	0.73	0.50
BI3	0.77	0.85	0.81
KP1	0.67	0.70	0.81
KP2	0.54	0.40	0.60
KP3	0.49	0.44	0.59
KP4	0.88	0.76	0.87
KP5	0.71	0.75	0.84
KP6	0.60	0.43	0.57

Source: Results of 2023 Primary Data Processing

The initial method for evaluating the indicators of each build variable is by referring to the cross-loading value presented in Table 4.6. In order to ensure the validity of the measurement model, it is necessary for the outer model value linked to the indicator variable of each construct variable to surpass the other cross-loading values. The analysis of Table 4.13 reveals that the outer loading values of each indicator variable for the respective construct variable are higher than the cross-loading values. So, it can be said that the questions on the indicators represent their own construct variables compared to the cross-loading values on other indicator variables.

Table 7. Fornell-Larcker Criterion

Variable	***Brand Image***	***Green Marketing***	**Decision Purchase**
Brand Image	0.78		
Green Marketing	0.80	0.69	
Buying decision	0.82	0.91	0.93

Source: Results of 2023 Primary Data Processing

The Fornell-Larcker criteria is a commonly used method for evaluating discriminant validity in research studies. When you look at the correlation between the construct variables and compare it to the square root of the average variance extracted (AVE) value, you get the Fornell-Larcker criteria value. According to the Fornell-Larcker criterion, it is necessary for a construct variable to have a higher degree of variation compared to other construct variables. Table 7 displays the variance values for each construct variable, indicating that certain variables exhibit higher values compared to the others. The analysis shows that the discriminant validity criteria have been met, as shown by the squared average variance extracted (AVE) values, which are a good representation of the different concept variables.

c) Composite Reliability

Two approaches that may be employed to assess reliability in structural equation modelling—partial least squares (SEM-PLS)—are Cronbach's alpha and composite reliability. Cronbach's alpha is a measurement based on the intercorrelation of observed indicator variables. Meanwhile, composite reliability is a measurement of internal consistency reliability but does not assume all outer loadings are the same. According to Hair, et al, (2017) Cronbach's Alpha rule of thumb and composite reliability are > 0.70. The following are the results of Cronbach's alpha and composite reliability.

Table 8. Cronbach's Alpha and Composite Reliability

Variable	***Cronbach's Alpha***	***Composite Reliability***
Green Marketing	0.71	0.78
Brand Image	0.71	0.82
Buying decision	0.81	0.87

Source: Results of 2023 Primary Data Processing

Table 8 displays the Cronbach's alpha and composite reliability values, both of which are above the threshold of 0.70. Based on the adherence to the rule of thumb, it may be inferred that each variable has a satisfactory level of dependability. This finding demonstrates that the construct exhibits high levels of reliability, indicating that the questionnaire employed as a research instrument in this study is deemed to be trustworthy and consistent.

2) Structural Model Testing (Inner Model)

The objective of structural model testing is to forecast the association between latent variables (Ghozali & Latan, 2015). The inner model measurement has the following measurement indicators.

a) R Square

R Square aims to assess how much the latent variable affects other latent variables, the affected variable is an endogenous latent variable (Hair, et al, 2017). Criteria for R Square according to Ghozali & Latan (2015) If the R square value is 0.75 or strong, 0.50 is moderate, and 0.25 is weak. The following is the result of R square using the SmartPLS application version 3.3.3.

Table 9. R Square

Variable	R Square	Criteria
***Brand Image*(Y)**	0.63	Currently
Purchase Decision (Z)	0.86	Strong

Source: Results of 2023 Primary Data Processing

It can be seen from table 4.17 above that the R square results on the brand image variable (Y) 0.63, it can be concluded that the green marketing variable influences it moderately or 63% and the rest brand image is influenced by other factors. Purchasing decision variable (Z) is moderately influenced by green marketing (X) by 0.86 or 86% and the rest is influenced by other factors.

b) Q2 Predictive Relevance

The Q2 measurement aims to measure how strong an indicator can be as a predictive power of a model without a sample. Q2 calculations in SmartPLS can use blindfolding. The findings from the analysis of the green marketing variable indicate a predictive-relevance value of 0.37, which is larger than zero. This indicates that 37% of the variance in green marketing can be accounted for by the variables included, hence establishing the model as possessing significant predictive capability. The predictive-relevance value of the variability of purchase decisions is 0.44, indicating a significant relationship. This implies that 44% of the variance in purchasing decisions, the dependent variable, can be accounted for by the independent variables utilised in the model. Consequently, the model is considered to possess significant predictive capability.

Table 10. Predictive Relevance Q2 Test Results

	Q2 (=1-SSE/SSO)
***Green Marketing*(X)**	0.37
***Brand Image*(Y)**	0.00
Purchase Decision (Z)	0.44

Source: Results of 2023 Primary Data Processing

It can be seen from table 10 that the Q2 value of the variable is more than > 0.15, so it can be concluded that the green marketing variable (X) can be a medium predictive relevance for brand image variables (Y) and purchasing decisions (Z).

c) Hypothesis test

The current study looked at a hypothesis and tried to figure out how important it was to compare the p value to a known alpha value. P value is the smallest probability value from hypothesis testing so that the relationship between variables is still meaningful. Testing this hypothesis can be done with the SmartPLS application using the bootstrapping feature and viewing the results on the path coefficient. In bootstrapping a certain amount of data is taken randomly from the original sample to replace the original sample (Hair, et al, 2017). Hair, et al (2017) argue that the subsample in SEM-PLS calculations is 5,000 subsamples for better distribution.

Degrees of Freedom(df) hypothesis in SEM-PLS depends on the significance level value. In this study, researchers used an alpha value of 5% so that the allowed p value was <0.05. In the event that the p-value exceeds 0.05, the alternative hypothesis (Ha) is deemed acceptable, leading to the rejection of the null hypothesis (H0). If the p-value is

less than 0.05, it indicates that there is sufficient evidence to reject the alternative hypothesis (Ha) and accept the null hypothesis (H0). The subsequent findings shown above are the bootstrapping outcomes of this study.

Table 11. Hypothesis Testing Results

Variable Relationships	Original Sample (O)	T Statistics (O/STDEV)	P Value	Significance
green marketing(X)→ *brand image*(Y)	0.80	35.08	0.00	Positive and significant
green marketing(X)→ purchase decision (Z)	0.70	13.42	0.00	Positive and significant
brand image(Y)→ purchase decision (Z)	0.27	4.88	0.00	Positive and significant
green marketing(X)→ *brand image*(Y)→ purchase decision (Z)	0.21	4.58	0.00	Positive and significant

Source: Results of 2023 Primary Data Processing

Based on the research findings detailed in Table 4, a comprehensive discussion can be formulated to interpret and apply these results on a global scale.

Impact of Green Marketing on Brand Image: A strong T-statistic of 35.08 supports the study's first hypothesis, which emphasizes the impact of green marketing on brand image. This finding aligns with Anggraini & Syahrinullah, (2023) research, illustrating that eco-friendly marketing strategies are crucial for enhancing a company's image. In today's globalized world, where environmental concerns are at the forefront of consumer consciousness, this relationship becomes even more critical. Green marketing is no longer just an ethical choice; it has evolved into a strategic tool that can shape public perception and brand identity. The implication of this finding is far-reaching. Businesses across the globe, regardless of size or industry, can leverage green marketing initiatives to differentiate themselves in a crowded market. This differentiation is not only about gaining a competitive edge but also about aligning with the values of a growing demographic of environmentally conscious consumers. In doing so, companies not only contribute to a sustainable future but also build a strong, respected brand image that resonates with customers globally. This approach can lead to increased brand loyalty, higher customer retention rates, and potentially a more significant market share.

Green Marketing and Consumer Purchasing Behavior: The second hypothesis highlights the impact of green marketing on consumer satisfaction, with a T-statistic of 13.2. This finding suggests a direct connection between a company's environmental initiatives and consumer purchasing decisions, according to research from Nekmahmud & Fekete-Farkas, (2020) and Kisieliauskas & Jančaitis, (2022). In a global context, this means that businesses that invest in green marketing are likely to see a positive shift in consumer behavior towards their products or services. The era of consumers making purchasing decisions based solely on product features or price is evolving. Today, the environmental footprint of a product or the sustainability of a service plays a critical role in shaping consumer choices. This shift in consumer behavior offers a unique opportunity for companies to innovate and redesign their marketing strategies to focus more on sustainability (Durge et al., 2021). It's a call for businesses worldwide to not only 'go green' in their operations but also in their marketing messages. Such a strategy can lead to a stronger customer base, higher customer satisfaction, and, as a result, better business performance. Embracing green marketing can be a game-changer for businesses, especially in highly competitive markets, as it resonates with the growing global demand for responsible and sustainable business practices.

Brand Image and Customer Satisfaction: According to the study's third hypothesis, a T-statistic of 4.88 indicates a significant relationship between brand image and customer satisfaction. This is in line with the findings of Sutrasmawati, (2016) and (Wulandari & Iskandar, 2018). The global implications of this relationship are profound. In an age where brand image can be shaped not only by traditional advertising but also through digital platforms and social media, maintaining a positive brand image is more crucial than ever (Ebrahim, 2020). A strong brand image can transcend geographical boundaries, allowing companies to connect with customers on a global scale. It's about creating a narrative that resonates with customers, one that is consistent and reflective of the company's values and promises. This is particularly relevant in today's digital age, where information is readily available and consumers are more informed and discerning. A positive brand image can lead to enhanced customer loyalty, advocacy, and ultimately, a sustained increase in customer satisfaction (Le, 2022). Companies that understand and leverage this

relationship can create a loyal customer base that not only continues to purchase their products or services but also becomes ambassadors of the brand, spreading positive word-of-mouth and recommendations (Habib et al., 2021).
Mediating Role of Brand Image: The fourth hypothesis elucidates the mediating role of brand image in the relationship between green marketing and purchasing decisions. A T-statistic of 4.58. This finding is particularly crucial in understanding the dynamics of consumer behavior in the context of green marketing (Mehraj et al., 2023). It suggests that while green marketing initiatives directly impact consumer choices, their effectiveness is significantly amplified when they improve the brand image. This emphasizes the significance of ensuring that green marketing strategies are not only implemented but also effectively communicated to and perceived by the target audience for businesses operating on a global scale. A strong brand image acts as a bridge, enhancing the impact of green marketing efforts on consumer decisions (M. Ali, 2021). This mediating role of brand image is a powerful tool for companies looking to make their green initiatives more impactful. By focusing on building a positive brand image that aligns with environmental values, companies can create a ripple effect, where green marketing not only appeals to consumers' environmental consciousness but also reinforces their positive perception of the brand, leading to a stronger influence on their purchasing decisions. This approach can create a virtuous cycle where effective green marketing leads to a better brand image, which in turn further boosts the impact of green marketing initiatives.
This creates a role brand imagevery important in mediationgreen marketingon purchasing decisions. So, when implementinggreen marketingby the company, will not only directly influence purchasing decisions but, will influencebrand imagewhich, will have an indirect influence on consumers making purchases. The results of this hypothesis are in accordance with research conducted by Safrit, (2019); Leggen, (2023); and Agustina & Diharto, (2023) which state thatbrand imagehas a mediating rolegreen marketingand decisions indirectly positively and significantly

The research offers valuable insights into the role of green marketing in shaping brand image and influencing consumer behavior on a global scale. The findings suggest that in a world where consumers are increasingly aware and concerned about environmental issues, green marketing can be a key differentiator for brands. By integrating green marketing into their strategies, companies can not only enhance their brand image and customer satisfaction but also contribute positively to environmental conservation efforts, aligning themselves with the values of modern consumers and making a positive impact on the world.

5. Conclusion

The research findings can be summarized as follows: Implementing green marketing tactics has a positive and significant effect on how a company is perceived and its reputation. Green marketing tactics have been shown to have a significant and positive effect on customer purchasing behavior. The influence of brand image on customer buying decisions is both favorable and statistically significant. There is a statistically significant and positive indirect correlation between the implementation of green marketing (X) and customers' purchasing choices (Z), which is influenced by the perception of brand image (Y). Future research endeavors are expected to include more characteristics that may influence buying decision variables. A future study is anticipated to expand the research reach beyond users of bottled drinking water products in Central Java. This may involve changing research locations and maybe encompassing other areas.

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