

Effect Of Green Marketing And Brand Image On Purchase Decision Of Aqua Gallon With Customer Loyalty As A Mediating Variable

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ABSTRACT

This study aims to analyze the influence of brand image and green marketing on purchasing decisions for Aqua Galon products with consumer loyalty as a mediating variable. This study is an explanatory research type, sampling using nonprobability sampling techniques. Data were taken by distributing questionnaires directly to 100 respondents of consumers of AQUA gallon packaging products in Jabodetabek. Data were collected through a survey of Aqua consumers and analyzed using the Structural Equation Modeling (SEM) method. The results of the study indicate that brand image has a very significant and positive influence on purchasing decisions and consumer loyalty. Green marketing also has a significant effect on consumer loyalty, but its impact on purchasing decisions is relatively small compared to brand image. In addition, consumer loyalty does not have a significant effect on purchasing decisions and does not act as a mediating variable between brand image and purchasing decisions or between green marketing and purchasing decisions. These findings indicate that to improve purchasing decisions, companies need to focus more on improving brand image, while green marketing strategies can be used to build consumer loyalty. This conclusion provides important implications for companies in designing effective marketing strategies to strengthen brand positions in the market and increase consumer loyalty without expecting loyalty to directly drive purchasing decisions.

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INTRODUCTION

With the increasing awareness of environmental issues, green marketing has become a major focus for companies across various sectors, including the bottled water industry. Aqua, as one of the leading gallon water brands in Indonesia, has implemented various green marketing initiatives to attract environmentally-conscious consumers. According to Kotler and Keller (2016), green marketing focuses on developing environmentally-friendly products and business practices, which can, in turn, influence consumer purchase decisions (Kotler, 2016).

Aqua, in its business operations, focuses on carbon footprint reduction, including energy efficiency (resource efficiency), air resource management (processing material), investing in environmental restoration (investing in natural restoration), environmentally-

friendly and hygienic packaging innovation (eliminating waste), and environmental management through green audits (www.aqua.com). The company's efforts in producing green products made from natural, eco-friendly materials are aimed at creating a positive brand image, which can attract consumers who are concerned about product safety and environmental impact (Muqorrobin et al., 2017).

Brand image plays a crucial role in influencing purchase decisions. Aaker (2009) stated that brand image includes not only visual aspects but also consumer perceptions and attitudes toward the brand. In Aqua's case, a strong brand image as a high-quality and environmentally-friendly product can serve as a driver in the decision-making process. Research by Rachmawati & Andjarwati (2020) shows that brand awareness and image significantly influence purchase decisions. Kotler (2016) emphasizes that brands with a positive image tend to be more easily chosen by consumers. Previous research by Silvia (2014) has shown that green marketing can improve brand image, which, in turn, affects purchasing decisions. In this context, brand image functions as a mediating variable. This means that Aqua's green marketing not only directly affects purchase decisions but also influences them through its impact on brand image built in the consumer's mind.

Data from the Indonesian Bottled Water Association (ASPADIN) shows that Aqua continues to hold a dominant market share, controlling over 40% of the bottled water market in Indonesia. This indicates that Aqua has successfully maintained its position in a competitive market. However, to remain competitive, it is essential for Aqua to understand how their green marketing strategies are received by consumers and their impact on purchase decisions.

Research by Karlina & Setyorini (2018) found that green marketing had a significant positive effect on Innisfree's brand image, which in turn encouraged purchase decisions. This research emphasizes the importance of brand image in the context of green marketing, especially among consumers increasingly concerned with environmental issues. These findings are consistent with research by Saputra & Saggaff (2024), which found that a positive brand image can enhance consumer loyalty to green products. However, despite the numerous studies linking green marketing to purchase decisions, there remains a gap in understanding how brand image acts as a mediator in this relationship. Therefore, this study aims to further explore the effect of Aqua's green marketing on purchase decisions for gallon products, with brand image as a mediating variable.

In this study, a quantitative method will be used to collect data through surveys with Aqua consumers. The data will be analyzed to understand the relationships between green marketing, brand image, and purchase decisions. Previous research by Silvia (2014) shows that a positive brand image can strengthen the relationship between attitudes toward green products and purchase decisions. The importance of this study lies not only in its focus on Aqua but also in providing insights for other companies in the same industry to understand how green marketing can be leveraged to improve competitiveness. By understanding the effects of green marketing and the role of brand image, companies can develop more effective strategies to attract environmentally-conscious consumers. However, challenges remain in maintaining consumer loyalty and strengthening brand image. This study aims to analyze

how green marketing and brand image influence Aqua Gallon purchase decisions and examine the role of consumer loyalty as a mediator in this relationship. The study is expected to provide a deeper understanding of the effectiveness of green marketing strategies and the importance of brand image in shaping consumer behavior.

METHODS

This study uses an explanatory research design with a quantitative approach and path analysis. Explanatory research aims to test hypotheses that explain the causal relationships between the variables being studied. This research will explain how the interactive or reciprocal relationships between the variables being examined influence each other.

Since the population of AQUA consumers in the Greater Jakarta area is unknown, the sample size was calculated using the Lemeshow formula, which yielded a value of 96.4. Therefore, the minimum sample size required is 96 respondents, and to simplify, the researcher decided to round up the sample to 100 respondents. The questionnaire used in this study consists of several sections, including questions about perceptions of green marketing, brand image, and purchasing decisions for Aqua Gallon products.

RESULTS AND DISCUSSION

Evaluation of the measurement model indicators includes tests for individual item reliability, internal consistency or composite reliability, average variance extracted, and discriminant validity. The first three measurements are grouped under convergent validity.

Convergent validity consists of three tests: item reliability (validity of each indicator), composite reliability, and average variance extracted (AVE). Convergent validity is used to measure how well the existing indicators explain the dimension. This means that the higher the convergent validity, the greater the ability of that dimension to apply its latent variable.

Convergent validity is related to the principle that the indicators (manifest variables) of a construct should be highly correlated. Convergent validity is assessed based on the loading factor and the Average Variance Extracted (AVE) value. The rule of thumb used in testing convergent validity is that the loading factor should be > 0.5 , and the AVE value should be > 0.5 (Ghozali, Iman, 2020).

Table 1. Results of AVE (Average Variance Extracted)

Variable / Construct	AVE	Test Results
Green Marketing	0.547	Valid
Brand Image	0.571	Valid
Customer Loyalty	0.609	Valid
Purchase Decision	0.535	Valid

Source: Data processed using SmartPLS (2024)

Based on the table above, it is known that the AVE value for each variable is greater than 0.5. Therefore, it can be concluded that the variables or constructs used are valid.

Discriminant Validity

The evaluation of discriminant validity in the reflective measurement model is based on cross-loading and comparing the AVE values with the squared correlation between constructs. The cross-loading measure compares the correlation of an indicator with its construct and the construct from other blocks. A good discriminant validity will enable the indicators' variable to be explained more effectively than the variance of other construct indicators. Below are the discriminant validity values for each indicator.

Table 2. Discriminant Validity

Indicator	Green Marketing	Brand Image	Purchase Decision	Customer Loyalty
X1.1	0.654	0.522	0.523	0.476
X1.10	0.662	0.510	0.545	0.431
X1.2	0.813	0.738	0.738	0.686
X1.3	0.516	0.377	0.378	0.472
X1.4	0.807	0.664	0.731	0.660
X1.5	0.712	0.543	0.596	0.540
X1.6	0.842	0.613	0.671	0.623
X1.9	0.845	0.654	0.702	0.646
X2.1	0.718	0.894	0.868	0.736
X2.2	0.597	0.798	0.776	0.640
X2.3	0.722	0.817	0.810	0.663
X2.4	0.644	0.865	0.837	0.714
X2.5	-0.027	0.083	0.044	-0.017
Y1	0.663	0.867	0.861	0.736
Y2	0.569	0.602	0.693	0.772
Y3	0.736	0.891	0.886	0.747
Y4	0.582	0.797	0.764	0.637
Y5	0.666	0.547	0.646	0.462
Y6	0.666	0.547	0.646	0.462
Z1	0.568	0.631	0.615	0.731
Z2	0.514	0.579	0.599	0.749
Z3	0.499	0.587	0.671	0.774
Z4	0.628	0.712	0.713	0.739
Z5	0.779	0.683	0.746	0.869
Z6	0.652	0.650	0.707	0.865
Z8	0.055	0.113	0.076	0.048

Source: Data processed by SmartPLS (2024)

Based on the data presented in the table above, it can be observed that each indicator in the research variables has a higher cross-loading value with its respective variable compared to the cross-loading values with other variables. Based on the results obtained, it can be stated that the indicators used in this study possess good discriminant validity in constructing their respective variables.

Composite Reliability

The statistics used in composite reliability or construct reliability are Cronbach's alpha and D.G. rho (PCA). Cronbach's alpha measures the lower bound of a construct's reliability, while composite reliability measures the true reliability value of a construct. The rule of thumb for composite reliability is that it should be greater than 0.6, and Cronbach's alpha should also be greater than 0.6. With this measurement, if the value achieved is > 0.60, it can be stated that the construct has high reliability. The results of the reliability test using both methods can be seen in the table below:

Table 3. Reliability Test Results

Variable / Construct	Cronbach's Alpha	Composite Reliability	Test Result
(X1)	0.877	0.904	Reliable
(X2)	0.776	0.848	Reliable
(Z)	0.868	0.902	Reliable
(Y)	0.820	0.875	Reliable

Source: Data processed by SmartPLS (2024)

Based on the data presented in the reliability test table above, it can be seen that each research variable has a Cronbach's alpha and composite reliability value greater than 0.60. Based on these results, it can be stated that the variables used in this study are reliable.

F-Square is a measure used to assess the relative impact of an exogenous variable on an endogenous variable. The criterion for drawing conclusions is as follows: if the F^2 value is 0.02, there is a small (weak) effect from the exogenous variable to the endogenous variable; if the F^2 value is 0.15, there is a moderate (medium) effect; and if the F^2 value is 0.35, there is a large (strong) effect (Juliandi, 2018). Based on the data processing performed using SmartPLS 3.0, the F-Square values can be seen in the following figure and table.

Table 4. F-Square Table Analysis

	Brand Image	Green Marketing	Purchase Decision	Consumer Loyalty
Brand Image		13.084	0.380	
Green Marketing		0.052	0.156	
Purchase Decision				
Consumer Loyalty		0.004		

Source: Data processed using SmartPLS (2024)

Interpretation of F-Square Analysis:

1. Brand Image is the most dominant factor influencing Purchase Decision. Its effect is very large compared to other variables, indicating that a strong brand image can significantly encourage consumers to choose and purchase products more effectively.
2. Brand Image also has a significant effect on Consumer Loyalty, meaning that a positive image can help retain customers and keep them loyal to the product or brand.

3. Green Marketing has a small effect on Purchase Decision, suggesting that green marketing strategies are not highly significant in encouraging consumers to buy products. However, this strategy has a better impact on Consumer Loyalty, albeit on a small scale. This indicates that consumers may appreciate sustainability efforts, but this factor has not yet become the main driver of their purchasing decisions.
4. Consumer Loyalty has almost no significant effect on Purchase Decision, which suggests that loyalty alone is not strong enough to consistently drive repeat purchases from consumers.

Table 5. R-Square Analysis

	R Square	R Square Adjusted
Purchase Decision	0.982	0.981
Consumer Loyalty	0.710	0.704

Source: Data processed using SmartPLS (2024)

Interpretation of R-Square Results:

1. Purchase Decision has an R Square value of 0.982 and Adjusted R Square of 0.981. This indicates that 98.2% of the variation in Purchase Decision can be explained by the independent variables in the model (i.e., Brand Image and Green Marketing), with the remaining 1.8% influenced by factors outside the model. This suggests that the model is very strong in explaining the factors influencing purchase decisions.
2. Consumer Loyalty has an R Square value of 0.710 and Adjusted R Square of 0.704. This means that 71% of the variation in Consumer Loyalty can be explained by the variables in the model, with the remaining 29% influenced by external factors or other variables not included in the model. This value indicates that the model is fairly good at explaining Consumer Loyalty, although not as strong as in explaining Purchase Decision.

The high R Square value for Purchase Decision indicates that the independent variables in the model are highly relevant and significant in influencing consumer purchase decisions. Meanwhile, while the R Square value for Consumer Loyalty is good, there is still room to add additional variables if one seeks a more comprehensive understanding of the factors affecting consumer loyalty.

Hypothesis Testing

This test is conducted to determine the path coefficients of the structural model. The objective is to test the significance of all relationships or hypotheses. In this study, hypothesis testing is divided into direct effects and indirect effects. Based on data processing conducted using SmartPLS 3.0, the results of the direct and indirect effects hypothesis testing can be seen in the following path coefficient diagram:

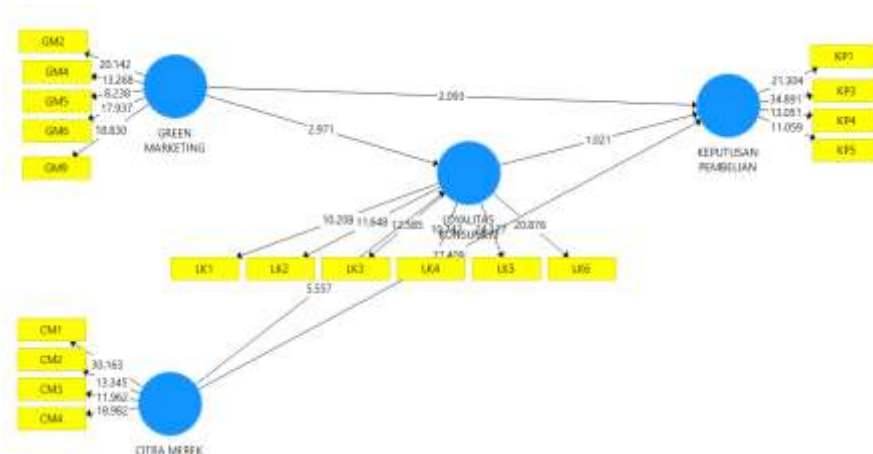


Figure 1. Hypothesis Testing

Direct Hypothesis Testing

The results of the direct effect hypothesis test can be seen in the following path coefficient table:

Path Coefficients
 Mean, STDEV, T-Values, P-Values

Table 6. Direct Hypothesis Testing

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Brand Image -> Purchase Decision	0,934	0,931	0,034	27,409	0,000
Brand Image -> Consumer Loyalty	0,541	0,537	0,097	5,557	0,000
Green Marketing -> Purchase Decision	0,054	0,058	0,026	2,093	0,037
Green Marketing -> Consumer Loyalty	0,347	0,349	0,117	2,971	0,003
Consumer Loyalty -> Purchase Decision	0,016	0,015	0,016	1,021	0,308

Based on the results of the hypothesis testing on the relationships between the variables, the following conclusions can be drawn:

1. Brand Image has a very strong and significant influence on both Purchase Decision and Consumer Loyalty. This indicates that a positive brand image is the main factor influencing both purchase decisions and customer loyalty.
2. Green Marketing has a significant influence on both Purchase Decision and Consumer Loyalty, but its impact is not as strong as Brand Image, especially in influencing purchase decisions.
3. Consumer Loyalty does not have a significant effect on Purchase Decision, suggesting that loyalty alone is not enough to drive consumers to purchase the product. This may

be because the influence of consumer loyalty is weaker in the context of Aqua Galon product purchase decisions.

Indirect Testing

The indirect effects between independent variables and dependent variables in this study can be summarized as follows:

Specific Indirect Effects

Mean, STDEV, T-Values, P-Values

Table 7. Indirect Testing

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Brand Image -> Customer Loyalty -> Purchase Decision	0,009	0,009	0,009	0,933	0,351
Green Marketing -> Customer Loyalty -> Purchase Decision	0,006	0,005	0,005	1,070	0,285

Based on the analysis of the table above, it can be concluded that customer loyalty does not mediate the relationship between brand image and purchase decision. This means that even though brand image may influence customer loyalty, its effect on the purchase decision is not mediated by customer loyalty.

Customer loyalty also does not mediate the relationship between green marketing and purchase decision. In other words, while green marketing may impact loyalty, customer loyalty does not play a significant role in influencing the purchase decision through this path. Overall, customer loyalty does not have a significant mediating role in this model to link brand image and green marketing with purchase decision.

CONCLUSION

The conclusion drawn from this study is that overall, brand image is the most influential factor in affecting purchase decisions, followed by green marketing which has a smaller impact. Customer loyalty does not play a significant role in driving purchase decisions, either directly or as a mediating variable. Therefore, to enhance purchase decisions, the main focus of the company should be on strengthening the brand image, while green marketing strategies can be used to build customer loyalty, although it does not serve as the primary driver in purchase decisions.

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