

How Green Marketing Orientation and Green Marketing Mix Helped Increasing Purchase Intention and Kept Customer Retention?

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Abstract. With companies that began launching green products or services considered to be environmentally safe, companies began to contribute to making a safer environment. However, consumers lack the knowledge of what makes them skeptical of these green products. This research aims to see the influence of green marketing orientation and green marketing mix in influencing purchase intention and customer retention. This research will be done by purposive sampling and uses cross-sectional form to gather respondents' data and acquired data will be then used to test each hypothesis regarding the influence of green marketing orientation and green marketing mix on purchase intention that would influence customer retention. The result of the research proves that Green Marketing Mix and Green Marketing orientation does indeed influence purchase intention and would also influence customer retention afterward. By using SEM PLS 3 it was determined that all the hypotheses were proven to be accurate. This research implied that Green Marketing Orientation and Green Marketing mix and marketing orientations influence purchase intentions as consumers have given information regarding what are the green elements in a green product. With one-time purchase intentions already made, customer retention would also be maintained or increased as purchase intentions helped to influence it.

Keywords: Green marketing Orientation, Green Marketing Mix, Purchase Intention, Customer Retention

INTRODUCTION

The environment has played a significant role in the lives of many people, including those considered living beings. For example, in urban areas such as New York or Toronto, metropolitan area trees help reduce pollution and heat in the regions (Kelbaugh, 2019; Rehan, 2016). The environment also provides natural resources that can be utilized and capitalized upon. The introduction of industry has enabled many individuals to capitalize on such environments and resources. In China, it is estimated that around 20.2 kg of fish and aquatic products, such as fish and kelps, were consumed per person in 2020 (Bu et al., 2024). Over the years of civilization, industry has played a significant role in providing the accommodations demanded by society. While the beginning of industrialization was necessary to achieve economic prosperity, it also resulted in population growth, the expansion of urban areas, and a clear strain on vital life-supporting systems, all while pushing environmental impacts closer to the limits of what is acceptable (Malik et al., 2023). However, with the rise and expansion of industrial revolutions, environmental harm began to increase as well.

The second half of the nineteenth century saw the earliest signs of declining water quality. Epidemics of disease and widespread illness were caused by the discharge of dangerous

chemicals into lakes, rivers, streams, and oceans. Waterways are vital to ecosystems because they support a wide variety of animal species and provide them with food. Many marine species died in these oceans as a result of exposure to oil spills and other pollutants (Malik et al., 2023). In 2023, Indonesia was ranked number 14 among cities with a highly polluted air quality index (IQAir, 2023). One of the factors contributing to this pollution is industrialization. Air pollution can cause health complications such as respiratory, cardiovascular, and pulmonary diseases, as well as cancer (WHO, 2024). Air pollution is one example of environmental harm that can cause diseases in people. Other environmental harms can lead to global catastrophes, such as plastic waste, water pollution, deforestation, and climate change. This is one of the reasons why there is growing demand for greener and safer products.

In China, around 2.5 billion tons of wastewater are produced yearly, coming from the fashion industries (Guo et al., 2020). Consumers have become aware of the environmental problems caused by the fashion industry and consequently demand products or services with smaller ecological impacts. Governments, environmental groups, and non-governmental organizations view mass production by businesses and mass consumption by society as the greatest hazards to future generations. Massive amounts of solid waste from hazardous leftovers are produced by industrial processes that deplete resources (Mehraj & Qureshi, 2020). Green products are those that have fewer impacts on the environment throughout manufacturing, use, and recycling (Ding & Wang, 2020). These products have attracted many consumers, and this impact has helped reduce the contributions of companies and ventures that pollute the environment. Customers now favor firms and products considered environmentally safe as awareness of environmental problems increases. However, some consumers also question the quality of products labeled as “green products.”

Consumers play a pivotal role in long-term sustainability goals and are key triggers for production decisions aimed at addressing sustainability issues (Mehta & Chahal, 2021). According to Mehta and Chahal (2021), consumers often have limited knowledge about what is truly considered a green product or environmentally safe. In their paper, “Consumer Attitude towards Green Products: Revisiting the Profile of Green Consumers Using Segmentation Approach” (2021), they stated that companies frequently have to change and transform their product lines according to consumer behavior as part of their green marketing mix. This means products change according to consumers' needs regardless of how green they are, but this also illustrates the arbitrary and limited knowledge about what constitutes a green product or service. Market-oriented businesses gain a thorough understanding of competitors' actions and the apparent and latent demands of their clientele. They then frequently strive to meet these needs with innovative goods and services (Dibrell et al., 2011).

Previous studies have examined consumers' perceptions of green products and their influence on purchase intentions. Mehta and Chahal (2021) highlighted that while consumers are increasingly aware of environmental issues, their knowledge about what constitutes a “green product” is often incomplete, leading to varied responses to green marketing initiatives. Similarly, Dibrell et al. (2011) emphasized that firms must align their offerings with both consumer expectations and competitors' actions to remain competitive, yet they did not fully address the role of structured green marketing orientation and the green marketing mix in shaping both initial purchase and repurchase intentions.

Firms and companies use this opportunity to help consumers fill the gap in green product

knowledge. However, does green marketing help consumers gain more knowledge about green products? How much impact can green marketing have on changing consumers' views? If so, has it been proven to increase consumers' purchase intentions and maintain repurchase intentions?

Thus, the purpose of this research paper is to examine how green marketing orientation and the green marketing mix can help companies and firms that want to fully go green in increasing customers' purchase intentions and sustaining repurchase intentions. The findings are expected to guide firms in optimizing their green marketing strategies while contributing to the theoretical understanding of environmentally conscious consumer behavior in emerging markets.

MATERIALS AND METHODS

This research will be conducted using a quantitative approach to measure the influence of Green Marketing Orientation and the Green Marketing Mix on consumers' Purchase Intentions and to determine whether these factors contribute to Customer Retention. The study will examine the cause-and-effect relationship between these variables, assessing how one influences the other. The research aims to provide insights into how green marketing strategies impact consumer behavior and long-term engagement.

The data variables in this study consist of independent and dependent variables. The independent variables are Green Marketing Orientation and Green Marketing Mix, while the dependent variables are Purchase Intention and Customer Retention. Sampling will be conducted using a Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). A questionnaire will be distributed to individuals considered as Millennials and Generation Z. Data collection will be cross-sectional, as the time frame for gathering data is limited to two weeks. The survey will target consumers who actively shop or have made purchases in the past.

The validity of the research instrument is crucial to ensure that the measurement indicators accurately assess the intended variables. Validity testing will involve two key measures:

1. **Convergent Validity:** This ensures that respondents comprehend each statement related to the latent variables as intended by the research. The outer loading criterion will be applied, where a latent variable statement is considered valid if its outer loading value falls between 0.5 and 0.6.
2. **Discriminant Validity:** This involves assessing the correlation between constructs in the study model. Using the Average Variance Extracted (AVE) criterion, an indicator is deemed valid if its AVE value exceeds 0.5 (Hair et al., 2021).

Reliability testing will ensure that the research instrument yields consistent data when used multiple times. The reliability of the indicators will be assessed using the Composite Reliability criterion. A variable is considered reliable if its Cronbach's Alpha value is at least 0.7. This ensures that the research instrument consistently measures the intended constructs, contributing to the accuracy and dependability of the research findings.

RESULTS AND DISCUSSION

Validity and Reliability Testing Result

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Table 1 shows the processing results for validity and reliability testing

Variable	Item	Statement	Outer Loading	Mean	Std. Deviation	AVE	Composite Reliability
Green Marketing Orientation	1	I possess knowledge of “Green Marketing”	0.663	3.8669	1.14960	0,526	0,869
	2	I believe a “Go Green” company is a good company	0.764	4.1331	0.96149		
	3	I recognize what is “Green Product”	0.693	4.0360	1.00834		
	4	I am aware that my activities can also affect the environment	0.717	3.9928	0.99454		
	5	For me “Green Products” can help our local environment.	0.772	4.0432	0.97159		
	6	I wish to contribute to restoring and protecting my environment	0.738	4.0180	0.90906		
	7	Green Marketing Orientation	-	4.0150	0.72342		
Green Marketing Mix	1	For me, the existence of “green Marketing” makes me want to buy “Green Products”	0.845	3.9928	1.06806	0,659	0,853
	2	I like companies with a distribution that doesn’t cause pollution or natural damage.	0.824	4.0324	1.03147		
	3	Company transparency about their eco-friendly products makes me want to buy and contribute to environmental protection.	0.765	4.1187	0.89741		
	4	Green Marketing Mix	-	4.0480	0.81311		
Purchase Intention	1	I always bought environment-friendly products	0.811	3.8813	1.04256	0,567	0,796
	2	If there are more eco-friendly products, I wish to switch to those products	0.681	3.9748	0.92854		
	3	I prefer eco-friendly products rather than regular products	0.761	3.8633	1.01399		
	4	Purchase Intentions	-	3.9065	0.75048		
Customer Retention		I wish to keep buying eco-friendly products because not only have I helped by contributing to nature protection, but also the natural components	0.761	4.0288	0.98686	0,573	0,800
	2	Even though it was	0.793	3.9820	1.01061		

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Variable	Item	Statement	Outer Loading	Mean	Std. Deviation	AVE	Composite Reliability
		expensive, I feel the sale price of eco-friendly products can benefit the environment.					
	3	Even though it was expensive, I wish to keep buying “green products” because I also contribute to preventing pollution	0.714	3.8309	1.21521		
	4	Customer Retentions	-	3.9472	0.80885		

Source: Organized using SMART-PLS 3

The average Green Marketing Orientation score is 4.0150, with a standard deviation of 0.72342. This shows that respondents' views on Green Marketing Orientation are positive. Validity testing for the Green Marketing Orientation variable, which consists of six measurement indicators, reveals that all of them are valid because they produce outer loadings greater than 0.50. The six indicators are also linked to the Green Marketing Orientation variable because they provide an AVE value of 0.526, which is more than 0.5. Reliability testing yielded a composite reliability value of 0.869 > 0.7, indicating that all measurement indications are trustworthy.

The average Green Marketing Mix score is 4.0480, with a standard deviation of 0.81311. This suggests that respondents' attitudes toward the Green Marketing Mix are positive. The three measurement indicators that make up the Green Marketing Mix variable's validity testing demonstrate that each measurement indicator is legitimate because it produces outer loadings greater than 0.50. Because the three indicators result in an AVE value of 0.659 > 0.5, they are also related to one another in the formation of the Green Marketing Mix variable. A Composite reliability rating of 0.853 > 0.7, the outcome of reliability testing, indicates that all indicators measuring the Green Marketing Mix variable are consistent and dependable. The three measurement indicators that make up the Purchase Intention variable's validity testing demonstrate that each measurement indicator is legitimate because it produces an outer loading greater than 0.50. Because the three indicators result in an AVE value of 0.567 > 0.5, they are also related to one another in the formation of the Purchase Intention variable.

The average Purchase Intention score is 3.9065, with a standard deviation of 0.75048. This shows that respondents' views on Purchase Intentions are positive. The results of reliability tests show that all indicators measuring the Buy Intention variable are reliable (constant), with a Composite reliability score of 0.796 > 0.7.

The average Purchase Intention score is 3.90472, with a standard deviation of 0.80885. This shows that respondents' views on Purchase Intentions are positive. Validity assessment for the Customer Retention variable, which consists of three measurement indicators, demonstrates that all measurement indicators are valid because they produce outer loadings greater than 0.50. The three indicators are additionally linked to generating the Customer Retention variable since they produce an AVE value of 0.567 > 0.5. Reliability testing yielded a composite reliability rating of 0.573 > 0.7, indicating that all indicators measuring the Customer Retention variable are reliable (constant).

SEM PLS

The SEM PLS that was used in the research is shown in the picture below:

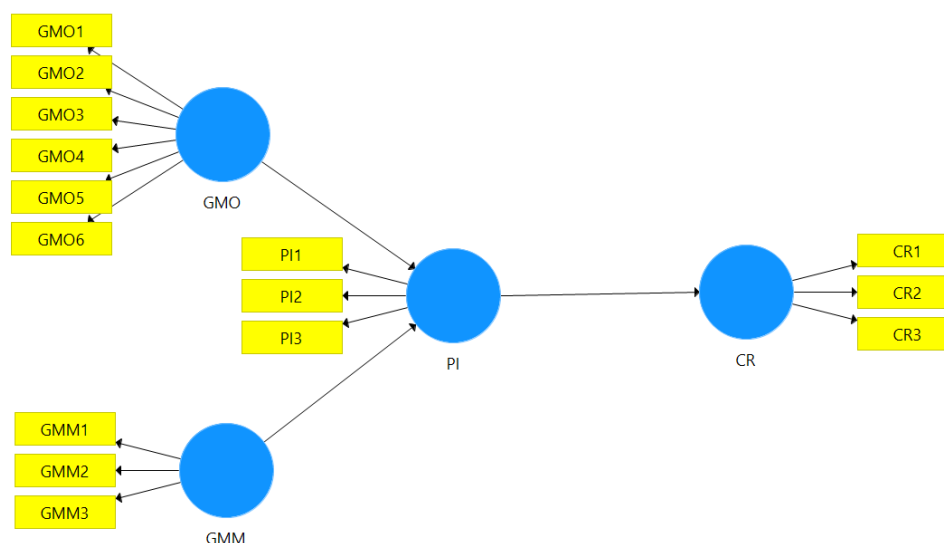


Figure 1. SEM PLS

Model Accuracy Testing

Multicollinearity Testing

Multicollinearity testing is used to ensure that the independent variables in the research model are not interrelated. Table 2 shows the processing results for multicollinearity testing. The Purchase Intention model with two independent variables (GMO and GMM) has a VIF value of less than 10, indicating no multicollinearity. The Customer Retention regression model with one independent variable, Purchase Intention, has a VIF score of <10, indicating no multicollinearity.

Table 2. Multicollinearity Testing

Indicators	Purchase Intention	Customer Retention
GMM	1.952	
GMO	1.952	
PI		1,000

Coefficient determination (R-Square)

The SEM-PLS model's model fit testing is represented by the coefficient of determination, and Table 3 displays the processing results. This table provides the following explanation.

Table 3. Coefficient determination (R-Square)

	R Square	R Square Adjusted
Repurchase Intention	0.521	0.517
Customer Retention	0.461	0.459

The adjusted R square value for the Purchase Intention model is 0.517, indicating that the independent variables (Green Marketing Orientation and Green Marketing Mix) can explain 51.7% of the variation in the dependent variable (Purchase Intention). The remaining 48.3 is due to variation in other independent variables that affect Purchase Intention but are not part of the model.

The adjusted R square value for the Customer Retention model is 0.459, meaning that

45.9% of the variation in the dependent variable, Customer Retention, can be explained by the behavior of the independent variable, Purchase Intention; the remaining 54.1% can be attributed to the variation in other independent variables that have an impact on Customer Retention but are not taken into account in the model.

Hypotheses Testing

Table 4. Hypotheses testing

	Hypotheses	Coefficient	T _{statistic}	P-value	Decision
H1	Green Marketing Orientation influences positively to Purchase Intentions	0.323	5.437	0.000	Hypothesis Supported
H2	Green Marketing Mix influences positively to Purchase Intentions	0.458	7.598	0.000	Hypothesis Supported
H3	Purchase Intention influences positively to Customer Retention	0.679	15.123	0.000	Hypothesis Supported

Hypothesis 1: Green Marketing Orientation influences positively to Purchase Intentions

The purpose of testing Hypothesis 1 was to investigate the beneficial impact of green marketing orientation on purchase intention. The estimated coefficient value of 0.323 in the processing results indicates that a higher level of green marketing orientation will result in a higher purchase intention, and a lower level of green marketing orientation will result in a lower purchase intention. The t-statistic value of 5,437 yields a p-value of 0.000 < 0.05, signifying the rejection of H_0 and the acceptance of H_a . This proves the hypothesis that Green Marketing Orientation positively influences Purchase Intention.

Hypothesis 2: Green Marketing Mix influences positively to Purchase Intentions

The purpose of testing Hypothesis 2 was to see how Purchase Intention was affected by the Green Marketing Mix. The calculated coefficient value of 0.458, which represents the processed findings, indicates that both raising and decreasing the green marketing mix will result in a decrease in purchase intention. The value of 7.598 for the t-statistic yields a p-value of 0.000 < 0.05, indicating the rejection of H_0 and acceptance of H_a . This indicates that the hypothesis that the Green Marketing Mix Influences Purchase Intention is validated.

Hypothesis 3: Purchase Intention influences positively to Customer Retention

The purpose of testing hypothesis three was to determine whether purchase intention has an impact on customer retention. The processed findings display an estimated coefficient value of 0.679, indicating that a rise in purchase intention will result in a rise in customer retention and a fall in buy intention will result in a drop in customer retention. Purchase intention affects customer engagement retention, and this is demonstrated by the t-statistic value of 15.123, which yields a p-value of 0.000 < 0.10, meaning that H_a is accepted and H_0 is rejected.

The results of this study demonstrate that Green Marketing Orientation (GMO) has a significant positive effect on Purchase Intention (H1). The coefficient value of 0.323 and a t-statistic of 5.437 ($p < 0.05$) indicate that consumers exposed to stronger green marketing strategies are more likely to intend to purchase environmentally friendly products. This finding

aligns with previous research by Jacob et al. (2023) and Chrisjatmiko (2018), who emphasized that companies' commitment to green marketing strategies enhances consumer awareness and positively influences purchasing behavior. The evidence suggests that effective communication of eco-friendly practices, environmental responsibility, and corporate sustainability initiatives can increase consumer motivation to support green products, thereby reinforcing the importance of GMO in shaping consumer decision-making.

Similarly, the study confirms that the Green Marketing Mix (GMM) significantly and positively affects Purchase Intention (H2), with a coefficient of 0.458 and a t-statistic of 7.598 ($p < 0.05$). This result corroborates findings from Mahmoud et al. (2024) and Mehraj & Qureshi (2020), who argued that integrating environmentally conscious strategies into the marketing mix—covering product design, pricing, distribution, and promotion—effectively drives consumer purchase intentions. These studies highlight that consumers increasingly prefer companies that demonstrate tangible efforts toward sustainability, and that a well-structured green marketing mix can enhance the attractiveness and perceived value of green products, which is consistent with the outcomes of the present research.

Finally, the analysis indicates that Purchase Intention significantly influences Customer Retention (H3), with a coefficient of 0.679 and a t-statistic of 15.123 ($p < 0.10$). This result supports the idea that consumers who are motivated to purchase environmentally friendly products are more likely to become repeat customers. Previous studies by Mehta & Chahal (2021) and Dibrell et al. (2011) similarly demonstrated that a higher purchase intention, cultivated through effective green marketing and consistent eco-friendly practices, enhances customer loyalty and retention. The implication is that firms not only benefit from immediate sales but also secure long-term customer relationships by aligning marketing strategies with sustainability principles.

These results collectively reinforce the theoretical and practical importance of integrating Green Marketing Orientation and Green Marketing Mix strategies to influence purchase intentions and enhance customer retention. The findings confirm that consumers' environmental awareness, when strategically nurtured through comprehensive green marketing initiatives, can drive both purchase decisions and sustained customer loyalty, providing actionable insights for firms seeking competitive advantage in eco-conscious markets.

CONCLUSION

This research aimed to examine how Green Marketing Orientation (GMO) and the Green Marketing Mix (GMM) influence purchase intentions and, in turn, how these intentions impact customer retention. The findings, supported by Structural Equation Modeling, revealed that Green Marketing Orientation (GMO) indeed influences purchase intentions. By adopting GMO, companies can strategize and market their products while minimizing their environmental impact, which encourages customers to consider purchasing green products. The Green Marketing Mix (GMM) was found to have a significant influence on purchase intentions. The three components of GMM—product, price, and place—offer transparency and provide consumers with better solutions, thereby enhancing their intention to purchase. Furthermore, purchase intentions were primarily influenced by the Green Marketing Mix rather

than Green Marketing Orientation alone. Despite price considerations, consumers continued to buy green products, which positively contributed to customer retention.

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