The Effect of Green Marketing Mix on Purchasing Decisions of MSME Products in Improving Environmental Quality

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ABSTRACT: The background of this research is based on the importance of Green Marketing in MSME Product Purchasing Decisions. Issues regarding the environment are a problem that is being highlighted by the wider community. These problems include air pollution, water pollution, and the most phenomenal is the waste problem. Waste is increasingly becoming a big problem when the amount of waste is increasingly accumulating and difficult to recycle. Problem One form of consumer demand is the desire for health due to the increasing spread of diseases transmitted through food, therefore food producers produce products containing organic food ingredients. healthy, does not contain additional chemicals and is safe for consumption. The phrase "back to nature and green" is a mission that has been activated in the world and a culture that has reappeared in society. The aim of the research is to analyze the influence of the Green Marketing Mix on purchasing decisions for MSME products in improving the quality of the environment.

The analytical method for this research is quantitative research. The design of this research uses a cross sectional design method with a sampling technique using purposive sampling. This research uses data analysis with the Partial Least Square (PLS) approach.

Green Product results have no effect on Purchasing Decisions. Green Products have an influence on improving the quality of the environment. Green Price has no effect on Purchasing Decisions. Green Prices have no effect on improving environmental quality. Green Place influences purchasing decisions. Green Place has no effect on improving the quality of the environment. Green Promotion influences Purchasing Decisions. Green Promotion has an effect on improving the quality of the environment. The buyer's decision has no effect on improving environmental quality.

KEYWORDS: Green Marketing, Purchasing Decisions, improving environmental quality

I. INTRODUCTION

(Rapid technological and economic developments have given rise to many unsustainable products and consumption patterns that cause negative impacts on the environment such as climate change, water and air pollution.

The large volume of plastic waste in the environment is one of the causes. Environmental damage is largely caused by human activities, so awareness of maintaining environmental cleanliness and health is very important today [1]. The thing that most often causes environmental damage is the amount of plastic waste [2].

In Indonesia, an estimated 150 million tons of plastic waste has clogged the ocean, and every year the amount of plastic waste increases by around 11 million tons [3]. Responding to the urgency of this environmental problem, people are starting to pay attention to the products they consume as environmentally friendly as possible.

Seeing this opportunity, many business people are also turning to environmentally friendly businesses to implement green marketing [4]. Green marketing is an activity to introduce environmentally friendly products [5]. Green marketing can take the form of green products, green prices, green places and green promotions.
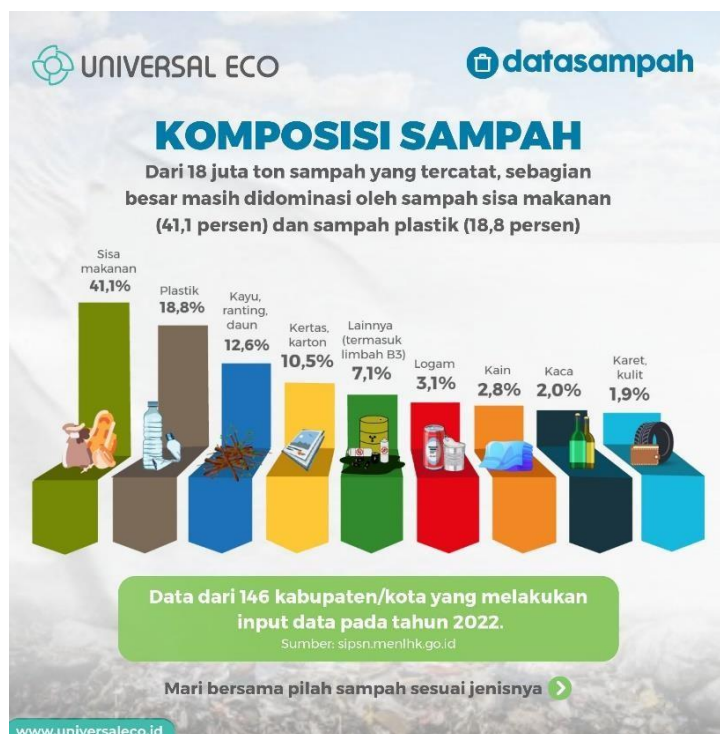
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Figure 1. Waste Data for 2022

Based on the picture above, it shows that the first rank contributor to waste comes from food waste which is followed by plastic, most of these remains are from products purchased through MSMEs. But unfortunately many people as consumers are still not aware of the dangers of this waste.

However, on the other hand, there are some people who are aware and have started looking for environmentally friendly products. According to a survey by the World Wide Fund for Nature (WWF) Indonesia and[6] shows that 63% of Indonesian consumers are willing to spend more money to be able to consume products that are safe for the environment. This shows that the majority of Indonesian people have a high level of awareness about consuming environmentally friendly products [7].

Novelty

The novelty of this research is the consideration of the green marketing mix variable reviewing MSME purchasing decisions and their impact on improving the quality of the environment. The relationship between these four variables, the object studied, and the type of analysis used is the main difference between this research and previous research.

II. THEORICALBASE

Purchasing Decisions

Purchasing decisions are someone's activities that are directly related to making purchasing decisions for products offered by the seller [9]. [10] states that purchasing decisions are an integration process used to combine knowledge to evaluate two or more alternative behaviors and choose one of them.

Green Products

Currently, most consumers are increasingly aware of the importance of green products. Consumer awareness of green products is very important in guiding purchasing decisions [11]. According to [13] green products are environmentally friendly products that contain a recycling process in their production, reducing or eliminating the level of danger or negative impacts on the environment.

Green Price

According to [13] green pricing is pricing by companies that pay attention to the environment with additional costs due to efforts to reduce energy and resource efficiency.

Green Place

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A comfortable place has a high impact on product promotion because customers want a comfortable place to buy their products or services [12]. Green place according to [13] is the company's choice of distribution channels with the aim of avoiding environmental damage and ensuring that the product is always available, so that it will have a big influence on consumers.

Green Promotion

According to [13] green promotion is all promotional activities including advertising activities, personal sales, sales promotions, direct marketing and public relations on the basis of concern for the environment.
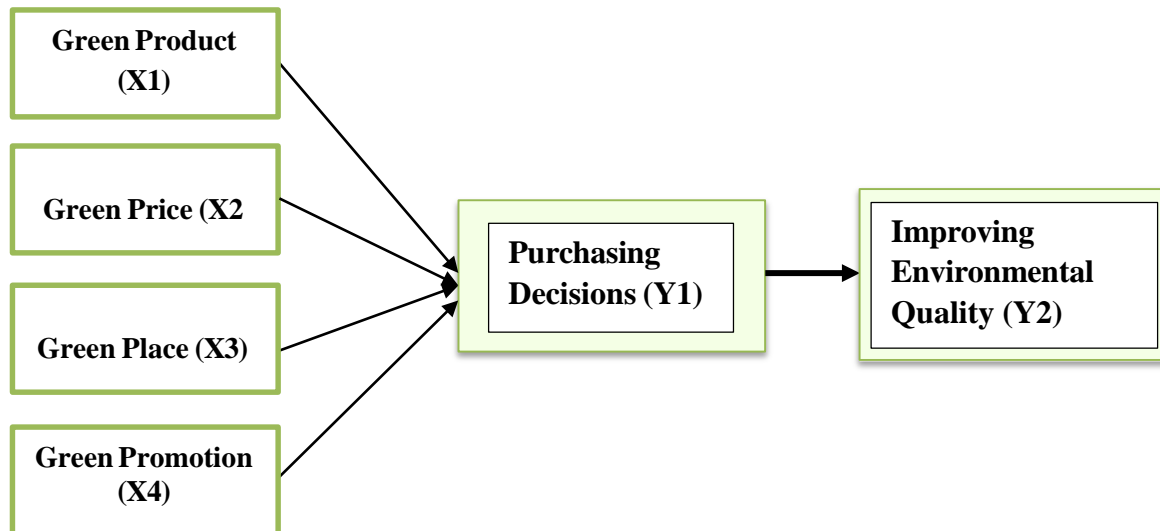
Conceptual Framework

Figure 2. Conceptual Framework

III. RESEARCH METHODS

Data source

The data source used in the research process is primary data. Primary data is data obtained from the field or obtained from respondents, namely consumers of MSME products.

Method of collecting data

Field study (field research), is a technique carried out by going directly to the research field to obtain data related to th e research. In this study, researchers used two data collection methods, namely questionnaires and interviews.

Population and Sample

The population selected in this study is all MSME consumers in Lubuk Pakam City, Deli Serdang Regency, North Sumatra.

This research uses a non-probability sampling method using the Snowball Sampling technique or chain reference sampling, defined as a non-probability sampling technique where the sample has characteristics that are rarely found. It is a sampling technique, in which existing subjects provide referrals to recruit the required sample for research studies.

Data analysis

In this research, data analysis uses the Partial Least Square (PLS) approach. PLS is a component or variant-based Structural Equation Modeling (SEM) equation model.

The data collection method uses a questionnaire with a modified Likert scale consisting of 4 answer choices, namely point 4 Strongly Agree (SS), point 3 Agree (S), point 2 Disagree (TS), and point 1 Strongly Disagree (STS) . The data analysis technique used in this study is multiple linear regression analysis, with the following stages:

a. convergent validity

The convergent indicator validity test is used to assess convergent validity, namely the loading factor value must be more than 0.7 for confirmatory research and the loading factor value between 0.6-0.7 for exploratory research is still acceptable and the average variance extracted (AVE) value must be greater than 0.5 [14].

b. discriminant Validity.

Discriminant validity is related to the principle that measures (manifest variables) of different constructs should not be highly correlated. The cross loading value for each variable must be > 0.70 [14].

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c. average variance extracted(AVE)

It is recommended that the AVE value should be greater than 0.50, which means that 50% or more of the variance of the indicator can be explained [14].

d. Composite Reliability and Cronbanch Alpha.

The reliability test was carried out to prove the accuracy, consistency and precision of the instrument in measuring constructs. The rule of thumb that is usually used to assess construct reliability is that the composite reliability value must be greater than 0.7 for confirmatory research and a value of 0.6-0.7 is still acceptable for exploratory research [14].

e. Coefficient of determination/RSquare value.

In assessing the structural model with PLS, we start by looking at the R-Square value for each endogenous latent variable as the predictive power of the structural model. R-Square values of 0.75, 0.50 and 0.25 can be concluded that the model is strong, moderate and weak [14].

f. Hypothesis test.

Hypothesis testing functions to test research hypotheses, where the t test can be seen from the results of the Path Coefficient test, which will provide an estimate of the influence between variables and provide very useful significant information regarding the relationship between research variables. The hypothesis is accepted when the significance level is smaller than 0.05 or the t-value exceeds the critical value. The t statistics value for the 5% significance level is 1.96.

The multiple regression model is formulated in the following form.

$Y1 = a + \beta1X1 + \beta2X2 + \beta3X3 + \beta4X4 + e$ $Y2 = a + \beta1X1 + \beta2X2 + \beta3X3 + \beta4X4 + e$

$Y = a + \beta Z + e$

Information :

Y = DecisionPurchase

Z = Environmental Quality Improvement X1 = Green Products

X2 = Green Prices X3 = Green Place

X4 = Green Promotion E = error

RESEARCH RESULTS

In this research, hypothesis testing uses partial least squares (PLS) analysis techniques, with the Smart PLS 4.0 program. The following is a schematic of the PLS program model being tested
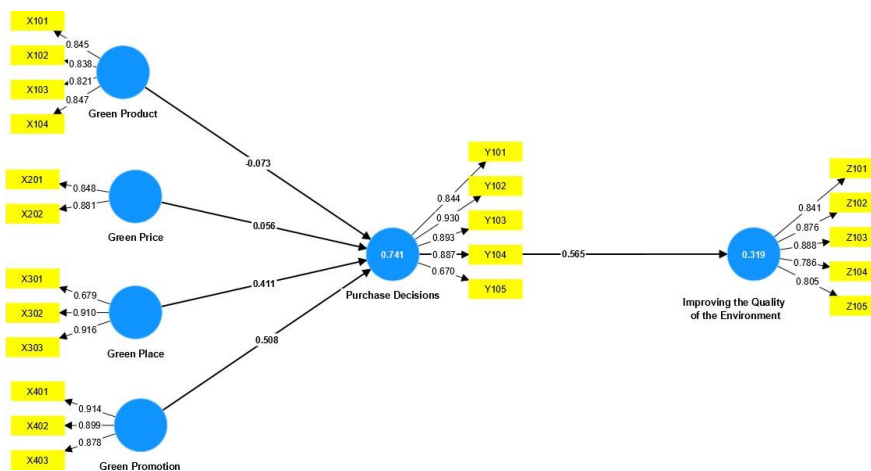

Figure 1. Display of PLS Algorithm calculation output after reduction

Based on Figure 1, it can be concluded that the expected cross loading value is greater than 0.7, [1] so that the discriminant validity requirements with the cross loading method have been fulfilled.

Indicator reliability aims to assess whether the latent variable measurement indicators are reliable or not. Reliability testing can also use internal consistent reliability which aims to measure how capable the indicator is of measuring its latent construct [2].

The tools used to assess this are composite reliability and Cronbach alpha. The following is a table of composite reliability and Cronbarch alpha values.

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Table 1. Construct Reliability and Validity

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Green Place	0.796	0.869	0.878	0.710
Green Price	0.764	0.789	0.856	0.789
Green Products	0.861	0.875	0.904	0.702
Green Promotion	0.879	0.881	0.925	0.806
Improving the Quality of the Environment	0.896	0.907	0.923	0.706
Purchase Decisions	0.900	0.904	0.928	0.722

Table 1 shows that Cronbach's Alpha is above 0.7 and composite rability is 0.6-0.7 indicating high reliability of the measuring instrument, meaning that the gauges of each construct are highly correlated.

Hypothesis Results

Whether or not a proposed hypothesis is accepted, it is necessary to test the hypothesis using the bootstrapping function in smartPLS 4.0. The hypothesis is accepted when the significance level is smaller than 0.05 or the t value exceeds the critical value [3].

Table 2. Path Coefficients

	Sampel asli (O)	Rata-rata sampel (M)	Standar deviasi (STDEV)	T statistik (|O/STDEV|)	Nilai P (P values)
Green Place -> Improving the Quality _of the Environment	-0.116	-0.117	0.169	0.688	0.491
Green Place -> Purchase Decisions	0.399	0.394	0.163	2.443	0.015
Green Price -> Improving the Quality _of the Environment	0.033	0.039	0.143	0.228	0.820
Green Price -> Purchase Decisions	0.048	0.059	0.092	0.518	0.604
Green Product -> Improving the Quality _of the Environment	0.331	0.326	0.154	2.151	0.032
Green Product -> Purchase Decisions	-0.068	-0.067	0.110	0.616	0.538
Green Promotion -> Improving the Quality _of the Environment	0.521	0.518	0.158	3.304	0.001
Green Promotion -> Purchase Decisions	0.518	0.514	0.128	4.032	0.000
Purchase Decisions -> Improving the Quality _of the Environment	0.016	0.019	0.164	0.096	0.924

Based on Table 2, it can be seen that the most dominant factor influencing purchasing decisions is Green promotion with the highest path coefficient of0.508. Based on this table, the following structural equation can be formed:

Buying decision=-0.068Green Products +0.048Green Price +0.399Green Place +0.518Green Promotion

Improving the Quality of the Environment=0.331Green Products +0.033Green Price - 0.116Green Place +0.521Green Promotion

1. Green Product has no effect on Purchasing Decisions. It can be seen that the P value is 0.538 > 0.05, indicating that the green product variable has no influence on purchasing decisions, meaning that green products do not have a significant influence on purchasing decisions for MSMEs.

2. Green Product has an effect on Environmental Quality Improvement. It can be seen that the P value is 0.032 > 0.05 indicating that the green product variable has an effect on improving the quality of the environment, meaning that green products have a significant influence on improving the quality of the environment. for MSMEs.

3. Green Price has no effect on Purchase Decision. It can be seen that the P value of 0.604> 0.05 indicates that the Green Price variable has no influence on purchasing decisions, meaning that Green Price does not have a significant influence on purchasing decisions for MSMEs.

4. Green Price has no effect on Environmental Quality Improvement. It can be seen that the P value of 0.820 > 0.05 indicates that the Green Price variable has no effect on improving the quality of the environment, meaning that the green price does not have a significant influence on improving the quality of the environment. for MSMEs.

5. Green Place has an effect on Purchasing Decisions. It can be seen that the P value of 0.015 > 0.05 indicates that the Green Place variable influences purchasing decisions, meaning that Green Place has a significant influence on purchasing decisions for MSMEs.

6. Green Place has no effect on Environmental Quality Improvement. It can be seen that the P value of 0.491> 0.05 indicates that the Green Place variable has no effect on Environmental Quality Improvement, meaning that Green Place does not have a significant influence on Environmental Quality Improvement. for MSMEs.

7. Green Promotion has an effect on Purchasing Decisions. It can be seen that the P value of 0.001 > 0.05 indicates that the green product variable influences purchasing decisions, meaning that Green Promotion has a significant influence on purchasing decisions for MSMEs.

8. Green Promotion has an effect on improving the quality of the environment. It can be seen that the P value is 0.000 >0.05 indicating that the Green Promotion variable has an effect on Environmental Quality Improvement, meaning that Green Promotion has a significant influence on Environmental Quality Improvement for MSMEs.

9. The buyer's decision has no effect on the Improvement of Environmental Quality. It can be seen that the P value of 0.924 > 0.05 indicates that the buyer decision variable has no effect on improving environmental quality, meaning that green products do not have a significant influence on improving environmental quality for MSMEs.

CONCLUSIONS

Green Product results have no effect on Purchasing Decisions. Green Products have an influence on improving the quality of the environment. Green Price has no effect on Purchasing Decisions. Green Prices have no effect on improving environmental quality. Green Place influences purchasing decisions. Green Place has no effect on improving the quality of the environment. Green Promotion influences Purchasing Decisions. Green Promotion has an effect on improving the quality of the environment. The buyer's decision has no effect on improving environmental quality.

REFERENCES

1) Putri, H. E., Maraputra, A. N., Efna, M. J., Permana, Y., Martiningtyas, M. P., Listiyanti, P. A., & Wulandari, H. (2020). Improvement of student awareness on cleanliness and environmental health through stop motion video technology. Journal of Physics: Conference Series, 1521(4), 1–8. https://doi.org/10.1088/1742-6596/1521/4/042042

2) Alabi, O. A., Ologbonjaye, K. I., Awosolu, O., & Alalade, O. (2019). Public and Environmental Health Effects of Plastic Wastes Disposal: A Review. Journal of Toxicology and Risk Assessment, 5(2), 9–13. https://doi.org/10.23937/2572- 4061.1510021

3) Purwendah, E. K., & Periani, A. (2019). Implementation of Presidential Regulation Number 83 of 2018 Concerning Handling of Sea was in order to Provide Protection and Preservation of the Sea Environment for Indonesia. Ganesha Law Review, 3(2), 1–9

4) Kaur, A. (2016). Green Marketing -Challenges and Opportunities. CKD Institute of Management and Technology, (December).

5) Machova, R., Ambrus, R., Zsigmond, T., & Bako, F. (2022). The Impact of Green Marketing on Consumer Behavior in the Market of Palm Oil Products. Sustainability, 14(1364), 1–25. https://doi.org/https://www.mdpi.com/2071- 1050/14/3/1364

6) Genoveva, G. & Levina, L. (2019). The Green Marketing Mix: A Review of Customers' Body Shop Purchase Intention. Jurnal Muara Ilmu Ekonomi dan Bisnis, 3 (2), 400409.

7) Priyanka, D., and Septrizola, W. (2019). Pengaruh green product dan green promotion terhadap brand image PT Suzuki Indomobil di Kota Padang, Jurnal Kajian Manajemen dan Wirausaha, 1(1), 344-348. http://dx.doi.org/10.24036/jkmw0255270.

8) Firmansyah, M, J,. (2018). 63 Percent Consumers Willing to Pay Premium for Green Products. Diakses pada 10 Februari 2022, dari https://en.tempo.co/read/910387/63-percent-consumers-willing-to-paypremium-for-green-products.

9) Hasan, Z & Ali, N.A (2015). The Impact of Green Marketing Strategy on the Firm's Performance in Malaysia. Elsevier: Procedia - Social and Behavioral Sciences, 172, 463-470.

10) Fishbein, Martin and Icek Ajzen. (1977). Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research.

11) Sarah, Y. (2020). Pengaruh Green Marketing, Corporate Social Responsibility Terhadap Brand Image dan Keputusan Pembelian. Jurnal Ekobis: Ekonomi Bisnis & Manajemen, 10(1), 33-47

12) Hossain, A., & Khan, M. Y. H. (2018). Green marketing mix effect on consumers buying decisions in Bangladesh. Marketing and Management of Innovations, 4(December), 298–306. https://doi.org/10.21272/mmi.2018.4-25

13) Kirgiz, A. C. (2016). Green Marketing: A Case Study of The Sub-Industry in Turkey. London: Palgrave Pivot.

14) Sugiyono. (2018). Metode Penelitian Kuantitatif, Kualitatif, R & D. Bandung: CV Alfabeta.