

DETERMINANTS OF CONSUMER PURCHASE DECISIONS IN THE AGROINDUSTRY OF ECO-ENZYME SOAP FOR WOVEN TEXTILES AT CV. MAZMUR ECO SHOP IN KUPANG CITY

(Faktor Penentu Keputusan Pembelian Konsumen Agroindustri Sabun Tenun Eco-Enzyme Pada CV. Mazmur Eco Shop Di Kota Kupang)

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ABSTRACT

The issue of organic waste management remains a serious environmental challenge in Indonesia. Eco-enzyme has emerged as one potential solution for organic waste management because it can be used as a raw material for organic soap that is environmentally friendly and has practical value. This study aims to analyze the determining factors of consumer purchasing decisions for eco-enzyme soap for woven textiles at CV. Mazmur Eco Shop, Kupang City. The study employed a quantitative approach using binary logistic regression with 100 respondents selected through purposive sampling. The results show that price and consumer trust have a significant effect on purchasing decisions, whereas perceived product quality is not significant. These findings indicate the importance of pricing strategies and consumer education in increasing consumer trust and encouraging the purchase of eco-enzyme soap.

Keywords: purchasing decision, eco-enzyme, price, product quality, consumer trust

ABSTRAK

Permasalahan pengelolaan sampah organik masih menjadi tantangan lingkungan di Indonesia. *Eco-enzyme* menjadi salah satu solusi permasalahan pengelolaan sampah organik sebab dapat dijadikan sebagai bahan baku sabun organik yang ramah lingkungan dan bernilai guna. Penelitian ini bertujuan untuk menganalisis faktor-faktor penentu keputusan pembelian konsumen pada produk sabun tenun *eco-enzyme* di CV. Mazmur Eco Shop, Kota Kupang. Penelitian menggunakan pendekatan kuantitatif dengan regresi logistik biner pada 100 responden melalui teknik *purposive sampling*. Hasil penelitian menunjukkan harga dan kepercayaan konsumen berpengaruh signifikan terhadap keputusan pembelian, sedangkan persepsi kualitas produk tidak signifikan. Hal ini menunjukkan pentingnya strategi harga dan edukasi untuk meningkatkan kepercayaan konsumen dalam mendorong pembelian sabun *eco-enzyme*.

Kata kunci: Keputusan pembelian, *eco-enzyme*, harga, kualitas produk, kepercayaan konsumen

INTRODUCTION

Waste generated by the population remains a serious environmental problem in Indonesia; therefore, the government continues to address this issue. Waste refers to the residue or by-product of human activities that is no longer used and is discarded, but does not yet have economic value. Based on data collected by the Ministry of Environment and Forestry in 2023, the amount of waste generation in Indonesia was recorded at 17.4 million tons per year. The amount of waste handled was recorded at 50.49%, while unmanaged waste reached 27.09%. The largest contribution of waste originated from household waste, which accounted for 38.4%.

Household waste is divided into two categories, namely organic waste and inorganic waste. Approximately 68% of organic waste originates from household waste (Rabbani et al., 2020). On the other hand, organic waste management remains suboptimal because it is still dominated by disposal on vacant land, into drainage channels, or by burning. In fact, there are more environmentally friendly and useful alternatives, such as processing it into liquid fertilizer (Ngurah et al., 2020). Accordingly,

organic waste management that is simple, economically valuable, and beneficial for society and the environment is needed.

In the agroindustrial context, one form of household organic waste processing is the production of eco-enzyme. Eco-enzyme is a concrete form of downstream agricultural product development that supports the sustainability of the agricultural product processing industry. Agroindustry plays an important role as a bridge between the agricultural sector, as the provider of raw materials, and the industrial sector, as the processor of agricultural products into high-value-added products.

Eco-enzyme itself is a liquid formed from the fermentation of vegetable residues or fruit peels with sugar and water in a certain ratio, producing a brown liquid with a strong acidic or fresh aroma (Pawestri et al., 2022). Eco-enzyme also plays an important role in environmental preservation because eco-enzyme solutions can serve as substitutes for commercial cleaners that contain various chemical compounds capable of polluting soil, water, and even air (Pawestri et al., 2022).

In addition, eco-enzyme soap also has economic value by utilizing local household organic waste, which can reduce the production cost of the soap. Its simple production process enables small-scale industries or household businesses to produce this organic soap independently. This can create business opportunities and increase the economic value of household organic waste utilization.

CV. Mazmur Eco Shop is one of the companies in Kupang City that recognized this potential and utilized the opportunity by selling eco-enzyme soap for woven textiles. The existence of eco-enzyme soap produced by CV. Mazmur Eco Shop is also an example of small-scale agroindustrial development that applies simple technology but has market potential, particularly among communities concerned with environmentally friendly products and environmental sustainability.

Eco-enzyme soap for woven textiles is also one solution to address a phenomenon among the people of East Nusa Tenggara, particularly in Kupang City, who actively use woven cloth as ancestral heritage but are concerned about washing it. Woven cloth is not recommended to be washed using chemical soaps commonly available in the market because of concerns that the quality of the cloth may decline or even become damaged. Woven cloth itself is made directly by human hands from natural fibers, so its price is relatively high depending on the length of production time, the motif produced, and the quality of the yarn used. These considerations provide a strong rationale for the company to produce eco-enzyme soap specifically for woven textiles.

In marketing its products, the company faces various consumer behaviors that are interesting to observe. Consumer behavior that influences economic activity includes purchasing decisions. Before making a purchasing decision, consumers engage in a process of identifying and evaluating products before deciding to conduct a transaction.

Companies need to provide information regarding awareness of a healthy lifestyle, the advantages of using eco-enzyme, and the environmental impact of product use so that consumer perceptions of product quality become positive and ultimately lead to purchase decisions. Furthermore, good quality also provides added value in competition with competitors. Examining eco-enzyme soap purchasing decisions through the factors of price, perceived product quality, and consumer trust is considered important so that the company can conduct marketing effectively. Increasing consumer demands also require companies to understand consumer preferences and translate them into superior products in order to face competition.

Based on the explanation above, the researcher was interested in conducting a study entitled "Determinants of Consumer Purchase Decisions in the Agroindustry of Eco-Enzyme Soap for Woven Textiles at CV. Mazmur Eco Shop in Kupang City." The objectives of this study are to identify the factors that influence purchasing decisions and to examine how these factors affect purchasing decisions.

METHODS

The research was conducted at CV. Mazmur Eco Shop, located at Jl. Karya Sakti No. 12, Maulafa Subdistrict, Kupang City, East Nusa Tenggara. Data collection was carried out from February 2024 to April 2024. The sampling method used was non-probability sampling with a purposive sampling technique involving 100 respondents.

The type of data used in this study was quantitative data. Quantitative data are data in numerical form or qualitative data that are quantified (Sugiyono, 2022). The quantitative data in this study were

obtained through questionnaires distributed to buyers and potential buyers of eco-enzyme soap for woven textiles.

Data Analysis Method

a. Binary Logistic Regression Analysis

To determine the factors influencing the purchase decision of eco-enzyme soap for woven textiles, this study used binary logistic regression analysis. Binary logistic regression is a statistical model used to determine the relationship between the independent variables in this study, namely price, perceived product quality, and consumer trust, and the dependent variable, namely the purchase decision of eco-enzyme soap for woven textiles in Kupang City. Mathematically, the logistic regression model according to Hosmer and Lemeshow is:

$$g(x) = \ln[\pi(x)/(1 - \pi(x))] = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3$$

where:

$g(x)$ = consumer decision to purchase eco-enzyme soap for woven textiles;

$\pi(x) = 1$, for consumers who decide to purchase eco-enzyme soap for woven textiles;

$1 - \pi(x) = 0$, for consumers who decide not to purchase eco-enzyme soap for woven textiles;

X_1 = price;

X_2 = perceived product quality;

X_3 = consumer trust;

β = regression coefficient; and β_0 = constant.

b. Simultaneous Test

The simultaneous test was conducted to determine the significance level of the regression coefficients (β) on the dependent variable. According to Hosmer and Lemeshow, the simultaneous test uses the likelihood ratio test. The hypotheses of the simultaneous test are as follows:

$$G = -2 \ln(L_0/L_1)$$

where:

G = likelihood ratio test;

L_0 = the model consisting of all variables;

L_1 = the complete model or a model consisting only of a constant;

H_0 is rejected if $G > \chi^2$ or if the p-value $< \alpha$.

c. Partial Test

The partial test in this study used the Wald test, which indicates whether a predictor variable is feasible to be included in the model. This test examines the effect of each variable partially. The hypotheses of the partial test are as follows:

$$W = (\beta / SE(\beta))^2$$

where:

β = parameter estimate;

$SE(\beta)$ = estimated standard error of β ;

H_0 is rejected if $W > \chi^2$ or if the p-value $< \alpha$, where α is the significance level and p is the number of predictor variables.

d. Model Fit Test

The model fit test used was the Goodness-of-Fit test, which aims to determine the overall suitability of the independent variables with the dependent variable in the logit model. The hypotheses of the model fit test are formulated using observed and expected frequencies.

$$\chi^2 = \sum[(O_i - E_i)^2 / E_i]$$

O_i = observed frequencies; E_i = expected frequencies.

RESULT AND DISCUSSION

Overview of the Research Location

CV. Mazmur Eco Shop is located at Jalan Karya Sakti No. 12, Maulafa Village/Subdistrict, Maulafa District, Kupang City, East Nusa Tenggara. The company's location is quite far from the

main road, making it difficult for the public to access. Therefore, customers who wish to purchase eco-enzyme soap for woven textiles must use a digital map or ask nearby residents to locate the company.

Respondent Characteristics

a. Age

Age is a factor that can determine the quality of consumer purchasing decisions for eco-enzyme soap for woven textiles. Differences in respondents' age levels may result in different decisions regarding the product. The youngest respondent was 18 years old, while the oldest was over 50 years old. The average respondent age was 35 years, which falls within the 35–42-year age range. This indicates that individuals in this age group are generally at the peak of productivity. According to Indra Dhana Wijaya and Setiawati (2021), the productive-age population affects Indonesia's economic growth. This supports the finding that the majority of respondents in this study were of productive age. The study also found that the minority of respondents were aged over 50 years. This indicates that individuals above 50 years of age have generally entered retirement age and experience a decline in income (Indra Dhana Wijaya & Setiawati, 2021).

b. Gender

Respondents in this study were also categorized by gender, namely male and female. The research results show that, of the total 100 research samples, female respondents were the most dominant in making product purchase decisions, totaling 76 people, while male respondents numbered only 24 people. This indicates that women play an important role in purchasing decisions, especially those related to the household economy (Amalia & Oktarina, 2022).

c. Domicile

This study also categorized respondents by domicile because domicile is one aspect that determines purchasing decisions based on consumers' ease of access to the product. Of the five subdistricts in Kupang City, the results show that respondents domiciled in Kupang City, particularly in Maulafa Subdistrict, dominated the sample with 23 people or 23%. This indicates that respondents who live in the same area as the company have a greater likelihood of making a purchase decision than respondents from other subdistricts.

d. Occupation

Occupation can influence a person's attitude in making purchasing decisions. The results show that the majority of respondents in this study worked as civil servants, military personnel, or police officers. This is because civil servants, military personnel, and police officers have fixed incomes, which increases the possibility of making purchase decisions.

e. Income

Income is the earnings obtained by individuals to meet their living needs. In this study, a person's income may influence the determining factors of product purchasing decisions. The results show that most respondents were dominated by individuals with incomes of around IDR 3,000,000–IDR 5,000,000. According to Suwardarshini and Mishra (2021), consumers with higher income tend to be more impulsive, seek high-quality goods, and show interest in new trends.

Binary Logistic Regression Analysis and Wald Test

Table 1. Binary Logistic Regression Test

Variable	B	S.E.	Wald	Sig.	Exp(B)
X1	1.753	0.864	4.118	0.042	5.770
X2	21.889	3780.63	0.000	0.995	32069
X3	3.295	1.609	4.194	0.041	26.998
Constant	-26.869	3780.64	0.000	0.994	0.000

Source: Data analysis, 2025.

$$\text{Purchase Decision} = -26.869 + 1.753X_1 + 21.889X_2 + 3.295X_3 + e$$

Based on the binary logistic regression equation above, the effects of the independent variables on the dependent variable can be analyzed as follows:

1. The constant in the model is -26.869 , which can be considered very low and produces an odds ratio close to zero. This means that when all independent variables are equal to zero, the probability of purchasing the product is very small, almost zero. In general, the model indicates that price and consumer trust are strong reasons underlying consumer purchase decisions; however, perceived product quality does not show a stable value in this regression model.
2. Price Variable (X_1). The results in this study represent the total score of three yes (1) or no (0) statements that reflect consumers' assessments of product price. The score ranges from 0, meaning that the respondent did not agree with any of the price-related statements, to 3, meaning that the respondent agreed with all price-related statements.

The price coefficient has a significant effect on purchasing decisions, with a B value of 1.753. The $\text{Exp}(B)$ value of 5.770 indicates that for each additional "yes" response related to price, the probability or value of consumers purchasing the product increases by 5.77 times. The price variable has a coefficient of 1.753, a Wald value of 4.118, and a significance value of 0.042. Since the significance value of 0.042 is less than 0.05, it can be concluded that the price variable has a significant effect on purchase decisions, meaning that H_0 is rejected and H_1 is accepted.

The results of this study are consistent with the findings of Vista et al. (2021), who found that the price variable significantly affects purchasing decisions. According to Andri et al. (2023), price is closely related to purchasing decisions because consumers compare price with the benefits obtained after making a purchase decision. This indicates that the price variable in this study is significant in determining purchasing decisions and is also an important factor that must be considered by the company in attracting consumer purchase interest.

3. Perceived Product Quality Variable (X_2). The results of this study show a very large coefficient value of 21.889; however, statistically, it is not significant because the resulting significance value is 0.996. The very large $\text{Exp}(B)$ value for this variable indicates that each additional "yes" response increases the purchase opportunity by 3,206,884,540 times. The $\text{Exp}(B)$ value in this study is extremely high; however, this result cannot be used as a strong basis. Therefore, this study concludes that perceived product quality does not significantly affect purchasing decisions.

The results of this study differ from those of Mulyana (2021), who stated that there is a positive influence. This difference may be caused by differences in research objects and analytical tools. Mulyana (2021) used Structural Equation Modeling (SEM) with two independent variables, namely price and product reviews, while this study used binary logistic regression analysis.

4. Trust Variable (X_3). The trust coefficient has a significant effect on purchasing decisions, with a B value of 3.295. The $\text{Exp}(B)$ value of 26.988 indicates that for each additional "yes" response related to trust, the probability or value of consumers purchasing the product increases by 26 times. The trust variable also shows a coefficient of 3.295 with a significance value of 0.041, which means that it has a significant effect on purchase decisions.

Consumer trust is closely related to the attributes and benefits of a product, encouraging marketers to understand consumers and regulate how product communication is delivered to consumers (Ningsih & Haryanti, 2021). The results of this study are in line with Hartono and Praptiningsih (2022), who found that trust has a positive influence on purchasing decisions. Consumers who trust a product feel more secure and confident that the product will not disappoint them.

Simultaneous Test

Table 2. Simultaneous Test

Chi-square	df	Sig.
120.259	3	<0.001
120.259	3	<0.001
120.259	3	<0.001

Source: Data analysis, 2025.

The test results show a Chi-square value of 120.259 with 3 degrees of freedom and a significance value of less than 0.001. This very small significance value indicates that the model as a whole is highly significant. Thus, the addition of the variables price, perceived product quality, and trust into the model provides a significant improvement in the model's ability to predict purchase decisions. This means that the three variables simultaneously contribute to the model.

Model Fit Test

The Nagelkerke R Square value in this study was 0.935, indicating that when the scale is expanded to reach a maximum value of 1, the model can explain up to 93.5% of the model fit.

CONCLUSION AND RECOMMENDATION

Conclusion

Based on the results of the analysis, there are three factors that determine purchasing decisions in this study, namely price (X_1), perceived product quality (X_2), and trust (X_3). The conclusions that can be drawn are as follows:

1. The analysis results show that there are three factors that determine purchasing decisions in this study, namely price (X_1), perceived product quality (X_2), and trust (X_3). These three factors are interrelated in determining purchasing decisions. Consumers tend to develop perceptions of product quality, then place trust in the product, and subsequently consider the price. This study has a 93.5% model fit with the actual data, meaning that 6.5% of other factors have not yet been examined and explained in this study.
2. Based on the research results, it can be concluded that price (X_1) and consumer trust (X_3) have a positive and significant effect on consumer purchase decisions for eco-enzyme soap for woven textiles in Kupang City, whereas perceived product quality (X_2) does not have a significant effect on purchase decisions, with a value of 0.995. The price factor (X_1) has a significance value of 0.42, and the trust factor has a significance value of 0.41. This indicates that affordable price and consumer trust in the product are the main factors influencing consumer purchase decisions, whereas perceived product quality has not yet become a primary consideration in purchase decisions for eco-enzyme soap for woven textiles.

Recommendation

Based on the research findings and discussion, the following suggestions are proposed:

1. The owner of CV. Mazmur Eco Shop is advised to maintain and improve pricing strategies in order to attract consumer interest in making purchases. In addition, the company also needs to build and maintain consumer trust, for example by improving service quality. The company is also advised to increase consumer education regarding the benefits of eco-enzyme soap for woven textiles so that consumer perceptions of product quality can enhance purchasing decisions.
2. Future researchers are expected to conduct further and more in-depth research on other aspects that may play an important role in purchase decisions at CV. Mazmur Eco Shop, as well as to expand the research area beyond Kupang City so that the research findings can have broader applicability.

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