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## The Effect of Product Knowledge, Product Diversity, and Store Atmosphere on Consumer Purchase Decisions at Medan Abadi Store

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**Abstract:** This study aims to test and analyze the influence of product knowledge, product diversity, and store atmosphere on consumer purchasing decisions at Toko Medan Abadi, a furniture store in Medan City. The decline in sales that has occurred in recent years is the background to the importance of this study. Quantitative data were collected through questionnaires distributed to 150 respondents selected using the accidental sampling technique. The data analysis technique used was multiple linear regression. The results of the study showed that partially, product knowledge, product diversity, and store atmosphere had a positive and significant effect on consumer purchasing decisions. In addition, simultaneously, the three independent variables also had a significant effect on purchasing decisions. This study suggests that Toko Medan Abadi improve employee product mastery, increase product variety, and improve the quality of store atmosphere in order to increase consumer purchasing decisions and support store sales growth.

**Keywords:** Product Knowledge, Product Diversity, Store Atmosphere, Purchasing Decisions, Toko Medan Abadi, Marketing, Consumer Behavior

### INTRODUCTION

Marketing is an important element in business activities, especially in attracting, retaining, and expanding the customer base. Through effective marketing, entrepreneurs can introduce products to the right target market, build brand awareness, create attraction, and encourage purchases. Marketing also helps business actors understand customer wants and needs, which ultimately supports product innovation and service adjustments to remain competitive. A strong marketing strategy not only increases customer satisfaction but also creates sustainable loyalty and contributes to the company's long-term growth.

In an increasingly competitive business world, understanding consumer behavior is key. One element in consumer behavior is the purchasing decision. Manik et al. (2022) stated that the purchasing decision is the stage where consumers are directly involved in the process of choosing, obtaining, and using the goods offered. This decision is greatly influenced by various

factors, one of which is product knowledge, namely the extent to which consumers know and understand the attributes and benefits of a product.

According to Mutiara & Syahputra (2018), product knowledge includes information about product categories, brands, terminology, features, prices, and beliefs about product quality. If product information is conveyed well, consumers will be more confident in making purchasing decisions. On the other hand, lack of information can cause doubt and even cancel the intention to buy.

Another factor that also determines is product diversity. Product diversity is important because consumers tend to look for stores that provide a complete selection according to their needs. Saragih et al. (2023) explained that product diversity includes a variety of brands, sizes, qualities, and availability of goods that are always available. With this diversity, consumers have the freedom to choose the most suitable product, and this can increase the likelihood of purchasing.

In addition to product knowledge and product diversity, store atmosphere is also an important variable. Store atmosphere includes physical elements such as lighting, layout, room temperature, cleanliness, and decoration. Sopiah & Sangadji (2022) emphasized that store atmosphere must be designed according to the target market and be able to provide a pleasant shopping experience. A good shopping environment can encourage consumers to linger in the store and increase their likelihood of making a purchase.

In Medan City, the development of furniture material stores has been quite rapid along with the increasing development and need for interiors. Furniture material stores are now transforming not only as providers of building materials such as plywood, HPL, glue, and other equipment, but also as service centers with various innovations such as online sales and ordering via applications. However, the increasingly tight level of competition requires each store to excel in service quality, product variety, and marketing strategy.

One of the stores that is experiencing challenges in this regard is the Medan Abadi Store, located at Jl. Gunung Krakatau No. 209C-D, Medan. This store experienced a decline in purchases from year to year, with total sales decreasing from IDR 1,835,369,000 in 2020 to IDR 1,792,445,000 in 2024. Based on initial observations, the main cause was the lack of product mastery by employees and suboptimal communication with consumers, which resulted in product information not being conveyed properly.

This condition is reflected in the results of a pre-survey which showed that the majority of consumers did not understand the characteristics of the store's products. Only 37% of respondents stated that they understood the products being sold, and only 43% understood the long-term benefits. In addition, only 37% of respondents considered that the store's products had better selling value than competitors. The average percentage of disagreement reached 61.11%, indicating the need for a strategy to improve consumer understanding of the product. Regarding product diversity, most respondents felt that the store did not provide enough choices. Around 60% of respondents stated that the store did not have adequate product completeness, 63% stated that there was no variety of brands, and 63% stated that there was no variety of product sizes that fit their needs. This shows that consumers do not feel that their needs are being met well by Toko Medan Abadi.

The store atmosphere also received less positive ratings. As many as 60% of respondents did not agree that the lighting in the store was bright enough to support product selection activities. As many as 57% considered that the layout of the goods made it difficult to search, and 63% stated that the room temperature did not support comfortable shopping. The average dissatisfaction reached 60%, indicating the importance of improving the interior and physical comfort of the store.

From all of these descriptions, it can be concluded that Medan Abadi Store faces major challenges in terms of product knowledge, product diversity, and store atmosphere. These three

factors are strongly suspected of influencing the decline in consumer interest in making purchases. Therefore, this study will raise the title:

"The Influence of Product Knowledge, Product Diversity, and Store Atmosphere on Consumer Purchasing Decisions at Medan Abadi Store."

Based on the background above, the objectives of this study are as follows: (1) To test and analyze the influence of product knowledge on consumer purchasing decisions at Medan Abadi Store. (2) To test and analyze the influence of product diversity on consumer purchasing decisions at Medan Abadi Store. (3) To test and analyze the influence of store atmosphere on consumer purchasing decisions at Medan Abadi Store. (4) To test and analyze the influence of product knowledge, product diversity, and store atmosphere on consumer purchasing decisions at the Medan Abadi Store.

## **METHOD**

This research was conducted at the Medan Abadi Store located at Jalan Gunung Krakatau No. 209 C-D, Medan City, with an implementation time from February to April 2025. The type of data used is quantitative data, according to Rangkuti's view (2019) which states that data in statistics is data in the form of numbers. The data collected came from two sources, namely primary data in the form of questionnaires to consumers of the Medan Abadi Store and secondary data from documentation studies and relevant literature, as explained by Wahyudi (2019) regarding the types of data sources.

The population of this study includes all consumers of the Medan Abadi Store, although the exact number is unknown. Therefore, referring to the suggestions of Hair et al. (2017), the number of samples was determined between 75 and 150 respondents, based on the number of indicators in the study which amounted to 15. The researcher finally chose 150 respondents using the accidental sampling technique. According to Jaya (2019), the population is all objects or subjects that have certain characteristics, and according to Nurdin and Hartati (2019), a sample is part of the population taken based on certain procedures.

Data collection techniques involve interviews, observations, questionnaires, and literature studies. Tantawi (2019) states that a questionnaire is a tool used to collect data from respondents through a list of questions, while literature studies involve collecting information from various written sources. Assessment of responses using the Likert scale according to Herlina (2019), which classifies responses into five levels ranging from strongly agree to strongly disagree.

To ensure data reliability, validity and reliability tests are carried out. The validity test aims to measure the accuracy of the instrument, as explained by Priyatno (2018) and Herlina (2019), using the Pearson correlation coefficient, and 5% significance as the standard for item eligibility. Marzuki et al. (2020) added that the correlation of items to the total score must be significant for the item to be considered valid. The reliability test uses the Cronbach Alpha method which according to Herlina (2019), reliability is considered poor if  $<0.6$ , acceptable if between  $0.6-0.79$ , and good if  $\geq 0.8$ .

Classical assumption tests include normality, multicollinearity, and heteroscedasticity tests. Gunawan (2020) stated that the normality test aims to evaluate whether the residuals are normally distributed, either through graphs or the Kolmogorov-Smirnov test. The multicollinearity test according to Priyatno (2018) looks at the correlation between independent variables with VIF indicators  $<10$  and Tolerance  $> 0.1$  as the feasibility limit. For the heteroscedasticity test, a scatterplot graph is used to see whether the points are spread randomly, as explained by Priyatno (2018), which indicates that there is no heteroscedasticity problem if no particular pattern is seen.

Data analysis was carried out using multiple linear regression as explained by Priyatno (2018), to measure the effect of independent variables on dependent variables simultaneously and partially. The regression equation used is:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e,$$

with Y as the purchasing decision, X1 as product knowledge, X2 product diversity, and X3 store atmosphere.

Hypothesis testing is carried out partially (t-test) and simultaneously (F-test), based on the decision of Riyanto and Hatmawan (2020), which states that significant results are achieved if the p-value is <0.05. The t-test is used to measure the influence of independent variables individually on the dependent variable, while the F-test is used to assess the influence collectively. Finally, the analysis of the coefficient of determination (R<sup>2</sup>) is used to determine the extent of the contribution of the independent variable to the dependent variable. According to Herlina (2019), the closer the R<sup>2</sup> value is to 1, the stronger the influence of the independent variable on the dependent variable, and if the value is 0 it means there is no influence at all.).

## RESULTS AND DISCUSSION

### Research Results

#### Respondent Characteristics

Respondent description is a description of the analysis/observation unit being studied which includes the characteristics or profiles of respondents obtained from the results of processing questionnaire data. The results of data collection carried out on customers from companies that were used as respondents obtained the characteristics of respondents based on gender, number of purchases and frequency of purchases. The following are the characteristics of respondents based on gender which will be explained in table 4.1 below, including:

Based on Respondent Characteristics Based on Gender, it is known that male respondents are 98 people or 65% of the total respondents while female respondents are 52 people or 35% of the total respondents. Thus, it can be seen that the dominant consumers who make purchases at the Medan Abadi Store are men.

Based on Respondent Characteristics Based on Purchase Amount, it is known that respondents with a purchase amount below Rp. 3,000,000 are 79 people or 53% of the total respondents, while respondents with a purchase amount between Rp. 3,000,000 - Rp. 6,000,000 is 45 people or 30% of the total respondents and respondents with a purchase amount above Rp. 6,000,000 are 26 people or 17% of the total respondents. Thus, the dominant respondents who make purchases on Medan Abadi Store products are consumers with a purchase amount below Rp. 3,000,000.

Based on the Characteristics of Purchase Frequency Respondents, it is known that respondents who buy once a month are 87 people or 58% of the total respondents. Respondents who buy twice a month are 42 people or 28% of the total respondents, while respondents who buy more than twice a month are 21 people or 14% of the total respondents. Thus, the dominant respondents who buy on Medan Abadi Store products are consumers who buy once a month.

### Validity and Reliability Test

#### Validity Test

**Table 1. Results of the Validity Test of the Product Knowledge Variable (X<sub>1</sub>)**

No	Statement	r <sub>count</sub>	r <sub>table</sub>	Information
1	Store employees know all the uses of the equipment products sold.	0.814	0.361	Valid
2	Store employees know the advantages of the products offered.	0.686	0.361	Valid

3	Store employees are able to know the benefits of the products sold by Medan Abadi Store.	0.864	0.361	Valid
4	Medan Abadi employees often suggest the best products to store consumers.	0.840	0.361	Valid
5	Medan Abadi Store owners always maintain consumer privacy about the products they buy.	0.743	0.361	Valid
6	Medan Abadi Store employees always advise consumers to buy products according to their utility.	0.941	0.361	Valid

Source: Research Results, 2025 (Processed Data)

From Table 1 above, it shows that based on the results of the validity test for the Product knowledge variable, all Corrected Item-Total Correlation values are greater than the minimum correlation limit value of 0.361, so that the results obtained are that all statements in the questionnaire are valid.

The following are the results of the validity test for the research variables can be seen in table 2 below:

**Table 2. Results of the Validity Test for the Product Diversity Variable (X<sub>2</sub>)**

No	Statement	r <sub>count</sub>	r <sub>table</sub>	Information
1	I feel that Medan Abadi Store provides a complete range of products according to their needs.	0.773	0.361	Valid
2	Medan Abadi Store offers a selection of products that are sufficient to meet my various needs.	0.806	0.361	Valid
3	Medan Abadi Store provides a variety of brands of products that I can choose from.	0.713	0.361	Valid
4	I am satisfied with the variety of brands offered at Medan Abadi Store.	0.780	0.361	Valid
5	Medan Abadi Store offers products in various sizes that suit my needs.	0.787	0.361	Valid
6	I feel that Medan Abadi Store has a complete selection of product sizes.	0.740	0.361	Valid
7	Medan Abadi Store provides products with varying qualities according to my needs.	0.694	0.361	Valid
8	I am satisfied with the variety of product quality available at Medan Abadi Store.	0.864	0.361	Valid

Source: Research Results, 2025 (Processed Data)

From Table 2 above, it shows that based on the results of the validity test for the Product Diversity variable, all Corrected Item-Total Correlation values are greater than the minimum correlation limit value of 0.361, so that the results obtained are that all statements in the questionnaire are valid.

The following are the results of the validity test for the research variables can be seen in table 3 below:

**Table 3. Results of the Validity Test for the Store Atmosphere Variable (X<sub>3</sub>)**

No	Statement	r <sub>count</sub>	r <sub>table</sub>	Information
1	The lighting inside the Medan Abadi Store is bright enough to make it easier for me to choose products.	0.794	0.361	Valid
2	The lighting in Medan Abadi Store creates a comfortable atmosphere when shopping.	0.656	0.361	Valid
3	The layout of the items at the Medan Abadi Store makes it easy for me to find the products I am looking for.	0.861	0.361	Valid
4	The layout of the goods inside the store is neat and well organized.	0.725	0.361	Valid
5	The temperature inside the Medan Abadi Store felt comfortable while I was shopping.	0.688	0.361	Valid

6	The room temperature at Medan Abadi Store supports comfortable shopping for a long time.	0.696	0.361	Valid
7	The facilities inside the Medan Abadi Store, such as the parking area, are quite adequate and comfortable to use.	0.773	0.361	Valid
8	Other facilities at the Medan Abadi Store, such as the waiting room or toilets, are quite good and clean.	0.723	0.361	Valid
9	The interior design of Medan Abadi Store looks attractive and in accordance with the store concept..	0.802	0.361	Valid
10	The colors and decorations inside Medan Abadi Store create a comfortable atmosphere while shopping..	0.756	0.361	Valid

Source: Research Results, 2025 (Processed Data)

From Table 3 above, it shows that based on the results of the validity test for the Product Diversity variable, all Corrected Item-Total Correlation values are greater than the minimum correlation limit value of 0.361, so that the results obtained are that all statements in the questionnaire are valid.

The following are the results of the validity test for the research variables can be seen in table 4 below:

**Table 4. Results of the Validity Test for the Purchase Decision Variable (Y)**

No	Statement	rcount	rtable	Information
1	I feel confident with the quality of the products available at Medan Abadi Store.	0.806	0.361	Valid
2	I often choose products from Toko Medan Abadi because they have been proven to meet their needs.	0.692	0.361	Valid
3	I tend to buy the same products from Medan Abadi Store every time I shop.	0.800	0.361	Valid
4	I feel comfortable and used to shopping for products at Medan Abadi Store because of the consistent service and product quality.	0.684	0.361	Valid
5	I can quickly find the desired product at Medan Abadi Store.	0.769	0.361	Valid
6	I feel that the purchasing process at Toko Medan Abadi is efficient and does not take much time.	0.827	0.361	Valid

Source: Research Results, 2025 (Processed Data)

From Table 4 above, it shows that based on the results of the validity test for the Purchase Decision variable, all Corrected Item-Total Correlation values are greater than the minimum correlation limit value of 0.361, so that the results show that all statements in the questionnaire are valid.

### Reliability Test

**Table 5. Reliability Test of Research Variables**

Reliability Statistics		
Variables	Cronbach's Alpha	N of Items
Product Knowledge	0.900	6
Product Diversity	0.902	8
Store Atmosphere	0.913	10
Purchase Decision	0.855	6

Source: Research Results, 2025 (Processed Data)

Based on Table 5. above, it can be stated that the items for all variables have a Cronbach's alpha value above 0.6 so that the reliability of this variable can be categorized as good.

### Classical Assumption Test

The normality test aims to evaluate whether the residual data from the regression model is normally distributed, which is one of the main requirements in regression analysis. The test is carried out using two methods, namely the normal probability plot graph and the Kolmogorov-Smirnov statistical test. Based on the graph, the residual points follow the diagonal line, indicating that the distribution is close to normal. The results of the Kolmogorov-Smirnov test show a significance value of 0.200 ( $> 0.05$ ), which indicates that the residual data is normally distributed and this assumption is met.

The multicollinearity test is carried out to detect whether there is too high a relationship between independent variables that can affect the accuracy of the regression results. The test results show a Tolerance value above 0.1 and a VIF value below 10 for all variables, namely product knowledge, product diversity, and store atmosphere. This indicates that there is no multicollinearity problem, so that the three variables are suitable for use in the regression model.

The heteroscedasticity test aims to ensure that the variance of the residual is constant or homogeneous. Using the scatterplot method, it can be seen that the points are randomly distributed around the Y axis and do not form a certain pattern. This indicates that there is no heteroscedasticity, and the regression model meets this assumption.

### Multiple Linear Regression Analysis

Regression analysis is used to determine how much influence the independent variables have together on the dependent variable. The model obtained from the analysis is:

$$Y = 0.261 + 0.397X_1 + 0.321X_2 + 0.105X_3,$$

where Y is the purchasing decision,  $X_1$  is product knowledge,  $X_2$  is product diversity, and  $X_3$  is store atmosphere.

This means that when all independent variables are zero, the purchasing decision remains at 0.261. A one-unit increase in product knowledge will increase purchasing decisions by 0.397, product diversity by 0.321, and store atmosphere by 0.105. This shows that all three variables have a positive influence on purchasing decisions.

### Hypothesis Testing

The t-test is used to assess the influence of each independent variable individually on purchasing decisions. The results show that all three variables have a t-value greater than t-table (1.976), and a significance value below 0.05. This means that product knowledge, product diversity, and store atmosphere all have a partial significant influence on purchasing decisions at Toko Medan Abadi.

The F-test is conducted to assess the influence of the three variables simultaneously on purchasing decisions. The F-value of 51.684 is much greater than the F-table of 3.06, with a significance value of 0.000. This shows that simultaneously, the three independent variables together have a significant influence on purchasing decisions.

### Determination Coefficient Test ( $R^2$ )

The determination coefficient or  $R^2$  of 0.505 indicates that 50.5% of the variation in purchasing decisions can be explained by product knowledge, product diversity, and store atmosphere. While the remaining 49.5% is influenced by other variables not included in the model, such as service quality, price, promotion, location, and other external factors. This means that the model is good enough, although there is still room to include other variables to make the model more accurate.

## Discussion

### 1. The Influence of Product Knowledge on Purchasing Decisions

The results of the analysis show that the product knowledge variable (X1) has a positive and significant influence on purchasing decisions at the Medan Abadi Store, with a calculated  $t$  value =  $6.690 > t_{table} = 1.976$  and a significance of  $0.000 < 0.05$ . The regression coefficient  $b_1 = 0.397$ , indicating that every 1 unit increase in product knowledge, the purchasing decision increases by 39.7%.

According to experts, product knowledge that includes consumer understanding of the benefits, specifications, and quality of the product will increase consumer confidence and self-confidence in making purchasing decisions. This speeds up the decision-making process and increases the suitability of the product to consumer expectations.

### 2. The Influence of Product Diversity on Purchasing Decisions

The product diversity variable (X2) also shows a positive and significant influence, with a calculated  $t$  value =  $6.543 > t_{table} = 1.976$  and a significance level of  $0.000 < 0.05$ . The regression coefficient  $b_2 = 0.321$  means that every 1 unit increase in product diversity will increase purchasing decisions by 32.1%.

Experts state that product diversity provides flexibility and freedom for consumers to choose, which increases satisfaction and encourages purchases. Stores with a wide selection of products tend to be more able to attract consumers' attention and meet their various needs.

### 3. The Influence of Store Atmosphere on Purchasing Decisions

The store atmosphere variable (X3) has a positive and significant influence on purchasing decisions with a  $t$  count value =  $2.247 > t_{table} = 1.976$ , a significance of  $0.026 < 0.05$ , and a coefficient  $b_3 = 0.105$ , meaning that an increase in store atmosphere by 1 unit will increase purchasing decisions by 10.5%.

According to experts, a comfortable store atmosphere—including lighting, cleanliness, layout, music, and service—creates a pleasant shopping experience. This makes consumers feel more at home, and increases their likelihood of making a purchase.

### 4. Simultaneous Influence of Product Knowledge, Product Diversity, and Store Atmosphere on Purchasing Decisions

Based on the  $F$  test, it is known that simultaneously the three variables have a significant effect on purchasing decisions, with a calculated  $F$  value =  $51.684 > F_{table} = 3.06$ , and a significance of  $0.000 < 0.05$ . The coefficient of determination  $R^2$  value =  $0.505$ , which indicates that 50.5% of the variation in purchasing decisions can be explained by the three variables. The remaining 49.5% is influenced by other factors outside the model such as price, product quality, service, and location.

Experts emphasize that the combination of product knowledge, diversity of choices, and store atmosphere forms a positive synergy in the consumer experience. If all three are managed optimally, purchasing decisions will increase and consumer loyalty to the store will also grow strongly.

## CONCLUSION

Purchasing decisions are consumer actions to buy or not buy a product, which are influenced by various factors and go through several stages before consumers make a final decision. According to Alwi et al. (2003), the syntactic function plays a role in forming a sentence structure that is complete in meaning; this is relevant in compiling effective marketing communications to influence consumer decisions linguistically and psychologically.

Product knowledge refers to all information related to a product being sold, including features, prices, special characteristics, and advantages and disadvantages of the product. When this information is conveyed clearly and precisely, consumers will feel more confident in making decisions.

Product diversity is the development of a product so that it produces a variety of choices that become a collection of all products and goods offered by certain sellers to buyers. With this diversity, consumers have the freedom to choose the product that best suits their needs and preferences.

Store atmosphere is a store atmosphere that is very influential in creating comfort and appeal for customers. A store atmosphere that is optimally designed through lighting, layout, and cleanliness can make customers feel at home and encouraged to make purchases.

Based on the results and discussion of the study, the author makes several conclusions as follows:

1. The t-test results show that the t-count value  $>$  t-table with significance, so it can be concluded that there is a significant positive influence partially between product knowledge on purchasing decisions at the Medan Abadi Store.
2. The t-test results show that the t-count value  $>$  t-table with significance, so it can be concluded that there is a significant positive influence partially between product diversity on purchasing decisions at the Medan Abadi Store.
3. The t-test results show that the t-count value  $>$  t-table with significance, so it can be concluded that there is a significant positive influence partially between store atmosphere on purchasing decisions at the Medan Abadi Store.
4. The F-test results show that the F-count value  $>$  F-table with significance, so it can be concluded that there is a significant influence between product knowledge, product diversity, and store atmosphere simultaneously on purchasing decisions at the Medan Abadi Store.

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