

The Effect of Product Availability on Customer Satisfaction at UD. Sahlan Utama Panyabungan III, Mandailing Natal Regency

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ABSTRACT

Product availability is a key factor in shaping customer satisfaction, particularly in the building supply retail sector, which requires timely and adequate stock. However, customer complaints regarding limited inventory are still found. This study aims to measure the effect of product availability on customer satisfaction at UD. Sahlan Utama, located in Kelurahan Panyabungan III. The sample consisted of 96 respondents selected through purposive sampling. Data were collected through a Likert-scale questionnaire (angket), observation, and documentation, and analyzed using SPSS version 21. The results showed that most respondents gave positive assessments of both product availability and customer satisfaction. Simple linear regression analysis yielded a t-value of 4.530, which is greater than the t-table value of 1.661, with a significance value of $0.000 < 0.05$, indicating a positive and significant influence of product availability on customer satisfaction. The coefficient of determination (R^2) of 0.763 indicates that 76.3% of customer satisfaction is explained by product availability, while the remaining 23.7% is influenced by other factors.

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INTRODUCTION

Product availability is a key factor in maintaining continuity and customer satisfaction, particularly in the building materials retail industry. Customers tend to be satisfied when the products they need are fully available and easily accessible, and this has served the community's needs since 2000. However, this can be achieved through an efficient process (Kotler, Philip & Keller, 2016). Conversely, limited stock or disorganized inventory often leads to dissatisfaction and risks reducing customer loyalty (Tjiptono, 2020). UD. Sahlan Utama is a building materials store located in Panyabungan III Village, Mandailing Natal Regency. Initial observations and interviews with several customers revealed several issues, such as frequently out-of-stock items, unsystematic product layout, and limited product variety.

This results in a less than optimal shopping experience. These issues highlight the importance of good inventory management and product presentation as part of a strategy to increase customer satisfaction. Accurate inventory management, product completeness, and responsive service can be differentiating factors in local retail competition (Peter, 2019). Therefore, this study was conducted to analyze the effect of product

availability on customer satisfaction at UD. Sahlan Utama. The results are expected to contribute to the development of retail business strategies oriented toward customer satisfaction.

THEORETICAL BASIS

1. Product Availability

Product availability is a business's ability to ensure that the products customers need are available at the right time and in the right place. In the context of a building supply store, this aspect is crucial because it affects the smooth running of customer construction projects, which often require fast and accurate product availability.

According to Peter (2019), product availability is the result of optimal customer service within the supply chain system. Without availability, the transaction process will not proceed. Mahendra (2015) stated that a complete product inventory reflects efficient stock management and demonstrates the store's ability to effectively understand customer demand patterns. In the digital era, the use of data-based inventory systems has helped companies monitor and update inventory information in real time (Sugiharto & Renata, 2020).

Based on previous research cited in this thesis, the indicators used to measure product availability (X) are:

a. Sales Layout

Sales layout is the arrangement of space and products within a store to create convenience and efficiency for customers in finding items. A good layout allows products to be displayed clearly and neatly, making them easy to find and enhancing the shopping experience (Suprayatino, 2024).

b. Product Stock in Stores is Always Available

A store that maintains consistent inventory demonstrates professionalism in supply chain management. This makes customers feel secure knowing the products they need are available at all times (Assauri, 2017).

c. Ease of Purchasing Products

Availability is not only about stock levels, but also how products are presented and accessed. Clear product information, an easy purchasing process, and strategic product placement contribute to positive customer perceptions (Tjiptono, 2020).

d. Product Completeness in Stores

Product completeness includes the variety of types, sizes, and brands offered by the store. The more diverse the product selection, the greater the store's opportunity to meet customer needs and increase customer satisfaction (Sugiharto, 2020).

With these indicators, it is hoped that product availability can be measured objectively and its impact on customer satisfaction can be analyzed.

2. Customer Satisfaction

Customer satisfaction is defined as a feeling of pleasure or disappointment that arises after comparing expectations for a product or service with the reality received (Kotler & Keller, 2016). If the product received meets or exceeds expectations, customers will be satisfied; otherwise, they tend to be disappointed.

According to Tjiptono (2015), satisfaction is the result of consumers' evaluation of the benefits received from a product compared to their expectations. Satisfied customers are more likely to make repeat purchases and recommend the product to others. In the long term, this is a crucial asset in maintaining business continuity.

Based on the theory used in this thesis, the indicators for measuring *customer satisfaction (Y)* refer to the opinion of Kotler and Armstrong in Rizka Chusnul Muna (2022), namely:

a. Customer Complaint and Suggestion Handling System

Refers to the store's ability to respond to and resolve customer complaints quickly and fairly. This system reflects the store's service orientation and concern for the customer experience.

b. Company Reputation Survey System

Customer perceptions of the store's reputation are obtained through surveys or feedback that measure how customers assess the store's credibility, trustworthiness, and service quality.

c. Customer Analytics System

Using customer data and input to improve service and product quality. This analysis helps the store better understand customer needs and make informed business strategy decisions.

These three indicators play a crucial role in creating and maintaining long-term relationships between the store and its customers. Customer satisfaction reflects the store's success in providing the expected value and service.

METHOD

This study employs a quantitative approach with an associative approach, aiming to examine the causal relationship between independent and dependent variables. The primary focus of this study is to analyze the effect of product availability (X) on customer satisfaction (Y) at UD. Sahlan Utama, Panyabungan III Village, Mandailing Natal Regency. Because the exact customer population is unknown, a purposive sampling technique was used, based on specific criteria, namely customers who have made at least two transactions. The sample size was 96 respondents, obtained using the Lemeshow formula.

Data were collected through three main techniques: observation to directly observe store conditions and service; a five-point Likert-scale questionnaire to measure respondents' perceptions of the variables studied; and documentation to supplement secondary data. The questionnaire instrument was tested for validity using Pearson Product Moment correlation, and its reliability was assessed using Cronbach's Alpha. All items were found to be valid and reliable. Data analysis was carried out using SPSS software version 21. The analysis steps included classical assumption tests (normality and heteroscedasticity), simple linear regression analysis, t-test to test the significance of the influence, and analysis of the coefficient of determination (R^2) to determine how much the independent variables contribute to the dependent variable.

RESULTS

This study involved 96 respondents, customers of UD. Sahlan Utama, selected using purposive sampling. The majority of respondents were aged 16–35 years (58%) and male (66%).

Classical Assumption Test

a. Normality Test

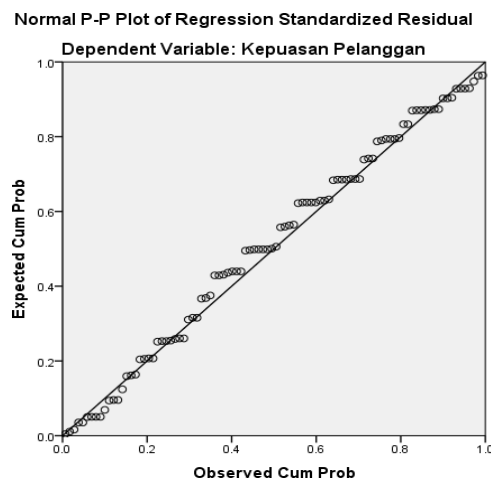


Figure 1. Results of Normality Test Using P-Plot Graph

Source: Data Management Program SPSS Version 21

Referring to Figure 1, the results of the normality test show that the distribution of points on the Normal P-Plot graph follows a diagonal line pattern. This indicates that the residual data is normally distributed, thus meeting the normality assumption, and the analysis can proceed using linear regression.

b. Heteroscedasticity Test

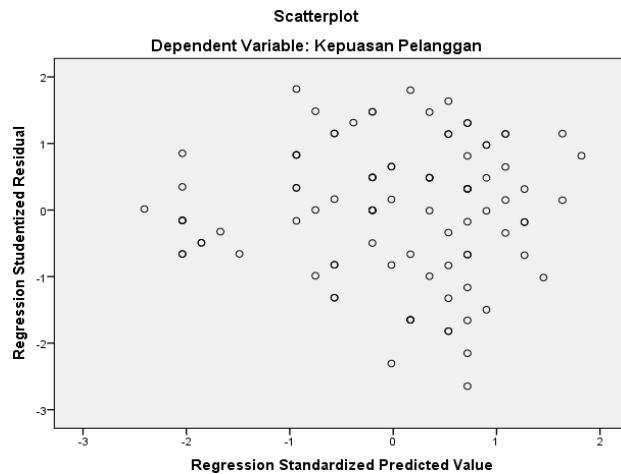


Figure 2. Heteroscedasticity Test Results Using Scatterplot
Source: SPSS Data Management Program Version 21

According to Figure 2, the distribution of residual points appears to be randomly distributed without forming a specific pattern such as a cone or curve. The points are also evenly distributed above and below the zero line on the Y-axis. This pattern indicates that the regression model does not contain symptoms of heteroscedasticity, thus fulfilling one of the classical assumptions in regression analysis.

c. Simple Linear Regression Analysis

Table 3. Simple Linear Regression Test Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.530	1.862		2.433	.017
Ketersediaan Produk	.670	.038	.874	17.409	.000

Sumber: *Pengelolaan Data Program SPSS Versi 21*

Referring to Table 4, the regression results show that the calculated t-value of 17.409 exceeds the t-value of 1.661, with a significance level of $0.000 < 0.05$, indicating that product availability has a significant effect on customer satisfaction. The regression equation $Y = 4.530 + 0.670X$ indicates that when the product availability variable is set to zero, the customer satisfaction level is 4.530. The regression coefficient of 0.670 indicates that each one-unit increase in product availability will increase customer satisfaction by 0.670, assuming other variables remain constant. The Standardized Coefficient (Beta) value of 0.874 also confirms that product availability is a dominant factor in this model. Thus, it can be concluded that product availability has a positive and significant contribution to customer satisfaction at UD. Sahlan Utama.

d. Partial Test (T-Test)

Table 4. Partial Test Results (T-Test)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.530	1.862		2.433	.017
Ketersediaan Produk	.670	.038	.874	17.409	.000

Sumber: *Pengelolaan Data Program SPSS Versi 21*

Based on the t-test results in Table 5, the calculated t value of 17.409 is greater than the t-table value of 1.661. Therefore, the decision is to reject H_0 and accept H_a . This proves that the product availability variable (X) has a positive and significant influence on customer satisfaction (Y).

e. Coefficient of Determination Test

Table 5. Coefficient of Determination Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.874a	.763	.761	2.040

Sumber: *Pengelolaan Data Program SPSS Versi 21*

Referring to Table 6, the R-square value of 0.763 indicates that product availability explains 76.3% of the variation in customer satisfaction, while the remaining 23.7% is influenced by other factors not included in the model. This finding indicates that product availability has a strong and significant influence on customer satisfaction.

DISCUSSION

The results of this study demonstrate that product availability has a positive and significant impact on customer satisfaction at UD. Sahlan Utama. This is demonstrated by the calculated t-value of 17.409, which far exceeds the t-table value of 1.661, and a significance level of $0.000 < 0.05$. The regression equation $Y = 4.530 + 0.670X$ indicates that each one-unit increase in product availability will increase customer satisfaction by 0.670 points. The coefficient of determination (R^2) of 0.763 indicates that 76.3% of the variation in customer satisfaction can be explained by product availability, while the remaining 23.7% is influenced by factors outside the model. Furthermore, the beta coefficient of 0.874 confirms that product availability is the most dominant variable in this model.

These findings align with Kotler, Philip & Keller (2016), who stated that good product availability will increase customer convenience and satisfaction because it directly meets consumer expectations. In Tjptono's (2020) view, the presence of a complete and well-organized product in-store also plays a crucial role in enhancing the customer shopping experience. Furthermore, Peter (2019) explains that difficulty finding a product or limited stock can be a major trigger for customer dissatisfaction in the retail sector. In the context of a building supply store like UD. Sahlan Utama, these results confirm that proper stock management, structured product arrangement, and adequate product variety are crucial elements in supporting satisfactory service. Thus, consistent and well-managed product availability not only directly impacts customer transactions but also fosters loyalty and a positive perception of the store in the long term.

The researcher first outlined the variables before presenting the research results. There are two categories of variables: independent and dependent variables. This research was conducted at UD. Sahlan Utama with the title "The Effect of Product Availability on Customer Satisfaction at UD. Sahlan Utama Panyabungan III, Mandailing Natal Regency." Product availability is the independent variable (X) that is suspected of influencing customer satisfaction as the dependent variable (Y). The purpose of this research is to evaluate the extent to which product availability influences customer satisfaction at UD. Sahlan Utama.

According to Peter (2019), product availability is the ability of a business to provide products in the right place and at the right time. Kotler (2016) states that product availability is crucial for meeting consumer

needs and maintaining customer loyalty—its absence can lead to lost sales opportunities. Furthermore, Kotler (2016) also defines customer satisfaction as a feeling of pleasure or disappointment that arises after comparing perceived performance with expectations. Tjiptono (2019) states that ease of product retrieval enhances the shopping experience and impacts customer satisfaction.

This research involved 96 respondents, consumers of UD. Sahlan Utama. The analysis of relationships between variables was conducted using SPSS version 21. Of these, 63 respondents (66%) were male, and 33 respondents (34%) were female. Fifty-six respondents (58%) were aged 16–35, and 40 respondents (42%) were aged 36–65.

The questionnaire was declared valid based on the results of the validity test using SPSS. There were 12 items for variable X and 9 items for variable Y. All calculated r values were greater than the table r (0.201), thus all items were declared valid. The calculated r values for variable X indicators were: 0.632; 0.760; 0.610; 0.432; 0.487; 0.328; 0.572; 0.373; and 0.243. Meanwhile, for variable Y: 0.622; 0.439; 0.515; 0.488; 0.722; 0.457; 0.616; 0.486; and 0.537.

A reliability test using Cronbach's Alpha technique showed that variable Y had a value of 0.700 and variable X had a value of 0.767, both > 0.60 , thus the instrument was declared reliable.

Two important assumptions in simple linear regression are the normality test and the heteroscedasticity test. The results of the normality test using a P-Plot graph show that the data are evenly distributed around the diagonal line, indicating a normal distribution. The heteroscedasticity test using a scatterplot shows that the points are randomly distributed, indicating no specific pattern, so the assumptions are met and linear regression can be performed.

Hypothesis testing was conducted using simple linear regression, t -tests, and determination tests (R^2) using SPSS 21. The resulting regression equation is $Y = 4.530 + 0.670X$, meaning that every one-unit increase in X will increase Y by 0.670 units.

The t -test yielded a calculated t value of 17.409 $>$ t -table value of 1.661, with a significance level of $0.000 < 0.05$. Therefore, H_0 is rejected and H_1 is accepted. This means that product availability has a positive and significant effect on customer satisfaction.

The determination test showed an R^2 value of 0.763, or 76.3%. This means that variable X explains 76.3% of the effect on Y, with the remaining 23.7% influenced by factors outside the study. Thus, this study empirically proves that product availability has a significant effect on customer satisfaction at UD. Sahlan Utama.

CONCLUSION

Based on the research results at UD. Sahlan Utama, it can be concluded that product availability has a positive and significant influence on customer satisfaction. The t -value of 17.409, which exceeds the t -table of 1.661, and a significance of $0.000 < 0.05$, indicates that statistically this variable influences the level of satisfaction. The coefficient of determination (R^2) value of 0.763 indicates that 76.3% of the variation in customer satisfaction is influenced by product availability. In other words, the more optimal the management of product availability in the store, the higher the level of customer satisfaction that can be achieved.

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