The Influence of Product Quality and Design Innovation on Purchasing Decisions in Sewing MSMEs in Marindal Village

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This study aims to determine the effect of Product Quality and Design Innovation on consumer Purchasing Decisions. The approach used is a quantitative method with 96 respondents. The results of the analysis show that all statement items are valid and reliable, so they are suitable for use. The data are normally distributed and free from symptoms of multicollinearity and autocorrelation. The t-test results show that Product Quality has a positive and significant effect on Purchasing Decisions with a sig. 0.000, while Design Innovation also has a positive and significant effect with a sig. 0.001. Simultaneously, both variables have a significant effect with an F-count value of 159.072 and a sig. 0.000. The R^2 value of 0.774 indicates that 77.4% of the variation in purchasing decisions is explained by these two variables. The better the product quality and design innovation, the higher the consumer purchasing decision.
Keywords: Product Quality; Design Innovation; Purchasing Decisions; Consumer Behavior; Regression Analysis;

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1. Introduction

In the era of globalization and the rapid growth of the creative economy, Micro, Small, and Medium Enterprises (MSMEs) play an essential role in driving national economic development and serving as key contributors to regional economic growth (Cicillia & Handoyo, 2025). In the context of the creative industry, tailoring businesses hold significant potential due to the increasing demand for fashion products and clothing needs. Competition among tailoring MSMEs has become increasingly intense in terms of product quality, design, and service, requiring each business to continuously innovate in order to survive and grow (Nurdiyanto & Ristanto, 2023). Today's consumers are more selective when choosing products, particularly in aspects related to quality and design. Product quality is one of the main determinants influencing purchasing decisions because it reflects useful value, durability, comfort, and overall workmanship (Ma'ruf et al., 2024). Products with neat stitching, high-quality materials, and precise finishing provide greater satisfaction to consumers. However, quality alone is not sufficient to compete in the dynamic fashion industry. Design innovation also plays an important role in attracting market attention, as consumer preferences tend to change in line with evolving fashion trends (Putrifasari et al., 2023). Creative and trend-aligned designs enhance product attractiveness and help tailoring MSMEs differentiate themselves from competitors.

Consumer purchasing decisions are the result of a complex evaluation process. Factors such as perceived quality, design innovation, price, and brand image become significant considerations before consumers decide to purchase a product (Fadhilah & Cahya, 2022). In the context of tailoring MSMEs in Marindal Village, understanding these factors is crucial. Marindal Village is known to have several tailoring MSMEs that serve various community needs, ranging from daily wear to uniforms. However, many business owners

still face challenges in maintaining customer loyalty and increasing sales, largely due to limited design updates and inconsistent quality standards (Nurdiyanto & Ristanto, 2023). With greater access to information and increasing consumer expectations, MSMEs are required to develop strategies that focus on customer satisfaction. Superior product quality and attractive design innovation are expected to enhance value and build consumer trust in local products (Ma'ruf et al., 2024). Therefore, this study is essential to determine the extent to which product quality and design innovation influence consumer purchasing decisions. The findings are expected to provide empirical insights that can help tailoring MSMEs in Marindal Village develop more effective business strategies. Moreover, this research may serve as a reference for policymakers in formulating policies aimed at strengthening MSMEs through creativity and product quality enhancement..

2. Methods

Research Location

This study was conducted in Marindal Village, one of the centers for micro, small, and medium enterprises (MSMEs) engaged in tailoring. This location was selected because it has a substantial number of tailoring businesses and a diverse customer base, making it relevant for examining the influence of product quality and design innovation on purchasing decisions (Nurdiyanto & Ristanto, 2023).

Population and Sample

The population in this study consists of all consumers who have purchased products from tailoring MSMEs in Marindal Village. A total of 100 respondents were selected as the research sample. The sampling technique used was purposive sampling, which involves selecting respondents based on specific criteria, such as consumers who have purchased products at least once and are willing to complete the research questionnaire (Fadhilah & Cahya, 2022).

Operational Definition of Variables

a. Variable X_1 (Product Quality): Measured through indicators of material durability, stitching neatness, comfort of use, and conformity to customer orders. Product quality is one of the key factors influencing consumer purchasing behavior (Ma'ruf et al., 2024).
b. Variable X_2 (Design Innovation): Includes the uniqueness of models, motif variations, design creativity, and the ability to adapt to fashion trends. Design innovation strengthens product attractiveness and competitiveness in the marketplace (Putrifasari et al., 2023).
c. Variable Y (Purchasing Decision): Measured through indicators of purchase interest, purchase frequency, product satisfaction, and customer loyalty toward MSMEs. Purchasing decisions are influenced by product quality, innovation, and brand-related factors (Cicillia & Handoyo, 2025).

Data Collection Techniques

Data were collected using two methods:

a. direct observation of production processes and services provided by tailoring MSMEs in Marindal Village, and
b. distribution of questionnaires to consumers using a five-point Likert scale to measure the level of agreement with statements related to each variable. The use of observation and consumer-based surveys is common in research examining MSME purchasing behavior (Fadhilah & Cahya, 2022).

Data Analysis Techniques

The collected data were processed using the Statistical Package for the Social Sciences (SPSS). The analysis included validity and reliability testing of the instrument, along with multiple linear regression to

determine the partial and simultaneous effects of product quality (X_1) and design innovation (X_2) on purchasing decisions (Y). Regression analysis is widely used to identify the determinants of purchasing decisions in MSME-related research (Ma'ruf et al., 2024; Nurdiyanto & Ristanto, 2023).

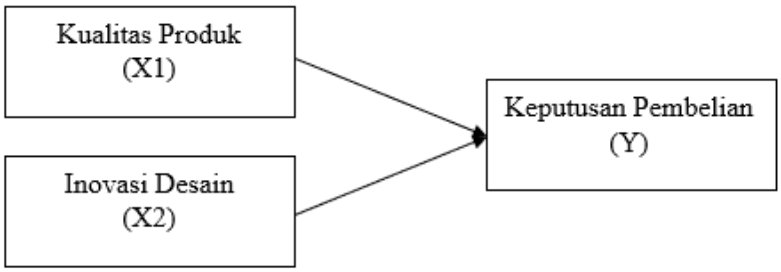

Figure1. Research Conceptual Framework

H1: Product quality has an effect on purchasing decisions. The better the product quality (materials, stitching, comfort, and accuracy of results), the higher the consumer's intention to purchase.
H2: Design innovation has an effect on purchasing decisions. Creative, attractive, and trend-aligned designs increase product appeal and encourage consumers to make a purchase.
H3: Product quality (H1) and design innovation (H2) simultaneously influence purchasing decisions (Y). The combination of both factors makes the product more competitive and preferred by consumers.

$$Y = a + b_1X_1 + b_2X_2 + \varepsilon$$

Description:
Y = Sewing MSMEs in Marindal Village
a = Constant
b1, b2 = Regression Coefficient
X1 = Product Quality
X2 = Design Innovation
e = Interference variable (error term)

1. H_0: There is no significant influence between product quality and design innovation on purchasing decisions among Sewing MSMEs in Marindal Village
2. H_1: There is a significant influence between product quality and design innovation on purchasing decisions among Sewing MSMEs in Marindal Village.

3. Results And Discussion

Validity Test

The validity test aims to determine the extent to which a research instrument is able to measure what it is supposed to measure. If the Sig. (2-tailed) value is <0.05, then the statement item is declared valid; if the Sig. value is >0.05, then the item is declared invalid. This test is important to ensure that each question in the questionnaire accurately measures the intended variable, ensuring that the research results are reliable and highly accurate.

Tabel 1. Hasil Uji Validitas.

Variable	Indicator	R-Count	R-Table	Description
Product Quality (X1)	X1.1	0.877	0.1986	Valid
	X1.2	0.830	0.1986	Valid
	X1.3	0.842	0.1986	Valid
	X1.4	0.900	0.1986	Valid
	X1.5	0.834	0.1986	Valid

Design Innovation (X2)	X2.1	0.924	0.1986	Valid
	X2.2	0.912	0.1986	Valid
	X2.3	0.827	0.1986	Valid
	X2.4	0.841	0.1986	Valid
	X2.5	0.873	0.1986	Valid
Purchase Decision (Y)	Y.1	0.952	0.1986	Valid
	Y.2	0.933	0.1986	Valid
	Y.3	0.935	0.1986	Valid
	Y.4	0.884	0.1986	Valid
	Y.5	0.892	0.1986	Valid

The results of the validity test show that all indicators in the three variables are declared valid because the calculated r-value is greater than the r-table value (0.1986). For the Product Quality variable (X1), the calculated r-values range from 0.830 to 0.900, all of which exceed the r-table value, indicating that all indicators are valid. The Design Innovation variable (X2) also has calculated r-values ranging from 0.827 to 0.924, meaning that all indicators are valid and suitable for use. Meanwhile, the Purchase Decision variable (Y) has calculated r-values ranging from 0.884 to 0.952, which are also higher than the r-table value. Thus, all statement items in the three variables meet the validity criteria and can be used in this study.

Reliability Test

The reliability test was conducted to determine the consistency of respondents' answers to the statement items. An instrument is considered reliable if the Cronbach's Alpha value is greater than 0.60. The closer the alpha value is to 1, the higher the reliability of the instrument. This test is used to ensure that the measuring instrument will provide consistent results when used under relatively similar conditions.

Table 2. Reliability Test Results

Variable	Cronbach's Alpha	R-Table	Description
Product Quality (X1)	0.892	0.6	Reliable
Design Innovation (X2)	0.918	0.6	Reliable
Purchase Decision (Y)	0.953	0.6	Reliable

Normality Test

The normality test is used to determine whether the data are normally distributed. If the Sig. value (Kolmogorov-Smirnov) is greater than 0.05, the data are considered normally distributed, whereas if Sig. < 0.05, the data are not normally distributed. Data normality is important because most parametric statistical tests require the data to follow a normal distribution.

Table 3. Normality Test Results

N	96
Normal Parameters	
Mean	0.0000000
Std. Deviation	1.11768605
Most Extreme Differences	
Absolute	0.300
Positive	0.294
Negative	-0.300
Test Statistic	0.300
Asymp. Sig. (2-tailed)	0.090

Based on the Kolmogorov–Smirnov normality test, the Asymp. Sig (2-tailed) value obtained is 0.090, which is greater than 0.05. This result indicates that the research data are normally distributed and therefore meet the basic assumption required in multiple linear regression analysis. Thus, the data are appropriate for further analysis.

Multicollinearity Test

The multicollinearity test aims to determine whether there is a strong correlation between the independent variables. If the Tolerance value is greater than 0.10 and the VIF value is less than 10, it can be concluded that multicollinearity does not occur. If multicollinearity is present, the regression analysis results may become invalid because the independent variables strongly influence one another.

Table 4. Multicollinearity Test Results

Model	Tolerance	VIF
Product Quality (X1)	0.197	5.067
Design Innovation (X2)	0.197	5.067

The results show that the Product Quality (X1) and Design Innovation (X2) variables have Tolerance values of 0.197 and VIF values of 5.067. Since the tolerance values exceed 0.10 and the VIF values are below 10, it can be concluded that no multicollinearity exists between the independent variables. This means that the variables do not excessively influence each other and can be used together in the regression model.

Heteroscedasticity Test

Heteroscedasticity is assessed by observing the pattern of points in the regression scatter plot. The method involves plotting the "Standardized Predicted Value (ZPRED)" against the "Studentized Residual (SRESID)." The presence or absence of a specific pattern in the scatterplot indicates whether heteroscedasticity occurs. In this plot, the Y-axis represents the predicted values and the X-axis represents the residuals (Predicted Y – Actual Y).

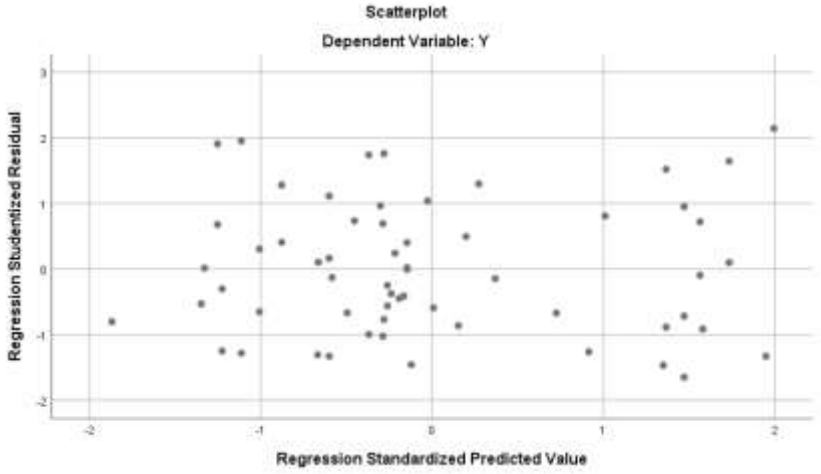

Figure 1. Heteroscedasticity Test Results

Based on the general criteria and visual observation, no symptoms of heteroscedasticity were found. This indicates that the residual values are random and evenly distributed around the regression line. Therefore, the regression model in this study meets the assumption of homoscedasticity.

Autocorrelation Test

The autocorrelation test is a statistical method used to examine whether there is a correlation between errors in one period and errors in the previous period in a linear regression model. The main purpose is to

assess whether the assumption of independent errors has been violated, which commonly occurs in time-series data.

Table 6. Autocorrelation Test Results

Run Test	Unstandardized Residual
Test Value	-0.6408
Cases < Test Value	17
Cases ≥ Test Value	79
Total Cases	96
Number of Runs	31
Z	0.717
Asymp. Sig. (2-tailed)	0.473

The autocorrelation test using the Run Test method shows an Asymp. Sig (2-tailed) value of 0.473, which is greater than 0.05. Therefore, it can be concluded that autocorrelation does not occur among the residuals in the regression model. This indicates that the data are random and that the regression model meets the assumption of independence.

F-Test (Simultaneous Test)

The F-Test aims to determine whether the independent variables simultaneously influence the dependent variable. If Sig. < 0.05, the independent variables significantly affect the dependent variable. This test assesses whether the regression model is appropriate for predicting the dependent variable.

Table 7. F-Test Results (Simultaneous)

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	405.980	2	202.990	159.072	0.000
Residual	118.676	93	1.276		
Total	524.656	95			

The simultaneous test shows that the F-value is 159.072 with a significance level of 0.000. Since the significance value is less than 0.05, Product Quality (X1) and Design Innovation (X2) simultaneously have a significant influence on Purchase Decision (Y). This indicates that the two independent variables together explain variations in the dependent variable, making the regression model valid and reliable.

t-Test (Partial Test)

The t-Test determines the effect of each independent variable individually on the dependent variable. If Sig. < 0.05, the independent variable has a significant effect. This test is important to identify which variable most dominantly influences the dependent variable.

Table 8. t-Test Results (Partial)

Variable	B	Std. Error	Beta	t	Sig.
Constant	5.298	1.156	—	4.584	0.000
Product Quality (X1)	0.492	0.090	0.530	4.777	0.000
Design Innovation (X2)	0.391	0.108	0.372	3.355	0.001

The partial test results show that each independent variable has a positive and significant influence on the dependent variable. Product Quality (X1) has a regression coefficient of 0.492, a t-value of 4.777, and a significance level of 0.000 (< 0.05), meaning that better product quality significantly increases consumer purchase decisions. Design Innovation (X2) has a regression coefficient of 0.391, a t-value of 3.355, and a significance level of 0.001 (< 0.05), indicating that higher design innovation also increases consumer purchasing tendencies.

Coefficient of Determination (R^2)

The coefficient of determination (R^2) measures how well the regression model explains variations in the dependent variable. The closer the R^2 value is to 1, the better the model's explanatory power. A low R^2 indicates that the independent variables do not fully explain the dependent variable.

Table 9. Coefficient of Determination (R^2) Results

Model	R	R-Square	Adjusted R-Square	Std. Error of the Estimate
1	0.408	0.774	0.769	1.12964

The coefficient of determination shows that the R^2 value is 0.774, meaning that 77.4% of the variation in Purchase Decision (Y) can be explained by the two independent variables, Product Quality (X1) and Design Innovation (X2). The remaining 22.6% is explained by other factors not included in this research model, such as price, promotion, and brand image. The high R^2 value indicates that the regression model has strong explanatory power.

Discussion of Results

The Influence of Product Quality on Purchase Decisions

Product quality is a key factor that determines consumer satisfaction and purchasing decisions. In the tailoring MSMEs of Marindal Village, product quality serves as the primary benchmark that influences customers' trust in the finished garments. Consumers tend to choose tailoring services that provide neat stitching, high-quality fabrics, and durable products.

Based on the study results, the Product Quality variable (X1) has a significance value of 0.000 < 0.05 with a regression coefficient of 0.492, indicating that product quality has a positive and significant effect on purchase decisions. This finding implies that the higher the quality delivered by the tailoring MSMEs, the greater the likelihood that consumers will continue using their services.

In the context of tailoring businesses, quality can be measured through the accuracy of garment measurements, stitching durability, fabric strength, and the alignment between the customer's order and the final result. When MSME owners consistently maintain high-quality standards, they create customer satisfaction that encourages repeat purchases. In addition, consumer trust in product quality also helps shape a positive image for the business.

Tailoring MSMEs that consistently provide high-quality work will more easily attract new customers through recommendations from previous customers. Therefore, product quality not only directly influences purchase decisions but also has long-term effects on consumer loyalty. For this reason, tailoring MSMEs in Marindal Village need to ensure that every garment produced meets customer expectations to maintain competitiveness in an increasingly competitive market.

The Influence of Design Innovation on Purchase Decisions

Design innovation (X2) also plays an important role in increasing consumer purchase decisions. The research results show that the Design Innovation variable has a significance value of 0.001 < 0.05 and a regression coefficient of 0.391, indicating that design innovation has a positive and significant effect on purchase decisions.

In the context of tailoring MSMEs in Marindal Village, design innovation includes the tailor's ability to produce attractive clothing models, follow fashion trends, and customize designs to fit customer preferences. Today's consumers evaluate products not only based on functionality and quality but also on aesthetic value and the uniqueness of the design offered. Customers tend to choose tailoring services capable of providing creative design suggestions and unique final results.

Design innovation adds value to the product by offering something new, refreshing, and visually appealing. For tailoring MSMEs, creativity in design becomes a competitive advantage that increases consumer interest. Furthermore, design innovation helps businesses build a distinctive local brand identity. MSMEs that can blend modern styles with local cultural elements tend to be more recognizable and possess unique appeal.

Based on the analysis, design innovation is proven to be an important factor driving increased demand for tailoring services in Marindal Village. Thus, business owners must continuously adapt to changes in consumer tastes and fashion trends to ensure sustained growth in purchase decisions.

The Influence of Product Quality and Design Innovation Simultaneously on Purchase Decisions

Simultaneously, the results show that Product Quality (X1) and Design Innovation (X2) have a positive and significant effect on Purchase Decisions (Y), with an F-value of 159.072 and a significance level of 0.000 < 0.05. The coefficient of determination (R^2) of 0.774 indicates that 77.4% of the variations in purchase decisions can be explained by these two independent variables, while the remaining 22.6% is influenced by other factors such as price, promotion, service quality, and brand image.

The combination of good product quality and attractive design innovation creates strong appeal for consumers. High product quality increases customer satisfaction and trust, while design innovation adds aesthetic value and reinforces consumer purchasing interest.

In the tailoring MSMEs of Marindal Village, the synergy between these two factors becomes the key to increasing order volume. When garments are produced with good-quality materials, neat results, and modern designs aligned with customer preferences, purchase decisions rise significantly. These two variables also contribute to building customer loyalty and strengthening the MSME's position in the local market.

Consumers who are satisfied with both the quality and design are more likely to return and reuse the same tailoring services in the future. Therefore, tailoring MSMEs in Marindal Village need to balance quality improvement with continuous design innovation to remain relevant to market trends and competitive with other businesses.

4. Conclusion

Based on the results of the t-test, both independent variables—Product Quality (X1) and Design Innovation (X2)—have a positive and significant influence on Purchase Decisions (Y). The Product Quality variable (X1) shows a t-value of 4.777 with a significance level of 0.000 < 0.05, indicating that product quality significantly affects purchase decisions. This finding suggests that the better the quality of the products offered, the higher the consumers' tendency to make a purchase. Meanwhile, the Design Innovation variable (X2) has a t-value of 3.355 with a significance level of 0.001 < 0.05, demonstrating that design innovation also significantly influences purchase decisions. This means that the more innovative the product designs are, the stronger the consumers' motivation to buy the product. Furthermore, the coefficient of determination (R^2) value of 0.774 indicates that 77.4% of the variation in Purchase Decisions (Y) can be explained by the two independent variables, namely Product Quality and Design Innovation, while the remaining 22.6% is influenced by other factors outside the model such as price, promotion, and brand image. With this high R^2 value, it can be concluded that the regression model used has strong explanatory power, making the research results reliable and demonstrating a close relationship among the variables studied.

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