

## THE INFLUENCE OF SERVICE QUALITY AND PRODUCT VARIETY ON CUSTOMER SATISFACTION AT PUFFELLA VAPE STORE AIRMADIDI

### PENGARUH KUALITAS PELAYANAN DAN VARIASI PRODUK TERHADAP KEPUASAN PELANGGAN DI PUFFELLA VAPE STORE AIRMADIDI

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**Abstract:** This study aims to determine the influence of service quality and product variety on customer satisfaction at Puffella Vape Store Airmadidi. With the increasing competition in the vape retail industry, understanding the key factors that drive customer satisfaction is essential for maintaining customer loyalty and sustaining business growth. The research employs a quantitative approach, using multiple linear regression analysis to assess the relationship between the independent variables and the dependent variable. The findings reveal that service quality and product variety simultaneously have a positive and significant influence on customer satisfaction. However, when tested individually, only service quality shows a positive and significant partial influence on customer satisfaction, while product variety does not show a significant partial influence. These results suggest that service quality is a key determinant of customer satisfaction at Puffella Vape Store Airmadidi. This research highlights the importance for retail vape businesses, particularly new and developing ones like Puffella Vape Store, to prioritize service excellence as a strategy for enhancing customer satisfaction and building long-term customer relationships.

**Keywords:** Service Quality, Product Variety, Customer Satisfaction

**Abstrak:** Penelitian ini bertujuan untuk mengetahui pengaruh kualitas pelayanan dan variasi produk terhadap kepuasan pelanggan di Puffella Vape Store Airmadidi. Dengan persaingan yang semakin ketat dalam industri ritel vape, memahami faktor-faktor yang memengaruhi kepuasan pelanggan menjadi sangat penting untuk menjaga loyalitas pelanggan dan pertumbuhan bisnis. Penelitian ini menggunakan pendekatan kuantitatif dengan analisis regresi linier berganda, dan hasilnya menunjukkan bahwa secara simultan, kualitas pelayanan dan variasi produk berpengaruh positif dan signifikan terhadap kepuasan pelanggan. Namun, secara parsial hanya kualitas pelayanan yang berpengaruh signifikan, sedangkan variasi produk tidak. Temuan ini menunjukkan bahwa kualitas pelayanan merupakan faktor kunci dalam menentukan kepuasan pelanggan, sehingga bisnis ritel vape seperti Puffella disarankan untuk memprioritaskan keunggulan pelayanan dalam strategi pengembangan usahanya.

**Kata Kunci:** Kualitas Pelayanan, Variasi Produk, Kepuasan Pelanggan

## INTRODUCTION

### Research Background

Vaping has quickly become a prominent part of modern consumer culture, especially among young adults seeking alternatives to traditional smoking. Unlike conventional cigarettes, vape products offer a more flexible and personalized experience, allowing users to choose from countless flavors, adjust nicotine levels, and explore different device types. This sense of control and individuality has contributed to vaping's rapid global growth. In Indonesia, the trend is especially strong, with the country ranking among the top in vape usage worldwide (Statista, 2023). One major factor driving this growth is affordability. Vape devices and liquids are often seen as more economical than buying cigarettes regularly, making them accessible to a broader range of consumers. As vaping continues to grow in popularity, it has also given rise to a new wave of retail businesses. Vape stores are opening in more regions, and

with them comes increasing competition, not only in terms of price, but also in how well they understand and serve their customers.

The growing popularity of vaping has not only changed consumer habits but also transformed local business landscapes, especially in North Sulawesi, Airmadidi. In 2023, vape users in this town had limited choices when it came to buying products locally. Most had to turn to online shops or travel to other cities just to get their preferred devices or liquids. That changed with the opening of Puffella Vape Store in city center Airmadidi, which quickly became a go-to spot for local vapers. Its presence filled a gap in the market and was soon followed by the rise of other vape stores in the area. What was once a niche market suddenly turned into a competitive space. In this increasingly saturated environment, vape businesses need more than just good prices, they need to understand what keeps customers coming back. Despite this visible shift, academic studies that explore customer satisfaction in this kind of setting remain limited. This lack of research creates a real opportunity to dig deeper into what matters most to vape customers in emerging markets like Airmadidi.

Understanding what drives customer satisfaction has long been a central concern in business research, with two concepts consistently emerging as key influencers: service quality and product variety. The SERVQUAL model by Parasuraman, Zeithaml, and Berry (1988) has provided a foundation for evaluating service interactions through five main dimensions that capture how customers perceive the care, competence, and reliability of a business. Kotler, Keller, and Chernev (2022) argue that offering a wide and well-structured variety of products, through width, depth, length, customization, and up-to-date selections, can significantly shape consumer perceptions and loyalty. However, these two frameworks are often studied independently and applied in sectors where customer needs are more standardized. In industries like vape retail, where shopping experiences are highly personal and product knowledge is essential, the connection between service and variety becomes more intertwined. Yet, research that combines these two theoretical approaches within this unique retail context is still very limited, exposing a theoretical gap that calls for further research.

Despite growing interest in customer satisfaction across various sectors, the relationship between service quality and product variety still shows inconsistent results in the literature. Some researchers argue that service quality has a more direct and measurable influence on customer satisfaction (Ali et al., 2021), while Sahai, Sharma, and Singh (2020) found that product variety often plays a lesser role, especially when the basic needs of customers are already met. Conversely, studies from Norawati et al. (2021) propose that both factors are essential when considered together, particularly in competitive retail settings. These contrasting conclusions suggest that the influence of service and variety may vary depending on the nature of the business, customer expectations, and the retail environment. However, there is a noticeable lack of research focusing on small, lifestyle-based retail businesses like vape stores, where customers seek more than just products, they also look for guidance, personalized service, and a sense of connection.

### Research Objectives

1. To find out the influence of service quality on customer satisfaction at Puffella Vape Store Airmadidi.
2. To find out the influence of product variety on customer satisfaction at Puffella Vape Store Airmadidi.
3. To find out the influence of service quality and product variety on customer satisfaction at Puffella Vape Store Airmadidi.

## LITERATURE REVIEW

### Marketing

Marketing is more than just selling products or services. It is about understanding people, their needs, desires, and behaviors, and then creating value that genuinely improves their lives. According to Kotler and Keller (2022), marketing is the process of identifying, creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large. At its core, marketing is about building relationships, it is about businesses listening to their customers, adapting to their expectations, and continuously finding ways to serve them better.

### Service Quality

Service quality is a fundamental aspect of customer experience, shaping how businesses deliver value and build relationships with their customers. According to Syahsudarmi (2022), service quality is the ability of a company to consistently meet or exceed customer expectations through reliable, responsive, and personalized service. The

SERVQUAL model developed by Parasuraman, Zeithaml, and Berry (1988) is a framework used to assess service quality by comparing what customers expect with what they actually experience. It highlights the importance of minimizing the gap between customer expectations and perceptions to ensure satisfaction. By focusing on core aspects of service performance, the model helps organizations identify areas that need improvement and guides efforts to enhance overall service delivery and customer trust.

### Product Variety

Product variety is essential for businesses that cater to customers with diverse preferences and needs, especially when selling products that involve personal choice and customization. According to Pratama, Putra, and Digdowiseiso (2023), product variety offering a diverse range of products that allows businesses to cater to different consumer preferences, ensuring that customers can find options that suit their tastes and needs. Lestari and Manafe (2023) explains that businesses that continuously expand their product offerings can improve customer experience by providing more choices, which ultimately leads to higher satisfaction levels. Consumers are more likely to remain loyal to a brand when they feel that their evolving preferences are being met through a wide range of product options.

### Customer Satisfaction

Customer satisfaction is a crucial factor in determining a business's long-term success, and can directly influences customer loyalty, repeat purchases, and brand reputation. Customer satisfaction refers to the degree of a customer's emotional response resulting from the comparison between what they receive and what they expect. It arises when the quality of a product or service meets or exceeds expectations, leading to a greater sense of satisfaction (Panday and Nursal 2021). Customer satisfaction is an evaluation of the characteristics or features of a product or service, or the product itself that provides a level of consumer pleasure related to the fulfillment of consumer consumption needs (Marliana et al., 2023). When customers have a positive experience with a product or service, they are more likely to return and recommend it to others.

### Empirical Studies

Pratama, Putra, & Digdowiseiso (2023) aimed to determine the influence of Service Quality, Product Variety, and Location on Customer Satisfaction at Bapades Coffee Kemanggisan, West Jakarta. The sample studied in this study amounted to 121 respondents. Based on the results of the T Test, it shows that there is an influence between Service Quality (X1) on Customer Satisfaction (Y), Product Variation variable (X2) does not have a significant influence on Customer Satisfaction (Y), and Location variable (X3) has an influence on Customer Satisfaction (Y). The results of this research conclude that the variables Service Quality and Location have a significant influence on Customer Satisfaction. Another conclusion from this research is that product variety does not have a significant effect on customer satisfaction

Lestari and Manafe (2023) examined the influence of product variety and customer experience on customer satisfaction at Kedai77. This research was tested using quantitative methods by distributing questionnaires as a way for data to be collected. The 100 respondents involved in the research included 61 women and 39 men. The age range is 12-65 years. The results of the study concluded that the variables of product variety and customer experience simultaneously affect Kedai77 customer satisfaction. From the partial determination coefficient, it is stated that the customer experience variable is more dominant than the product variation variable that affects customer satisfaction in purchasing basreng.

Sahai, Sharma and Singh (2020) aimed to find out the factors affecting customer satisfaction in teleshopping. Researchers hypothesize that perceived value, convenience, and product variety have positive effect on customer satisfaction in teleshopping. The survey was done using convenient sampling from the region of Noida, Uttar Pradesh, India. Sample consisted of 150 respondents of Noida. Results suggested that convenience is the only factor that significantly affects the customer satisfaction in teleshopping. The research suggests that product variety available and perceived value show correlation but does not significantly affect customer satisfaction in teleshopping. The research was useful for TV channels like NAPTOL BAZAR as it proves that customers order products from them just because of the convenience they are getting in return. This study is one of the first, at least to the author's knowledge, to empirically examine and confirm the effect of convenience, perceived value, and product variety on customer satisfaction in teleshopping.

### Research Hypothesis

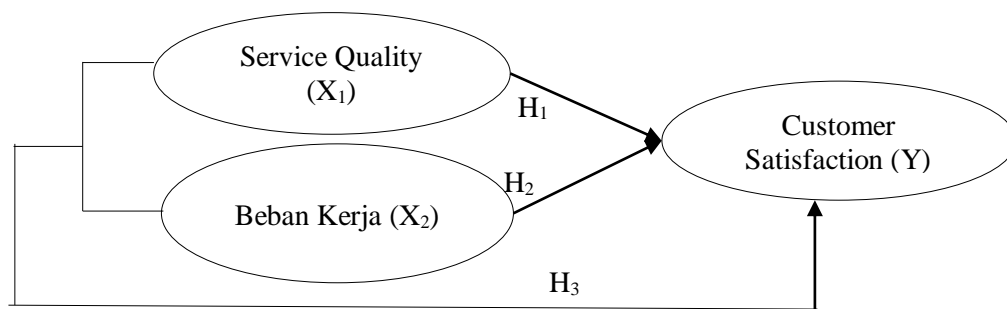
H<sub>1</sub>: Service quality has influence towards customer satisfaction at Puffella Vape Store Airmadidi partially.

H<sub>2</sub>: Product variety has influence towards customer satisfaction at Puffella Vape Store Airmadidi partially.



H<sub>3</sub>: Service quality and product variety has influence towards customer satisfaction at Puffella Vape Store Airmadidi simultaneously.

### Research Model



**Figure 1. Research Model**

*Source: Literature Review*

## RESEARCH METHOD

### Research Approach

This research employs a quantitative approach to examine how service quality and product variety influence customer satisfaction. According to Creswell (2018), quantitative research involves the systematic collection of numerical data and its statistical analysis to test hypotheses and explore relationships among variables. By applying this method, the study provides objective insights by measuring the effects of service quality and product variety on customer satisfaction in a clear, reliable, and measurable way.

### Population, Sample Size, and Sampling Techniques

The population consists of customers of Puffella Vape Store Airmadidi. Based on calculation using Lemeshow formula (1991), 97 respondents being the bare minimum required for this study. The sample size was rounded up to 100 respondents to ensure adequate representation and improve the reliability of the findings. In this study, the researcher applied purposive sampling, a technique within non-probability sampling, where participants are chosen based on specific criteria.

### Data Type and Data Sources

The focus of this study was to measure the influence of service quality and product variety on customer satisfaction at Puffella Vapestore Airmadidi. Primary data were collected directly from customers who had made purchases at the store. Collecting primary data ensures that the insights obtained are directly relevant to the actual shopping experiences of customers. This approach provides an accurate reflection of customer perceptions, offering meaningful insights into how service quality and product variety shape overall satisfaction.

### Method of Collecting Data

Data for this study were collected through structured surveys using a standardized questionnaire designed to obtain quantitative data, ensuring consistency and comparability across responses. Respondents rated each item on a seven-point Likert scale, with 1 = very strongly disagree, 2 = strongly disagree, 3 = disagree, 4 = neither agree nor disagree, 5 = agree, 6 = strongly agree, and 7 = very strongly agree.

### Operational Definition and Indicator of Research Variable

**Tabel 1. Operational Definition and Indicator of Research Variable**

Variable	Definition	Indicators
Service Quality (X <sub>1</sub> )	Service quality is the customer's overall perception of the excellence and value of a service, reflected through the consistency, professionalism, and ability of the service provider to meet or exceed customer	1. Tangible 2. Reliability 3. Responsiveness 4. Assurance 5. Empathy Parasuraman, Zeithaml, and Berry (1988)

Product Variety ( $X_2$ )	<p>expectations throughout the service experience at Puffella Vape Store Airmadidi. Product variety is the range of different products that Puffella Vape Store Airmadidi offers, giving customers more options to choose from based on their individual needs, preferences, and interests.</p>	<ol style="list-style-type: none"> <li>1. Product width</li> <li>2. Product depth</li> <li>3. Product length</li> <li>4. Customization</li> <li>5. Up-to-Date offerings</li> </ol> <p>Kotler, Keller, and Chernev (2022)</p>
Customer Satisfaction (Y)	<p>Customer satisfaction is the emotional and cognitive response of customers resulting from the comparison between their expectations and the actual experience with a product or service from Puffella Vape Store Airmadidi, which reflects the degree of fulfillment they perceive.</p>	<ol style="list-style-type: none"> <li>1. Overall Satisfaction</li> <li>2. Expectation Confirmation</li> <li>3. Likelihood to Return</li> <li>4. Willingness to Recommend</li> <li>5. Loyalty Intention</li> </ol> <p>Zeithaml, Bitner and Gremler (2020)</p>

## Research Instrument Testing

### Validity And Reliability Tests

In this study, validity tests are essential for determining how effectively a measurement instrument captures the intended construct. They ensure that the questions within a questionnaire are both accurate and relevant to the study's objectives. As Cook and Beckman (2006) explain, validity pertains to the interpretation of scores derived from research instruments.

Reliability testing is all about making sure that a measurement tool consistently gives accurate results over time. According to Sugiyono (2019), a study is considered reliable when the data collected accurately reflects what actually happened during the research process.. To assess reliability, this study will use Cronbach's Alpha, a statistical measure widely recognized for evaluating internal consistency. A Cronbach's Alpha value greater than 0.6 generally indicates that the survey items are reliable and consistently measure the same underlying construct.

## Data Analysis Methods

### Classical Assumption Tests

#### Normality Test

The normality test checks whether the residuals (errors) in the regression model follow a normal distribution. A common way to assess this is by using the Kolmogorov-Smirnov test. If the significance value is greater than 0.05, the data is considered normally distributed, meaning the model is more likely to provide valid conclusions. Ensuring normality helps maintain the accuracy of hypothesis testing and statistical inferences

#### Multicollinearity Test

Multicollinearity happens when independent variables in a regression model are highly correlated with each other, making it difficult to determine their individual impact on the dependent variable. To check for multicollinearity, researchers use the Variance Inflation Factor (VIF), where a VIF value greater than 10 suggests a strong correlation between variables. Ideally, a good regression model should have little to no multicollinearity to ensure precise and meaningful results.

#### Heteroscedasticity Test

Heteroscedasticity occurs when the variance of residuals varies across different levels of an independent variable, potentially impacting the accuracy and reliability of regression results. To detect heteroscedasticity, researchers often use the Glejser test, where a significant effect of independent variables on absolute residuals indicates its presence. A good regression model should have homoscedasticity, meaning the variance remains consistent. This helps avoid biased estimates in statistical tests.

## Multiple Linear Regression Analysis

Multiple linear regression is a statistical method used to determine the effect of two or more independent variables on a single dependent variable through a linear relationship. In this study, multiple linear regression is utilized to analyze how service quality ( $X_1$ ) and product variety ( $X_2$ ) influence customer satisfaction (Y). The data is processed using SPSS software to identify the strength and direction of the relationship between the variables,

helping to understand how these factors contribute to customer satisfaction. The multiple regression equation is as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + e$$

Y = Customer Satisfaction

$\alpha$  = Constant

$X_1$  = Service Quality

$X_2$  = Product Variety

$\beta_1$  = Regression Coefficient of Service Quality

$\beta_2$  = Regression Coefficient of Product Variety

e = Error

### Coefficient Correlation Test (R) And Coefficient Determination Test (R<sup>2</sup>)

The Coefficient of Correlation (R) is a statistical measure that indicates the strength and direction of the linear relationship between two variables. Its value ranges from -1 to 1, where a value closer to 1 signifies a strong positive correlation, a value closer to -1 signifies a strong negative correlation, and a value near 0 indicates little to no linear relationship.

The Coefficient of Determination (R<sup>2</sup>) is a statistical measure that indicates the proportion of variance in the dependent variable that can be explained by the independent variables in a regression model. Its value ranges from 0 to 1, where a value closer to 1 signifies that the model effectively explains the variability in the data, while a value closer to 0 indicates a poor explanatory power.

### Hypothesis Testing

#### T-Test And F-Test

The t-test is carried out to determine how far an independent variable partially varies the dependent variable. The t-test used to determine the significance of individual regression coefficients within a model, evaluating whether a specific predictor variable has a statistically significant relationship with the dependent variable while keeping other variables constant. The test is performed at a 95% confidence level with a significance level ( $\alpha$ ) of 0.05. If the overall regression model is found to be significant, the t-test helps determine whether each independent variable contributes significantly to the model.

The F-test is used in regression analysis to assess whether all independent variables, when considered together, have a significant impact on the dependent variable. This test helps determine the overall feasibility of the regression model. The decision is based on comparing the significance value ( $\alpha = 0.05$ ) with the test result, if the significance value of F is greater than 0.05, then  $H_0$  is accepted, suggesting that the regression model is not suitable, as the independent variables do not have a significant combined effect on the dependent variable.

## RESULTS AND DISCUSSION

### Research Result

#### Validity And Reliability Tests

Table 2. Validity Result

Variable	Indicator	Validity			Results
		R-Count	R-Table	Sig.	
Service Quality (X <sub>1</sub> )	X1.1	0.905	0.1966	<0.001	Valid
	X1.2	0.904	0.1966	<0.001	Valid
	X1.3	0.871	0.1966	<0.001	Valid
	X1.4	0.887	0.1966	<0.001	Valid
	X1.5	0.893	0.1966	<0.001	Valid
Product Variety (X <sub>2</sub> )	X2.1	0.694	0.1966	<0.001	Valid
	X2.2	0.752	0.1966	<0.001	Valid
	X2.3	0.719	0.1966	<0.001	Valid
	X2.4	0.808	0.1966	<0.001	Valid
	X2.5	0.765	0.1966	<0.001	Valid
Customer Satisfaction (Y)	Y.1	0.831	0.1966	<0.001	Valid

Y.2	0.839	0.1966	<0.001	Valid
Y.3	0.869	0.1966	<0.001	Valid
Y.4	0.887	0.1966	<0.001	Valid
Y.5	0.845	0.1966	<0.001	Valid

Source: Data Processed

Table 2 shows that every indicators for variables  $X_1$ ,  $X_2$ , and Y has a Pearson correlation value (r-count) greater than the r-table value of 0.1966. In addition, all each item has a significance value are below the 0.05 level. This confirms that each item in the questionnaire is valid and effectively reflects the constructs being measured in this research.

### Reliability Test

**Table 3. Reliability Result**

Variable	Cronbach's Alpha	Results
Service Quality ( $X_1$ )	0.936	Reliable
Product Variety ( $X_2$ )	0.717	Reliable
Customer Satisfaction (Y)	0.906	Reliable

Source: Data Processed

Table 3 shows that the Cronbach's Alpha values for all variables  $X_1$ ,  $X_2$ , and Y are above 0.6. This results indicates that each variable in the study meets the reliability criteria.

### Classical Assumption Tests

#### Normality Test

**Table 4. Normality Result**

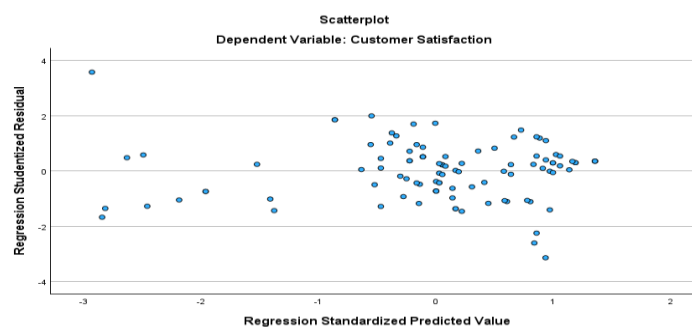
#### One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		100
Normal Parameters <sup>a,b</sup>	Mean	0,0000000
	Std. Deviation	2,86688991
Most Extreme Differences	Absolute	0,077
	Positive	0,077
	Negative	-0,070
Kolmogorov-Smirnov Z		0,077
Asymp. Sig. (2-tailed)		0,157

Source: Data Processed

Table 4 presents the SPSS output, showing an Asymp. Sig. (2-tailed) value of 0.157, which exceeds the 0.05 significance value. This result indicates that the data follows a normal distribution and meets the assumption of normality.

### Heteroscedasticity Test



**Figure 2. Scatterplot**

Source: Data Processed



Figure 2 presents a scatterplot where the data points are randomly dispersed and consistently spread both above and below the zero line on the Y-axis. This pattern indicates that heteroscedasticity is not present in the regression model, supporting the conclusion that the model is suitable for predicting the dependent variable Y using the independent variables  $X_1$  and  $X_2$ .

### Multicollinearity Test

**Table 5. Multicollinearity Result**

Model	Collinearity Statistics		Status
	Tolerance	VIF	
Service Quality ( $X_1$ )	0.328	3.050	No Multicollinearity
Product Variety ( $X_2$ )	0.328	3.050	No Multicollinearity

Source: Data Processed

Based on Table 5, the results show that the tolerance values for all independent variables is 0.328 or  $> 0.10$ , and the Variance Inflation Factor (VIF) values is 3.050 or  $< 10$ . This indicates that there is no multicollinearity among the independent variables.

### Multiple Linear Regression Analysis

**Table 6. Multiple Linear Regression Analysis Result**

Model	Coefficient <sup>a</sup>				
	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
1 (Constant)	4.419	1.341		3.296	0.001
Service Quality ( $X_1$ )	0.710	0.083	0.746	8.579	0.000
Product Variety ( $X_2$ )	0.135	0.079	0.148	1.704	0.092

a. Dependent Variable: Y

Source: Data Processed

Based on the regression analysis result in Table 6, it can be concluded that the multiple linear regression model equation in this study is as follows:

$$Y = 4.419 + 0.710X_1 + 0.135X_2 + e$$

1. The value of customer satisfaction (Y) is 4.419 if both service quality ( $X_1$ ) and product variety ( $X_2$ ) are zero or remain unchanged. This indicates that customer satisfaction can still exist at a baseline level even without considering the influence of the two independent variables. Thus, it can be concluded that customer satisfaction (Y) is influenced by service quality ( $X_1$ ) and product variety ( $X_2$ ).
2. Customer satisfaction will increase by 0.710 (71%) for every one-unit increase in service quality. This shows that there is a strong positive relationship between service quality ( $X_1$ ) and customer satisfaction (Y).
3. Customer satisfaction will increase by 0.135 (13.5%) for every one-unit increase in product variety. This suggests that product variety ( $X_2$ ) also has a positive relationship with customer satisfaction (Y), though its influence is smaller compared to service quality.

### Correlation Coefficient (R) and Determination Coefficient ( $R^2$ )

**Table 7. Correlation Coefficient (R) and Determination Coefficient ( $R^2$ ) Result**

Model	Model Summary <sup>b</sup>			
	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.872 <sup>a</sup>	.760	.755	2.896

a. Predictors: (Constant), Service Quality, Product Variety

Source: Data Processed

Table 7 shows that the correlation coefficient (R) is 0.872, indicating a very strong positive relationship between Service Quality ( $X_1$ ) and Product Variety ( $X_2$ ) with Customer Satisfaction (Y). Since the R value is close to +1, it suggests a high level of correlation. Additionally, the coefficient of determination ( $R^2$ ) is 0.760, which means that 76% of the variation in Customer Satisfaction can be explained by the two independent variables. The remaining 24% is influenced by other factors not included in this study's model.



**Hypothesis Test****T-Test**

Based on the Table 6, the results are:

1. The table shows that the relationship between Service Quality and Customer Satisfaction is significant, with a t-count of  $8.579 > t\text{-table } 1.984$ , and a Sig. value of  $0.000 < 0.05$  ( $\alpha = 5\%$ ). As a result,  $H_1$  is accepted and  $H_{01}$  rejected.
2. The table shows that the relationship between Product Variety and Customer Satisfaction is insignificant, with a t-count of  $1.704 < t\text{-table } 1.984$ , and a Sig. value of  $0.092 > 0.05$  ( $\alpha = 5\%$ ). As a result,  $H_{02}$  is accepted and  $H_2$  is rejected.

**F-Test****Table 8. F-Test Result**

ANOVA <sup>a</sup>						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2570.823	2	1285.412	153.235	<.001 <sup>b</sup>
	Residual	813.687	97	8.389		
	Total	3384.510	99			

a. Dependent Variable: Customer Satisfaction

b. Predictors: (Constant), Service Quality, Product Variety

Source: Data Processed

Based on Table 8, the F-count value is 153.235, which exceeds the F-table value of 3.09. Furthermore, the significance value is less than 0.001, falling below the 0.05 (5%) significance level. These findings confirm that Service Quality and Product Variety together have a significant influence on Customer Satisfaction. As a result,  $H_3$  is accepted and  $H_{03}$  is rejected.

**Discussion****The Influence of Service Quality on Customer Satisfaction**

The partial t-test results indicate that service quality has influence towards customer satisfaction at Puffella Vape Store Airmadidi partially. This finding highlights the important role that service quality plays in shaping customer perceptions and satisfaction levels. When customers receive helpful assistance, clear information, prompt responses, and friendly treatment, they tend to feel more valued and satisfied with their overall shopping experience. In retail settings, particularly for lifestyle products such as vape devices, these service elements often have a lasting impact that contributes to stronger customer loyalty. This result is supported by the theory developed by Parasuraman, Zeithaml, and Berry (1988) through the SERVQUAL model, which outlines five key dimensions of service quality: tangibles, reliability, responsiveness, assurance, and empathy. These elements help explain how quality service delivery leads to increased customer satisfaction. For instance, a clean and organized store (tangibles), accurate and consistent service (reliability), and staff who are attentive and caring (empathy) all contribute positively to the customer's experience. Syahsudarmi (2022) also found that service quality has a direct and significant influence on customer satisfaction, especially in the retail sector. Her research emphasizes that customers who feel respected, well-served, and understood are more likely to have a positive view of the business and return in the future. In this way, service quality acts as both a functional and emotional driver of satisfaction. The findings of Ali et al. (2021) reinforce that high service quality delivered through responsive, skilled, and customer-oriented staff, leads to greater customer satisfaction and stronger customer relationships. Their study revealed that businesses that invest in service excellence tend to enjoy higher customer loyalty, particularly in competitive markets. In the context of Puffella Vape Store Airmadidi, these findings suggest that maintaining excellent service through knowledgeable staff, consistent assistance, and a welcoming environment, is essential for enhancing customer satisfaction. Service quality not only influences the customer's immediate experience but also plays a crucial role in encouraging repeat visits and building long-term loyalty in a highly competitive vape retail industry.

**The Influence of Product Variety on Customer Satisfaction**

The results of the partial t-test indicate that product variety has no influence towards customer satisfaction at Puffella Vape Store Airmadidi partially. These results suggest that although product variety is available, it does not strongly influence how satisfied customers feel with their overall shopping experience. This finding aligns with the study by Sahai, Sharma, and Singh (2020), which revealed that product variety may not always be a key

determinant of customer satisfaction, especially when the available options already meet the basic needs and expectations of the consumer. According to their research, customers may become indifferent to variety if the differences between products are minimal or if the core preferences are already fulfilled. Similarly, Lestari and Manafe (2023) found that product variety does not significantly impact customer satisfaction in certain retail environments where consumers prioritize service, convenience, or product quality over the number of choices offered. Their findings indicate that too much variety can sometimes lead to decision fatigue or confusion, which may even reduce satisfaction rather than enhance it. In the case of Puffella Vape Store Airmadidi, it is possible that customers are already content with the current selection of vape products, and additional variety does not contribute meaningfully to their satisfaction. Customers may be more focused on other aspects such as the quality of service, product availability, or staff recommendations when making their purchasing decisions. The data analysis revealed that although the overall effect of product variety was not statistically significant, among the five indicators measured, product width, product depth, product length, customization, and up-to-date offerings, the indicator up-to-date offerings showed the strongest influence on customer satisfaction. This suggests that while the breadth or customization of products may not matter much to customers, the timeliness and relevance of the products such as the availability of the latest vape devices, flavors, or accessories still holds some importance in shaping their perceptions. However, even this factor was not strong enough to reach statistical significance, reinforcing the idea that customers may value other dimensions, particularly service quality or staff assistance, more heavily when evaluating their shopping experience.

### **The Influence of Service Quality and Product Variety on Customer Satisfaction**

The results of the F-test show that service quality and product variety has influence towards customer satisfaction at Puffella Vape Store Airmadidi simultaneously. These findings suggest that while product variety may not have a significant partial effect when tested individually, it still contributes meaningfully when combined with service quality in shaping customer satisfaction. This result aligns with the theory presented by Zeithaml, Bitner, and Gremler (2022), who emphasized that customer satisfaction is a result of the overall service experience, which includes not only the interactions with service personnel but also the availability and accessibility of products that meet customer expectations. According to their research, satisfaction increases when the service delivery is reliable and responsive, and when customers feel their preferences are being considered through diverse product options. Norawati et al. (2021) also support this finding, noting that both service quality and product attributes, including variety, are essential components in creating a satisfying customer experience. Their study concluded that businesses that maintain excellent service standards while also offering a variety of product choices are more likely to fulfill customer expectations and achieve higher satisfaction scores. In retail environments, these two variables often work together to shape how customers perceive the overall value of the store. In the context of Puffella Vape Store Airmadidi, this means that customers do not evaluate their experience based on service or product options alone, but rather on the combination of both. A wide range of vape products becomes more valuable when accompanied by friendly, knowledgeable, and helpful service. Likewise, excellent service is more meaningful when customers have access to the products that suit their tastes and needs. Therefore, the simultaneous influence of service quality and product variety on customer satisfaction emphasizes the importance of an integrated strategy. Management should ensure that product selection remains relevant and sufficient, while also continuously improving service quality to meet evolving customer expectations. By focusing on both elements together, Puffella Vape Store can enhance customer satisfaction, build loyalty, and strengthen its position in the competitive vape retail market.

## **CONCLUSION AND RECOMMENDATION**

### **Conclusion**

1. Service quality partially has a positive and significant influence on customer satisfaction at Puffella Vape Store Airmadidi. This means that service quality plays an important role in increasing customer satisfaction. The indicators used to measure service quality are tangible, reliability, responsiveness, assurance, and empathy. These indicators together help explain why customers feel more satisfied with the services provided.
2. Product variety partially does not have a significant influence on customer satisfaction at Puffella Vape Store Airmadidi. This shows that offering many different types of products is not the main factor affecting customer satisfaction. The indicators used to measure product variety are product width, product depth, product length, customization, and up-to-date offerings. Although these are present, they do not strongly impact how satisfied customers feel.

3. Service quality and product variety simultaneously have a positive and significant influence on customer satisfaction at Puffella Vape Store Airmadidi. This means that when both are considered together, they have a stronger effect on satisfaction. Customer satisfaction in this study is measured using overall satisfaction, expectation confirmation, likelihood to return, willingness to recommend, and loyalty intention. These results show that a combination of good service and a variety of products can lead to higher customer satisfaction.

### Recommendation

1. Given the strong positive impact of service quality on customer satisfaction, Puffella should continue prioritizing excellent service. Regular staff training in friendliness, responsiveness, and product knowledge is essential. Management must ensure consistent service by minimizing wait times, addressing complaints effectively, and maintaining a clean, welcoming environment. Although product variety showed no significant partial effect, maintaining a well-selected and up-to-date product range remains important. Focus on stocking high-demand, quality items and consider customer feedback when selecting products. Enhancing value through loyalty rewards, bundles, or educational content, and building a strong social media presence, can also strengthen customer engagement and brand loyalty.
2. This study was limited to analyzing the influence of service quality and product variety on customer satisfaction. For future researchers, it is recommended to expand the scope of research by including other variables that may have a strong impact on customer satisfaction. These may include pricing strategy, store atmosphere, promotional activities, product quality, trust, convenience, or brand image. Exploring these factors may provide a more comprehensive understanding of what drives customer satisfaction in the vape retail industry. Future studies may also benefit from conducting comparative research between multiple vape stores or across different regions to identify trends and preferences specific to different market segments.

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