

The Effect of Marketing Literacy and Service Quality on Customer Loyalty with Purchase Decision as an Intervening Variable (Case Study at the PT NSS AHASS Workshop in Palopo City)

[Putri Tang^{1*}](#), [Rahmawati²](#), [Rahmawati³](#), [Imam Pribadi⁴](#), [Muammar Khaddapi⁵](#)

^{1,2,3,4,5}Magister Management, Muhammadiyah University of Palopo, Indonesia

Corresponding Author Email: putritang.267@gmail.com

Abstract

This study examines the effects of Marketing Literacy and Service Quality on Customer Loyalty, with Purchase Decision as an intervening variable at the PT NSS AHASS Workshop in Palopo City. A quantitative associative design was applied to 80 respondents selected through purposive sampling. Data were collected through questionnaires, observation, and documentation and analyzed using classical assumption tests, multiple regression, path analysis, and Sobel tests for indirect effects. The results show that Marketing Literacy does not significantly affect Purchase Decision ($\beta = 0.100$; $p = 0.367$), whereas Service Quality has a positive and significant effect on Purchase Decision ($\beta = 0.264$; $p = 0.019$). Purchase Decision ($\beta = 0.207$; $p = 0.004$), Marketing Literacy ($\beta = 0.265$; $p = 0.020$), and Service Quality ($\beta = 0.295$; $p = 0.014$) significantly affect Customer Loyalty. Sobel tests show that Purchase Decision does not significantly mediate the effect of Marketing Literacy ($z = 0.649$; $p = 0.516$) or Service Quality ($z = 0.873$; $p = 0.383$) on Customer Loyalty. These findings indicate that customer loyalty is driven primarily by direct effects.

Keywords: Marketing_Literacy; Servic_Quality; Purchase_Decision; Customer_Loyalty

1. Introduction

The current development of the business world requires business actors to have a deep understanding of the marketing aspect. Increasingly fierce competition requires the right strategy in expanding the range of products and services, while anticipating various threats from both internal and external factors. One of the important aspects needed is marketing literacy [1], [2]. Marketing literacy in the digital era has developed into several forms, such as digital marketing literacy that emphasizes search engine optimization (SEO) strategies to improve website rankings, as well as social media literacy which includes understanding the ethics of interacting, content promotion techniques, consumer behavior when shopping, to seller strategies in utilizing social media platforms. In addition, marketing literacy can also be associated with an understanding of the marketing mix (products, prices, promotions, and distribution), as well as the ability to create, distribute, promote, and price goods and services to suit customer needs. These concepts are consistent with marketing-management theory [1], [2] and prior research on marketing literacy [3]. Research on online purchase intention also examines digital marketing alongside consumers' digital and financial literacy [24]; however, these constructs and the online setting differ from the marketing-literacy construct investigated in the present workshop study.

PT Nusantara Sakti Group (NSS), better known as an official Honda motorcycle repair service provider or AHASS, is one of the business actors that seeks to answer these challenges. Based on consumer visit data in the last three months, there were 1,850 customers

performing service services. Meanwhile, in the September 2025 period, the number of consumers who service reached 392 people, with an average of 32 customers per day.

Table 1. Consumer Visit Data

Branch	Branch Name	Total Unit Entry	Total Cash Entry Units	KPB 1	KPB 2	KPB 3	KPB 4	Total Unit Entry BELIPART	Total Rounding
PLP11 PALOPO	NSS	392	188	50	27	30	18	79	700
NATIONAL		392	188	50	27	30	18	79	700

This data shows that although the average number of customers receiving services per day reaches 32 people, the transaction pattern is still dominated by cash payments. Meanwhile, the KPB (Periodic Maintenance Coupon) program, which is one of Honda's promotional strategies, is also quite widely used, although the percentage is smaller than cash services. This shows the potential to increase the effectiveness of KPB promotions while improving the service quality so that every consumer feels comfortable and loyal to the workshop service.

However, the results of observations in the field show that service to consumers is still not optimal. Some customers complained about the long queue time and the lack of fast purchase and service services. This indicates that the quality of service still needs to be improved. In fact, good service not only affects customer satisfaction, but is also an important factor in building positive relationships and long-term loyalty. The customer loyalty that is formed will ultimately have an impact on increasing sales and business sustainability. As emphasized [4], service quality has a significant influence on consumer loyalty and buyback interest. Therefore, the analysis of marketing literacy and service quality in relation to purchasing decisions and customer loyalty is important to investigate. Prior service-marketing research further identifies service quality, value, and satisfaction as relevant antecedents of consumers' behavioral intentions [18].

Previous studies have addressed several parts of this relationship. Rahman and Hidayati [3] examined marketing literacy in relation to consumer purchase decisions, while Anggraini [5] linked marketing literacy to customer loyalty. In service settings, Sari and Balqiah [6] discussed service quality and customer loyalty in vehicle repair and maintenance, whereas Fitriani and Susanto [7] examined service quality in relation to purchase decisions in automotive services. Santoso and Ruslim [8] also showed that a loyalty model can involve an intervening mechanism, although their study used customer satisfaction in mobile banking. More recent workshop studies have examined service quality and loyalty among Honda service customers [22] and the mediating role of customer satisfaction in motorcycle maintenance services [23].

However, the prior studies focus on separate relationships, different service contexts, or mediating variables other than purchase decisions. This leaves room for an integrated test of Marketing Literacy and Service Quality as antecedents of Customer Loyalty while positioning Purchase Decisions as an intervening variable in the specific context of the AHASS PT NSS

Workshop in Palopo City. The proposed framework therefore evaluates both direct effects on loyalty and indirect effects through purchase decisions. This research gap is identified by comparing the emphases of previous studies [3], [6], [7], [5], [8]. Other service-sector findings have likewise modeled customer satisfaction, rather than Purchase Decision, as a mediator between service quality and loyalty [25].

Therefore, this study aims to analyze the influence of Marketing Literacy and Service Quality on Customer Loyalty with Purchase Decisions as an intervening variable at the AHASS PT NSS Workshop in Palopo City. The study also examines the extent to which Marketing Literacy and Service Quality shape Purchase Decisions and whether Purchase Decisions transmit their effects to Customer Loyalty. A quantitative associative design is used with 80 respondents, and the data are analyzed using classical assumption tests, multiple regression, and path analysis. The relationships among the research variables are illustrated in the following conceptual framework.

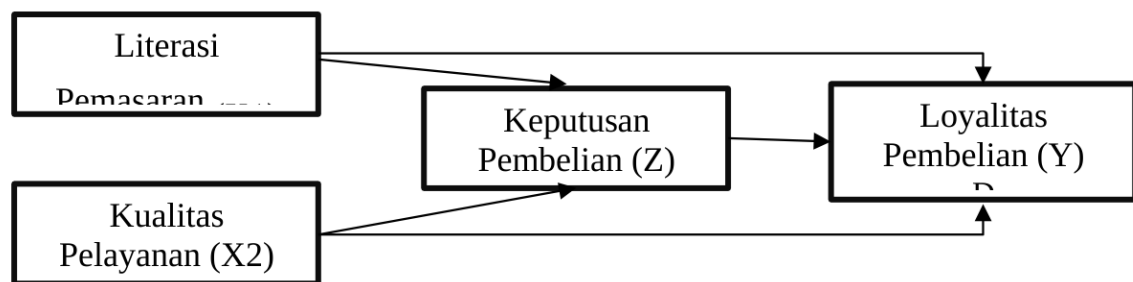


Figure 1. Conceptual Framework

2. Methodology

2.1 Research Type and Approach

This study uses a quantitative associative approach to analyze the effects of Marketing Literacy and Service Quality on Purchase Decision and Customer Loyalty, including the role of Purchase Decision as an intervening variable.

2.2 Research Location and Time

This research was carried out at the AHASS PT NSS Workshop, located on Jl. Andi Djemma, Palopo City, in the period of August to September 2025.

2.3 Variable Operational Definition

The variables used in this study consist of independent variables, dependent variables, and an intervening variable to comprehensively analyze the relationship and influence between variables. The operationalization of Marketing Literacy and Purchase Decision draws on marketing-management concepts [1], [2]; Service Quality refers to the SERVQUAL dimensions [9]; and Customer Loyalty follows the loyalty framework [10]. The customer-journey perspective also highlights the role of repeated service encounters in shaping customer experiences over time [17].

Table 2. Variable Operational Definitions

Variable	Operational Definition	Indicators	Measurement Scale
Marketing Literacy (X1)	Individual knowledge and understanding of marketing principles, strategies, and techniques that can improve customer service and satisfaction	1. Customer service 2. Management style 3. Technology 4. Customer retention	Likert 1–5
Service Quality (X2)	The level of service excellence provided by the company to meet customer expectations and needs	1. Tangible 2. Reliability 3. Responsiveness 4. Assurance 5. Empathy	Likert 1–5
Purchase Decision (Z)	The consumer's process in evaluating and choosing products/services to meet their needs or desires	1. Recognition of needs 2. Information search 3. Alternative evaluation 4. Purchase decision 5. Post-purchase behavior	Likert 1–5
Customer Loyalty (Y)	Commitment and loyalty of customers to continue to use the company's products/services and recommend them	1. Repurchase 2. Buying across product/service lines 3. Recommend 4. Resistant to the influence of competitors	Likert 1–5

2.4 Population and Sample

1. Population

The population of this study is all customers of the PT NSS Workshop in Palopo City who service or purchase spare parts during the period of September 2025 as many as 392 people.

2. Sample

This research sample was taken from customers of the AHASS PT NSS Workshop in Palopo City using *the purposive sampling technique*, which is the selection of respondents based on certain criteria that are relevant to the purpose of the research. Sample criteria:

- Customers who have serviced or purchased spare parts at the AHASS PT NSS Workshop in Palopo City.
- Customers who are willing to fill out a questionnaire and provide complete information.
- Customers who made a transaction at least once during the research period.

The sample size was determined using the Slovin formula as follows:

$$n = \frac{N}{1 + N(e^2)}$$

where n = sample size, N = population size, and e = error tolerance.

$$n = \frac{392}{1 + 392(0,10)^2} = \frac{392}{4,92} = 79,67 \approx 80$$

Therefore, the sample size was rounded to 80 respondents.

2.5 Data Collection Techniques

The data collection technique in this study is carried out in three ways, namely:

1. Observation

Observation was carried out by directly observing service activities and customer behavior at the AHASS PT NSS Workshop in Palopo City to get a real picture of the service process and interaction between employees and customers.

2. Questionnaire

The questionnaire is used to collect primary data from customers related to marketing literacy, service quality, purchase decisions, and customer loyalty. The questions are arranged on a Likert scale of 1–5 so that the results can be measured quantitatively.

3. Documentation

Documentation includes the collection of secondary data in the form of customer service reports, records of workshop visits, as well as references from relevant books, journals, and previous research to support the research analysis.

2.6 Data Analysis Techniques

1. Classical Assumption Test

Classical assumption tests must be carried out to test the assumptions that exist in the research with a regression model. The regression model must be free from classical assumptions which consist of the following:

a. Normality Test

The Normality Test is used to test whether in a regression model the independent variables and dependent variables have a normal distribution or not. A good regression model should have residuals that are normally or approximately normally distributed.

b. Multicollinearity Test

Multicollinearity test means a near-perfect linear correlation between more than two independent variables. The multicollinearity test is carried out with the aim of testing whether the regression model in the form of a high or perfect relationship between independent variables, then the regression model is declared to contain symptoms of multicollinearity between independent variables.

c. Heteroscedasticity Test

The heteroscedasticity test is used to assess whether residual variance differs across observations. A well-specified regression model should not exhibit heteroscedasticity.

2. Multiple Regression Analysis

Multiple regression analysis is used to analyze the relationship between dependent variables (Y) and some independent variables (X1, X2, ... Xn). This analysis aims to understand how the independent variables together affect the dependent variables.

3. Hypothesis Testing

Hypothesis testing was conducted to determine whether the estimated effects between the study variables were statistically significant.

a. Partial Test (t test)

A partial test is used to find out whether the independent variable being studied has an effect on the dependent variable.

b. Simultaneous Test (F)

The F test is used to assess whether the independent variables jointly affect the dependent variable.

c. Coefficient of Determination Test (R^2)

The coefficient of determination (R^2) measures the proportion of variation in the dependent variable explained by the model and ranges from 0 to 1.

4. Path Analysis

Path analysis is a statistical method used to test causal relationships between variables in a research model. This method is developed from regression analysis and is used to examine direct and indirect relationships among independent variables, intervening variables, and dependent variables [11].

5. Mediation Significance Test

The significance of the indirect effects was evaluated using the Sobel test based on the unstandardized coefficients and standard errors for the a and b paths. A two-tailed p-value below 0.05 was used as the criterion for a statistically significant indirect effect. Mediation-method comparisons indicate that the choice of significance test matters [20], while resampling-based procedures provide another way to evaluate indirect effects [21]; these alternative procedures were not applied to the present data

3. Result

a. Respondent Characteristics

Based on data obtained from 80 respondents, the characteristics of the respondents can be explained as follows:

Table 3. Characteristics of Respondents

Characteristics	Category	Number of Respondents	Percentage (%)
Gender	Man	52	65
	Woman	28	35
Age	18–25 years old	15	18.75
	26–35 years old	30	37.50
	36–45 years old	20	25
	>45 years old	15	18.75
Education	High School/Vocational School	25	31.25
	Diploma	20	25
	Bachelor	35	43.75

Based on the table above, it can be seen that the majority of respondents are men (65%) with an age range of 26–35 years (37.5%). Most of the respondents had a bachelor's degree (43.75%).

b. Classical Assumption Test

a. Normality Test

The normality test in this study was carried out by *the Probability Plot test*, using the SPSS program. The results of the normality test are presented in the following output table.

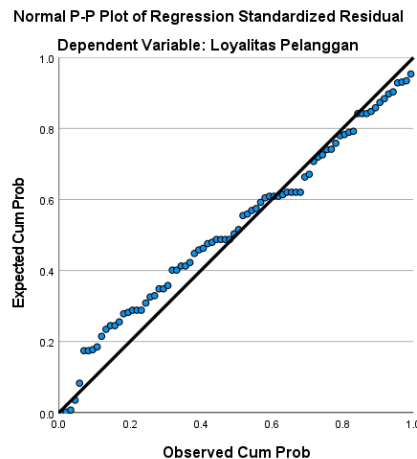


Figure 2. Normality Test Results

Based on the results of the normality test through the Normal Probability Plot graph, the data is declared to be normally distributed if the data points are spread around the diagonal line and follow the direction of the line. In the results of this study, it can be seen that the distribution of points is relatively close to the diagonal line and does not form a certain pattern, so it can be concluded that the residual data is normally distributed.

b. Multicollinearity Test

The multicollinearity test is used to determine whether or not there is a correlation between independent variables in the regression model. The test was carried out by looking at *the value of Tolerance and Variance Inflation Factor (VIF)* using the SPSS program. The results of the multicollinearity test can be seen in the following table.

Table 4. Multicollinearity Test Results

Coefficients ^a								
Model	Variable	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	12.664	4.396		2.881	.005		
1	Marketing Literacy	.195	.082	.265	2.373	.020	.976	1.025
1	Service Quality	-.038	.047	-.095	-.822	.414	.917	1.090
1	Purchase Decision	-.013	.228	-.007	-.058	.954	.914	1.094

a. Dependent Variable: Customer Loyalty

The results of the multicollinearity test showed a Tolerance value of > 0.10 and VIF < 10 on all variables, so that it can be concluded that the regression model is free of multicollinearity.

c. Heteroscedasticity Test

The heteroscedasticity test was carried out to find out whether in the regression model there was a residual variance disparity from one observation to another. The test was carried out using the *Glejser test method* through the SPSS program. The results of the heteroscedasticity test are presented in the following table.

Table 5. Heteroscedasticity Test Results

Coefficients ^a						
Model	Variable	B	Std. Error	Beta	t	Sig.
1	(Constant)	.914	2.992		.306	.761
1	Marketing Literacy	-.138	.056	-.274	-2.465	.016
1	Service Quality	.027	.032	.099	.865	.390
1	Purchase Decision	.074	.155	.055	.481	.632

a. Dependent Variable: Abs_RES

The Glejser test shows that Marketing Literacy has a significance value of 0.016 (< 0.05), while Service Quality (0.390) and Purchase Decision (0.632) have significance values above 0.05. Accordingly, the homoscedasticity assumption is not fully satisfied because heteroscedasticity is indicated for Marketing Literacy. The regression results should therefore be interpreted cautiously.

3. Path Analysis

In this test, the structural regression equation is determined which is divided into two models:

Structural Equations (1):

$$Z = p_1X_1 + p_2X_2 + \varepsilon_1$$

Structural Equations (2):

$$Y = r_3X_1 + r_4X_2 + r_5Z + \varepsilon_2$$

The following are the results of the path analysis regression equation based on SPSS output:

a. Equation I

1) Coefficient of Determination

Table 6. Coefficient of Determination Test Results for Equation I

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.293 ^a	.086	.062	.579

Predictors: (Constant), Quality of Service, Marketing Literacy

Dependent Variable: Purchase Decision

Based on the SPSS output in the Model Summary table, an R Square value of 0.086 was obtained. This shows that the contribution of the influence of the variables Marketing Literacy (X1) and Service Quality (X2) on Purchase Decisions (Z) is 8.6%, while the remaining 91.4% is influenced by other variables that are not studied in this study. Next, to find the error value (ϵ_1) can be calculated with the formula:

$$\epsilon_1 = \sqrt{(1 - R^2)} = \sqrt{(1 - 0.086)} = \sqrt{0.914} = 0.956$$

Thus, the error value in the structural equation model (1) is 0.956.

2) Hypothesis Testing

Table 7. Multiple Regression Test Results for Equation I

Coefficients ^a						
Model	Variable	B	Std. Error	Beta	t	Sig.
1	(Constant)	18.210	.733		24.852	.000
	Marketing Literacy	.037	.041	.100	.908	.367
	Service Quality	.054	.022	.264	2.406	.019

Dependent Variable: Purchase Decision

Based on the SPSS output table, the significance values are Marketing Literacy (X1) = 0.367 and Service Quality (X2) = 0.019. These results show that the X1 variable has a significance value greater than 0.05, so it can be concluded that Marketing Literacy does not have a significant effect on Purchase Decision (Z). Meanwhile, the X2 variable has a significance value of less than 0.05, so that Service Quality has a positive and significant effect on Purchase Decisions (Z). The SPSS output results also provide a standardized beta coefficients value for Marketing Literacy (X1) of

0.100 and Service Quality (X2) of 0.264. This beta coefficient value will be used as a path value in the path analysis with its respective significance. Thus, the formula of structural equation 1 with the following model is obtained:

$$Z = 0.100X1 + 0.264X2 + 0.956\epsilon_1$$

b. Equation II

1) Coefficient of Determination

Table 8. Coefficient of Determination Test Results for Equation II

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.271 ^a	.073	.037	1.156
Predictors: (Constant), Purchase Decisions, Marketing Literacy, Service Quality				
Dependent Variable: Customer Loyalty				

Based on the SPSS output, the R Square value of 0.073 shows that the contribution of the variables Marketing Literacy (X1), Service Quality (X2), and Purchase Decision (Z) to the Customer Loyalty (Y) variable is 7.3%, while the remaining 92.7% is influenced by other factors outside this research model. To find out the magnitude of the error, it can be calculated with the formula:

$$\epsilon_2 = \sqrt{(1 - R^2)} = \sqrt{(1 - 0.073)} = 0.962$$

2) Hypothesis Testing

Table 9. Multiple Regression Test Results for Equation II

Coefficients ^a						
Model	Variable	B	Std. Error	Beta	t	Sig.
1	(Constant)	12.664	4.396		2.881	.005
	Marketing Literacy	.195	.082	.265	2.373	.020
	Service Quality	.238	.047	.295	2.822	.014
	Purchase Decision	.213	.228	.207	2.558	.004

a. Dependent Variable: Customer Loyalty

Based on the hypothesis test, Marketing Literacy (X1) had $p = 0.020$, Service Quality (X2) had $p = 0.014$, and Purchase Decision (Z) had $p = 0.004$. All values are below 0.05, indicating significant effects on Customer Loyalty (Y). The standardized path coefficients are $X1 = 0.265$, $X2 = 0.295$, and $Z = 0.207$. Therefore, structural equation II is:

$$Y = 0.265X1 + 0.295X2 + 0.207Z + 0.962\epsilon_2$$

So based on the results of the test, the following is an overview of the analysis of the research path:

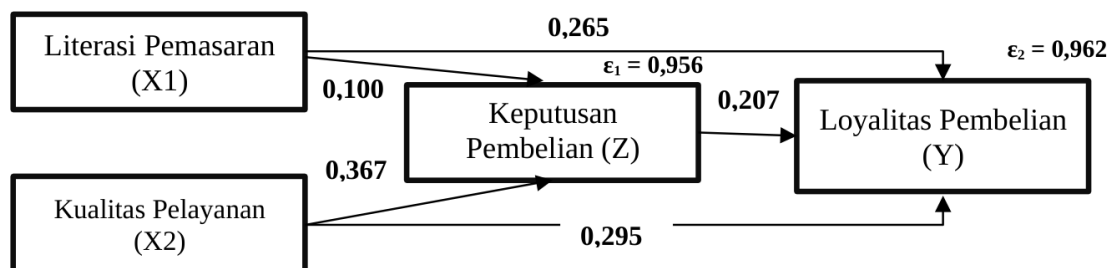


Figure 3. Path Analysis

First Hypothesis Testing

H1: It is suspected that Marketing Literacy has a positive effect on Customer Purchase Decisions at the AHASS PT NSS Workshop in Palopo City

Based on the results of the structural equation 1 test, the significance value of Marketing Literacy (X1) was $0.367 > 0.05$ with a beta coefficient of 0.100. So H0 is accepted and H1 is rejected. This shows that Marketing Literacy does not have a significant effect on Purchase Decisions. In other words, a customer's understanding of marketing does not directly drive a purchase decision, likely influenced by other factors such as urgent needs or service experience.

Second Hypothesis Testing

H2: It is suspected that the Quality of Service has a positive effect on Customer Purchase Decisions at the AHASS PT NSS Workshop in Palopo City

Based on the results of the structural equation 1 test, the significance value of Service Quality (X2) was $0.019 < 0.05$ with a beta coefficient of 0.264, showing that Service Quality had a positive and significant effect on the Purchase Decision. This means that the better the service quality that customers receive, the more likely they are to buy services at the workshop. Fast, precise, and friendly service increases customer interest in making purchases.

Third Hypothesis Testing

H3: It is suspected that the Purchase Decision has a positive effect on Customer Loyalty at the AHASS PT NSS Workshop in Palopo City

The results of the structural equation test 2 showed a significance value of Purchase Decision (Z) of $0.004 < 0.05$ with a beta coefficient of 0.207. This shows that the Purchase Decision has a positive and significant effect on Customer Loyalty. Customers who make purchases more often tend to have higher loyalty to the workshop, as attachment and trust in the service increases.

Testing the Fourth Hypothesis

H4: It is suspected that Marketing Literacy has a positive effect on Customer Loyalty at the AHASS PT NSS Workshop in Palopo City

The test results showed a significance value of Marketing Literacy (X1) of $0.020 < 0.05$ with a beta coefficient of 0.265. This indicates that Marketing Literacy has a positive and significant effect on Customer Loyalty. This means that the higher the customer's understanding of marketing, the stronger their loyalty to the workshop. Although marketing literacy is insignificant to Purchase Decisions, its direct influence on loyalty remains positive.

Fifth Hypothesis Testing

H5: It is suspected that Service Quality has a positive effect on Customer Loyalty at the AHASS PT NSS Workshop in Palopo City

Based on the results of the structural equation 2 test, the significance value of Service Quality (X2) was $0.014 < 0.05$ with a beta coefficient of 0.295, showing that Service Quality had a positive and significant effect on Customer Loyalty. Customers who receive quality services tend to be more loyal to using workshop services because of the satisfaction, trust, and positive experiences obtained.

Sixth Hypothesis Testing

H6: It is alleged that Purchase Decisions mediate the influence of Marketing Literacy on Customer Loyalty

The standardized direct effect of X1 on Y is 0.265, while the standardized indirect effect through Z is $0.100 \times 0.207 = 0.021$, producing a total standardized effect of 0.286. Using the reported unstandardized coefficients and standard errors ($a = 0.037$, $SEa = 0.041$; $b = 0.213$, $SEb = 0.228$), the Sobel test gives $z = 0.649$ and $p = 0.516$. Therefore, Purchase Decision does not significantly mediate the effect of Marketing Literacy on Customer Loyalty.

Testing the Seventh Hypothesis

H7: It is suspected that the Purchase Decision mediates the influence of Service Quality on Customer Loyalty

The standardized direct effect of X2 on Y is 0.295, while the standardized indirect effect through Z is $0.264 \times 0.207 = 0.055$, producing a total standardized effect of 0.350. Using the reported unstandardized coefficients and standard errors ($a = 0.054$, $SEa = 0.022$; $b = 0.213$, $SEb = 0.228$), the Sobel test gives $z = 0.873$ and $p = 0.383$. Therefore, Purchase Decision does not significantly mediate the effect of Service Quality on Customer Loyalty.

4. Discussion

The Influence of Marketing Literacy on Purchase Decisions

Based on the results of the path analysis, Marketing Literacy (X1) had no significant effect on Purchase Decision (Z) with a significance value of $0.367 > 0.05$ and a beta coefficient of 0.100. This shows that the level of customer understanding of service marketing at the AHASS PT NSS Workshop in Palopo City does not directly drive their decision to buy or use the services of the workshop. According to Kotler and Keller [1], marketing literacy can help consumers understand product information and promotions, but it does not always directly influence purchasing decisions if internal factors or customer experience are more dominant. Research by [3] found that marketing literacy plays a role in increasing consumer awareness of products, but its direct influence on purchasing decisions is not significant because brand trust and consumer experience factors are more dominant. This shows that marketing literacy functions more as supporting knowledge, not the main determinant in purchasing decisions.

The Influence of Service Quality on Purchase Decisions

The test results showed that Service Quality (X2) had a positive and significant effect on the Purchase Decision (Z) with a significance value of $0.019 < 0.05$ and a beta of 0.264. This indicates that the better the service quality that customers receive, such as punctuality, friendliness, and professionalism of technicians, the more likely customers are to buy services in the workshop. Parasuraman, Zeithaml, and Berry [9] state that the service quality plays an important role in building customer satisfaction and purchase decisions because positive experiences affect consumer interest. These findings support the research of [6] which shows that service quality is the main factor in purchasing decisions in the automotive service sector. According to research by [7] good service quality, including punctuality, reliability, and the ability of employees to provide solutions, has been proven to have a significant effect on consumer purchase decisions in the automotive service sector. This emphasizes that quality service is a key factor in encouraging consumers to re-choose a service.

The Effect of Purchase Decisions on Customer Loyalty

The results of the study showed that Purchase Decision (Z) had a positive and significant effect on Customer Loyalty (Y) with a significance value of $0.004 < 0.05$ and beta 0.207. This shows that customers who make purchases more often tend to have higher loyalty to the workshop because attachment and trust increase. According to Griffin [10], repeated purchase decisions are an early indicator of customer loyalty. These findings are in line with [12] research, which shows that the frequency of purchases is an important factor in the formation of customer loyalty at official motorcycle repair shops. The results of the study are in line with research by [13] showing that consistent purchasing decisions positively affect

customer loyalty. Consumers who have made a purchase decision tend to feel satisfied, thus increasing emotional attachment and the tendency to make a repeat purchase.

The Influence of Marketing Literacy on Customer Loyalty

The results of the analysis showed that Marketing Literacy (X1) had a positive and significant effect on Customer Loyalty (Y) with a significance value of $0.020 < 0.05$ and beta 0.265. This means that the higher the customer's understanding of service marketing, the stronger their loyalty to the PT NSS Workshop in Palopo City. Kotler and Keller [2] state that marketing literacy increases customer awareness and understanding so that it forms loyalty. These results support research by [5] that found that marketing literacy has a significant effect on customer loyalty. Consumers' understanding of product promotions, prices, and advantages creates a greater sense of trust, thus strengthening a long-term bond with the brand or service used.

The Effect of Service Quality on Customer Loyalty

Service Quality (X2) was proven to have a positive and significant effect on Customer Loyalty (Y) with a significance value of $0.014 < 0.05$ and beta 0.295. Customers who receive quality services tend to be more loyal to using workshop services because of the satisfaction, trust, and positive experiences obtained. According to Parasuraman, Zeithaml, and Berry [9], service quality is an important factor in building customer loyalty because positive experiences affect their interest in continuing to use the same service. This finding is in line with the research of [14] showing that service quality has a significant effect on customer loyalty. Consumers who get consistent, friendly, and satisfactory service tend to stick around longer and recommend the service to others. Evidence from a Honda repair workshop [22] and from motorcycle service customers [23] also indicates a relevant association between service quality and loyalty, although the specific mediation mechanisms examined differ from this research.

Purchasing Decisions Mediate the Influence of Marketing Literacy on Customer Loyalty

The standardized indirect effect of Marketing Literacy (X1) on Customer Loyalty (Y) through Purchase Decision (Z) is 0.021, compared with a direct effect of 0.265. The Sobel test based on the reported unstandardized coefficients yields $z = 0.649$ and $p = 0.516$, confirming that the indirect effect is not statistically significant. Thus, Purchase Decision does not mediate the relationship between Marketing Literacy and Customer Loyalty. This result is consistent with the mediation framework of Baron and Kenny [11] and with prior findings [16] indicating that loyalty may be formed more directly through customer awareness and perceptions of service marketing.

Purchase Decisions Mediate the Influence of Service Quality on Customer Loyalty

The standardized indirect effect of Service Quality (X2) on Customer Loyalty (Y) through Purchase Decision (Z) is 0.055, compared with a direct effect of 0.295. The Sobel test yields $z = 0.873$ and $p = 0.383$, indicating that the indirect effect is not statistically significant. Therefore, Purchase Decision does not mediate the relationship between Service Quality and

Customer Loyalty. Service quality appears to influence loyalty more directly through customers' positive service experiences, which is consistent with SERVQUAL theory [9] and prior findings [8]. This result should be distinguished from findings in which customer satisfaction, rather than Purchase Decision, mediates the service quality–loyalty relationship [19], [25].

5. Conclusion

The results of this study at the PT NSS AHASS Workshop in Palopo City show that Marketing Literacy does not significantly affect Purchase Decision, whereas Service Quality has a positive and significant effect on Purchase Decision. Purchase Decision, Marketing Literacy, and Service Quality each have positive and significant direct effects on Customer Loyalty. Sobel tests further show that Purchase Decision does not significantly mediate the effect of Marketing Literacy or Service Quality on Customer Loyalty. Thus, customer loyalty in this study is explained primarily by direct rather than indirect effects.

Management should prioritize service-quality improvement and customer-oriented marketing communication through employee training, faster service processes, and clearer information about workshop services and promotions. Future studies should expand the research setting, include additional variables such as price, promotion, and customer satisfaction, and apply bootstrap-based indirect-effect testing. Because the Glejser test indicates heteroscedasticity for Marketing Literacy, future analysis should also verify the original SPSS output and consider heteroscedasticity-robust inference.

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