The Effect of Product and Service Quality on Customer Loyalty: The Moderating Role of Price at Pouter Coffee, Cempaka Putih

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ABSTRACT

This study examines the effects of product quality and service quality on customer loyalty, with price serving as a moderating variable at Pouter Coffe Cempaka Putih. A quantitative causal-associative design as used. Data were collected from 102 customers selected through purposive sampling; eligible respondents were at least 17 years old and had made at least three purchases. The data were analyzed using validity and reliability tests, classical assumption tests, multiple linear regression, and Moderated Regression Analysis with IBM SPSS Statistics. The results show that product quality has a positive and significant effect on customer loyalty (B = 0.269; p = 0.003), whereas service quality has no significant effect (B = 0.173; p = 0.062). Price has a positive and significant direct effect on customer loyalty (B = 0.229; p = 0.024). Price significantly moderates and weakens the relationship between product quality and loyalty (B = -0.018; p = 0.035), but it does not moderate the relationship between service quality and loyalty (B = -0.007; p = 0.400). These findings underline the importance of maintaining product consistency and price fairness. Because several indicators were invalid, reliability was below the recommended threshold, and heteroscedasticity was detected, the inferential findings should be interpreted cautiously.

Keywords: Product Quality, Service Quality, Price, Customer Loyalty, Moderated Regression Analysis.

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INTRODUCTION

Changes in people's consumption patterns have encouraged the growth of food and beverage businesses, including coffee shops that not only offer drinks, but also spaces to work, study, socialize, and build communities. The increasingly close competition makes it not enough for business actors to just attract the first purchase; Business sustainability is also determined by the ability to retain customers and encourage repeat purchases (Tjiptono, & Chandra, 2023).

Consumer loyalty describes a customer's commitment to continue to choose a brand or service provider, make a repeat purchase, and make positive recommendations even when other alternatives are available. Loyalty is formed through a repetitive evaluation process of the benefits, experiences, and value received by customers For (Oliver, 1999). coffee shops, loyalty plays an important role because consumers have many choices with products, atmospheres, and price levels that are relatively easy to compare.

One of the primary sources of value in the culinary industry is product quality. Taste consistency, quality of raw materials, cleanliness, menu variety, and presentation appearance will affect consumers' assessment of product benefits. Products that are able to meet or exceed expectations are more likely to increase satisfaction and repurchase intent (Alma, 2022; Pramezwary et al., 2022).

The whole client experience is shaped not only by the items but also by the quality of the services. Service speed, employee friendliness, responsiveness to requests, service assurance, and attention to customers are dimensions commonly used to assess service quality. Consistent service can strengthen the relationship between customers and companies, although its contribution to loyalty may differ according to the characteristics of the research object (Parasuraman et al., 1988).

Price also has a strategic function because consumers judge not only the nominal amount paid, but also the fairness of the price compared to the quality and benefits obtained. In this study, price was tested as a direct variable as well as a moderator. Conceptually, perceived reasonable prices can strengthen the relationship between quality and loyalty; Conversely, prices that are considered unreasonable can reduce the benefits of quality improvement (Tjiptono, 2022).

A number of studies have shown results that are not completely consistent. as well as finding positive relationships between quality, price, and loyalty. However, it reports that product quality has no partial effect, whereas it shows that the role of moderation variables can differ according to the context. This lack of consensus demands further studies that cover the broader scope of the issue and consumer demographics to fill the knowledge gap (Yandini & Rangkuti, 2023), (Aisyah et al., 2024), (Bali, 2022), (Riyanti & Purnomo, 2022), (Bungin & Tangdialla, 2023), (Winata, 2025).

Pouter Coffe Cempaka Putih is located in a business environment with many alternative coffee shops. Therefore, managers need to know the most relevant factors in retaining consumers. The study's

five goals are to ascertain how customer loyalty is impacted by product and service quality, how prices impact customer loyalty, how prices moderate the impact of product quality, and how price moderates the impact of service quality on customer loyalty.

This study offers a novel contribution by testing a model that positions price as a moderating variable in the relationship of product quality and service quality with loyalty, in addition to analyzing the direct effects of price, product quality, and service quality on consumer loyalty. This approach enables a more comprehensive explanation of the relationship between price perception and customer loyalty. The findings indicate that while service quality does not have a significant impact on loyalty, product quality and price do. Furthermore, the results demonstrate that price moderates the relationship between product quality and loyalty but does not moderate the relationship between service quality and loyalty.

LITERATURE REVIEW

Consumer Loyalty

A relatively high level of commitment to routinely repurchase a product or use a chosen service is known as consumer loyalty. Purchase frequency is merely one indicator of loyalty; others include brand attachment, resistance to competitors' offers, and a willingness to recommend the product or service (Oliver, 1999; Aaker & Moorman, 2023). In this study, loyalty was measured through repurchases, positive recommendations, impossibility of moving, and commitment to Pouter Coffe.

Product Quality

The capacity of a product to satisfy the demands and expectations of customers is shown by its quality. The quality of raw materials, flavour, product consistency, appearance, cleanliness, and menu diversity are all indicators of product quality in the setting of a coffee shop. Consumers' assessment of these aspects shapes perceptions of the product's ability to provide benefits in accordance with expectations. When consumers obtain quality and consistent products, the possibility of making repurchases and maintaining the choice of a coffee shop becomes greater (Kumar , 2023). Based on these arguments, the first hypothesis is formulated as follows.

Quality of Service

The capacity of the business to deliver services that either match or exceed client expectations is known as service quality. Service quality is divided into tangibles, assurance, responsiveness, empathy, and dependability according to the SERVQUAL paradigm (Parasuraman et al., 1988). Positive experiences may be created by prompt, amiable, accommodating, responsive, and communicative service. These reasons lead to the following second hypothesis.

Price and the Role of Moderation

Price is the monetary value that consumers exchange to obtain products or services. Price perceptions are formed through assessments of affordability, competitiveness, conformity with quality, and conformity with benefits (Pramezwary et al., 2022). Fair prices can boost loyalty and perceived value. Price may alter the intensity of the link between loyalty and the quality of a product or service in addition to having a direct impact. Testing if an independent variable's effect varies at various moderator levels is possible with moderation analysis (Hayes, 2022).

Previous Research and Conceptual Framework

Satisfaction with services, products, and pricing all play a role in positively determining customer loyalty (Yandini & Rangkuti, 2023). (Aisyah et al., 2024) show that price and promotion form loyalty, while (Bali, 2022) found that product quality and price have a direct or indirect effect on satisfaction. The impact of product quality, pricing, and marketing in the coffee business has been documented by (Riyanti and Purnomo, 2022). (Bungin & Tangdilia, 2023) found the opposite: product quality has no real impact on dependent variables. These diverse findings reinforce the need for testing on Pouter Coffe with price as a moderator.

State of the Art

The inconsistent findings of previous studies on the connection between pricing, customer loyalty, service quality, and product quality are addressed in this study. While some research indicates that pricing, service quality, and product quality all positively impact loyalty, other research indicates that product quality is not necessarily a major factor. These variations demonstrate that the impact of quality on loyalty varies depending on the research item.

In order to close this gap, this study modifies the link between customer loyalty and product and service quality using pricing. The model made it possible to determine if pricing perceptions affect how strongly quality and loyalty are related. The use of the moderation model in the context of Pouter Coffe Cempaka Putih is the differentiator of this study compared to previous studies that placed satisfaction as an intervening variable or tested the direct influence between variables.

Hypothesis

H_1: Product quality has a positive effect on consumer loyalty.

H_2: The quality of service has a positive effect on consumer loyalty.

H_3: Price moderates the influence of product quality on consumer loyalty.

H_4: Price moderates the effect of service quality on consumer loyalty.

H_5: Price has a positive effect on consumer loyalty.

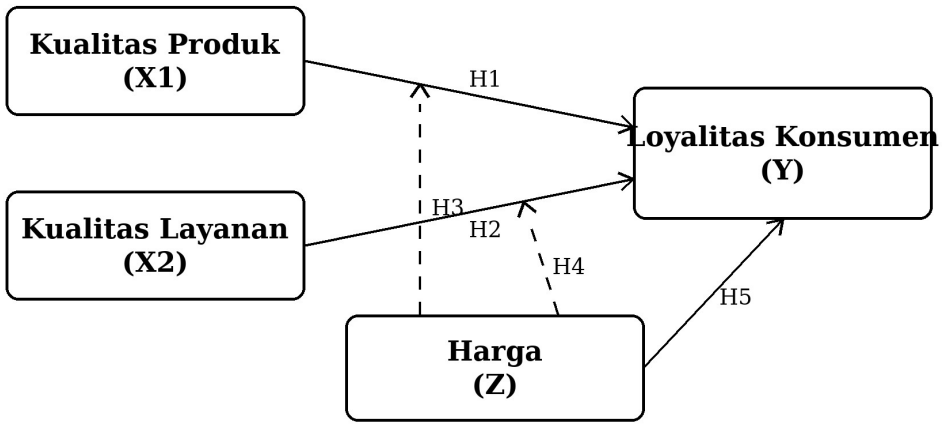


Figure 1. Conceptual Framework

RESEARCH METHODS

Design, Location, and Research Time

Cross-sectional data collection and a causal associative design were utilized in this quantitative investigation. Pouter Coffee Cempaka Putih is the subject of the study. In 2026, consumer surveys will be distributed in order to collect data. Product quality (X_1) and service quality (X_2) are independent variables; pricing (Z) is a moderator variable; and customer loyalty (Y) is a dependent variable.

Population, Sample, and Respondent Criteria

The research population includes all consumers who have made purchases at Pouter Coffe Cempaka Putih. Since the population is not known for sure, the population is treated as an infinite population. The sample was selected using purposive sampling techniques so that respondents had adequate experience in assessing products, services, prices, and loyalty. A total of 103 complete questionnaires were used in the analysis. The respondent criteria are set as follows: at least 17 years old, have made purchases at pouter coffe cempaka putih at least three times, and willing to fill out all questionnaire items completely.

Instruments and Variable Measurements

A questionnaire using a five-level Likert scale 1 being severely disagree, 2 being disagree, 3 being neutral, 4 being agree, and 5 being highly agree was used to gather data. Product quality is measured through five indicators, namely the quality of raw materials, menu variety, product appearance, taste suitability with expectations, and taste consistency.

Service quality is measured through service speed, employee friendliness, responsiveness to complaints, comfort of atmosphere and facilities, and employees' ability to provide information to customers. Price affordability, price conformance with product quality, price conformance with service quality, price competitiveness with other coffee shops, and price conformance with the advantages received are all used to gauge prices. Consumer loyalty is measured by the intention to make a repurchase, willingness to recommend, the tendency not to move to competitors, and commitment to Pouter Coffe.

Data Analysis Techniques

The analysis was conducted using IBM SPSS Statistics. Reliability was evaluated using Cronbach's Alpha with a recommended value of at least 0.60, and validity was tested using Corrected Item-Total Correlation with an acceptable limit of 0.30 (Hair et.al , 2019). Heteroscedasticity, multicollinearity, and normalcy are examples of traditional assumption testing. Multiple linear regression was used to assess direct influence, while moderated regression analysis was used to examine the moderators' role (Hayes , 2022) . The main regression and the moderation equations are formulated as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3Z + e$$

$$Y = a + b_1X_1 + b_2X_2 + b_3Z + b_4(X_1 \times Z) + b_5(X_2 \times Z) + e$$

The hypothesis is accepted if the significance value is less than 0.05. A significant interaction coefficient indicates a moderation effect, while a coefficient sign indicates the direction of strengthening or weakening the relationship.

RESULTS

Overview of Objects and Characteristics of Respondents

Pouter Coffe Cempaka Putih is a business engaged in the food and beverage sector by providing a variety of coffee-based beverage products, non-coffee drinks, and complementary foods. Pouter Coffe consumers come from various community groups, including students, students, employees, and the general public. Consumer activities at Pouter Coffe are not only related to the purchase and consumption of products, but also include meeting colleagues, doing tasks, working informally, and spending free time. Consumers who make three or more transactions are considered to have sufficient experience to judge Pouter Coffee based on four dimensions: product quality, service quality, price, and loyalty.

Characteristics of Respondents by Gender

Table 1. Characteristics of Respondents by Gender

Gender	Frequency	Percentage (%)
Male	41	40,2
Women	61	59,8
Total	102	100,0

Source: Primary data processed, 2026.

Table 1 shows that of the total respondents, 61 people were women (or 59.8%) and 41 people were men (or 40.2%). There was a dominance of female respondents in this study. These details show that the sample of the Pouter Coffee Cempaka Putih survey is more inclined towards female participants. Given that this study did not explicitly examine differences in loyalty by gender, we cannot use this distribution to conclude that women are more loyal than men; This data only describes how the sample is distributed.

Characteristics of Respondents by Age

Table 2. Characteristics of Respondents by Age

Age Group	Frequency	Percentage (%)
17–26 years old	32	31,4
27–36 years old	37	36,3
37–46 years old	30	29,4
47–56 years old	3	2,9
Total	102	100,0

Source: Primary data processed, 2026.

Table 2 shows that 37 respondents, or 36.3% of the total, fell within the 27–36 age range. Additionally, 31.4% of respondents were between the ages of 17 and 26, 29.4% were between the ages of 37 and 46, and just 3.9% of all respondents were between the ages of 47 and 56. As a result, the majority of respondents were working-age individuals. This condition is relevant to the characteristics of a coffee shop business which can function as a place of consumption as well as a space to carry out social activities, work, and academic activities.

Validity Test

Each statement item is tested for validity to find out how well it measures the target construct. The acceptance of items in this study was based on the Corrected Item-Total Correlation value of 0.30; If the correlation value is at least 0.30, an item is deemed acceptable; if it is less than 0.30, it is deemed invalid.

To ensure that the items of the research instrument reliably measure the variables in question, all of them undergo validity tests. The R-value (R-calculated) obtained is then compared with the R-value of the table to perform the test. An R-table value of 0.194 was found using a sample size of 102 respondents and

a significance level of 5%. An item's R-value must be higher than the table's R-value in order for it to be considered genuine.

Product Quality Validity Test (X_1)

Table 3. Product Quality Variable Validity Test (X_1)

Indikator	Rhitung	Rtabel	Keterangan
X1.1	0,716	0,194	Valid
X1.2	0,605	0,194	Valid
X1.3	0,706	0,194	Valid
X1.4	0,617	0,194	Valid
X1.5	0,569	0,194	Valid

Source: IBM SPSS Statistics data processing, 2026.

Table 3 shows that all Product Quality (X_1) indicators are valid. The r-calculated value for the X1.1 to X1.5 indication varies from 0.569 to 0.716, but the r-table value is 0.194. Since the r-calculated value is higher than the r-table value, all product quality-related elements are deemed valid and viable for this investigation

Service Quality Validity Test (X_2)

Table 4. Validity Test of Service Quality Variables (X_2)

Indikator	Rhitung	Rtabel	Keterangan
X2.1	0,670	0,194	Valid
X2.2	0,754	0,194	Valid
X2.3	0,729	0,194	Valid
X2.4	0,717	0,194	Valid
X2.5	0,581	0,194	Valid

Source: IBM SPSS Statistics data processing, 2026.

Based on Table 4, all indicators for the Service Quality variable (X_2) are declared valid. The calculated r-value (R-calculated) is greater than the critical r-value (R-table) of 0.194 and is in the range of 0.581 to 0.754. Thus, all items of the Service Quality statement are declared valid according to the validity analysis criteria and can be used for further research.

Price Validity Test (Z)

Table 5. Price Variable Validity Test (Z)

Indikator	Rhitung	Rtabel	Keterangan
Z1.1	0,630	0,194	Valid
Z1.2	0,675	0,194	Valid
Z1.3	0,709	0,194	Valid
Z1.4	0,714	0,194	Valid
Z1.5	0,643	0,194	Valid

Source: IBM SPSS Statistics data processing, 2026.

Table 5 shows that all indicators for the price variable (Z) are declared valid. For each indicator, an R-count value is obtained which ranges from 0.630 to 0.714. All of these values exceed the critical value of r (R-table) by 0.194. Thus, this study can use all statement items for price variables because they all meet the validity criteria.

Consumer Loyalty Validity Test (Y)

Table 6. Validity Test of Consumer Loyalty Variables (Y)

Indikator	Rhitung	Rtabel	Keterangan
Y0.1	0,610	0,194	Valid
Y0.2	0,692	0,194	Valid
Y0.3	0,745	0,194	Valid
Y0.4	0,661	0,194	Valid
Y0.5	0,673	0,194	Valid

Source: IBM SPSS Statistics data processing, 2026.

Table 6 shows that all Consumer Loyalty (Y) indicators are valid. The calculated r-value ranges from 0.610 to 0.745, while the critical r-value (table r) is 0.194. All statement items for the Consumer Loyalty variable are declared valid and suitable for use in the research analysis because all calculated r values exceed the required r value.

X_1, X_2, Z, and Y were the four research variables that were tested for validity. The entire statement item has a calculated r-value greater than the critical r-value of 0.194. This leads to the conclusion that the twenty items of the statement are valid and worthy of inclusion in the next stage of data analysis.

Reliability Test

To find out how consistently the research instrument measures the variables in question, a reliability test was carried out. Cronbach's Alpha value is used in the test. For an instrument to be considered reliable, Cronbach's Alpha value must be greater than 0.60.

Table 7. Reliability Test Results

Variabel	Cronbach's Alpha	N of Items	Keterangan
Kualitas Produk (X1)	0,645	5	Reliabel
Kualitas Layanan (X2)	0,727	5	Reliabel
Harga (Z)	0,700	5	Reliabel
Loyalitas Konsumen (Y)	0,702	5	Reliabel

Source: IBM SPSS Statistics data processing, 2026.

Each research variable has a Cronbach's Alpha value above 0.60, as seen in Table 7. Thus, all research instruments are considered reliable and worthy of further analysis. The Product Quality variable (X_1) obtained a Cronbach's Alpha score of 0.645. The statement items for the Product Quality variable are reliable because these values are greater than 0.60. Cronbach's Alpha score of 0.727 was obtained for the Quality of Service (X_2) variable. This value indicates that the Quality of Service instrument has a strong and reliable internal consistency. Cronbach's Alpha value of 0.700 was recorded for the Price variable (Z), while the Consumer Loyalty variable (Y) had a value of 0.702. Both numbers are above 0.60, which means that the measurement instruments for both of these variables are reliable. There is sufficient internal consistency in these research instruments, so it can be concluded that these instruments are feasible to analyze research data regarding Product Quality, Service Quality, Price, and Consumer Loyalty.

Classical Assumption Test Results

Normality Test

Finding out if the residual regression model has a normal distribution is the aim of the normality test. The test was conducted using a single-sample Kolmogorov-Smirnov test and graphical analysis.

Table 8. Kolmogorov–Smirnov Normality Test Results

Parameter	Nilai
N	102
Test Statistic	0,078
Asymp. Sig. (2-tailed)	0,137

Source: IBM SPSS Statistics data processing, 2026.

Based on Table 8, the level of statistical significance (bidirectional) is 0.137. It can be seen that this figure is greater than 0.05 because it is 0.137 > 0.05. Thus, the residual regression model follows a normal distribution.

Multicollinearity Test

When running a regression model, multicollinearity testing is performed to detect the presence of too strong relationships between independent variables. If the VIF value is less than 10 and the Tolerance value is greater than 0.10, then the regression model is free of multicollinearity.

Table 9. Multicollinearity Test Results

Variabel	Tolerance	VIF	Keterangan
Kualitas Produk (X1)	0,676	1,479	Tidak terjadi multikolinearitas
Kualitas Layanan (X2)	0,721	1,386	Tidak terjadi multikolinearitas
Harga (Z)	0,692	1,444	Tidak terjadi multikolinearitas

Source: IBM SPSS Statistics data processing, 2026.

Table 9 shows that the Product Quality variable (X_1) has a Tolerance value of 0.676 and a VIF value of 1.479. The Quality of Service (X_2) variable has a Tolerance value of 0.721 and VIF of 1.386, whereas the Price (Z) variable has a Tolerance value of 0.692 and VIF of 1.444. Every tolerance value is greater than 0.10, and every VIF value is less than 10. Therefore, it may be said that the regression model does not contain multicollinearity.

Heteroscedasticity Test

We search for evidence of uneven residual variance at different levels of independent variables when assessing heteroscedasticity. The Glejser algorithm is used to conduct the tests. A significance value greater than 0.05 indicates that there is no heteroscedasticity in the model.

Table 10. Results of Heteroscedasticity Test with Glejser Test

Variabel	Sig.	Keterangan
Kualitas Produk (X1)	0,268	Tidak terjadi heteroskedastisitas
Kualitas Layanan (X2)	0,815	Tidak terjadi heteroskedastisitas
Harga (Z)	–	Tidak dapat diinterpretasikan

Source: IBM SPSS Statistics data processing, 2026.

Based on Table 10, both the Product Quality (X_1) and Service Quality (X_2) variables showed statistical significance (with p=0.268 and 0.815 values, respectively). No heteroscedasticity was found because the two values were greater than 0.05. Meanwhile, the Price variable (Z) has no significance value available on the output so the results cannot be statistically interpreted through the Glejser test. Overall, based on the significance values of the variables that could be tested, no indication of heteroscedasticity was found in Product Quality and Service Quality.

Autocorrelation Test

Finding a correlation between the residuals of two observations is the goal of the autocorrelation test. The test is conducted using Durbin-Watson statistics.

Table 11. Results of Autocorrelation Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0,641	0,411	0,393	2,81367	2,057

Source: IBM SPSS Statistics data processing, 2026.

In Table 11, it can be seen that the value of Durbin-Watson is 2.057, which is higher than the DL value of 1.6153 and the value of DU of 1.7374. Since these values are in the range that indicates the absence of autocorrelation, we can conclude that the regression model is not affected by autocorrelation.

Regression Analysis Test

Table 12. Multiple Linear Regression Analysis Results

Variabel	B	Std. Error	Beta	t	Sig.
Constant	4,118	1,951	–	2,110	0,037
Kualitas Produk (X1)	0,362	0,103	0,330	3,497	0,001
Kualitas Layanan (X2)	-0,018	0,087	-0,019	-0,210	0,834
Harga (Z)	0,422	0,094	0,420	4,513	0,000

Source: IBM SPSS Statistics data processing, 2026.

Multiple linear regression analysis was utilized to determine the relationship between Product Quality (X_1), Service Quality (X_2), and Price (Z) and Consumer Loyalty (Y). Table 12, allows us to formulate the multiple linear regression equation as follows:

$$\boldsymbol{Y = 4{,}118 + 0{,}362X1 - 0{,}018X2 + 0{,}422Z + e}$$

According to the equation, a constant of 4.118 indicates that the consumer loyalty value is 4.118 if all other variables stay the same. Higher product quality is associated with more dedicated customers, according to a positive correlation between product quality and customer loyalty (r=0.362). Despite not being statistically significant, there was a negative correlation between service quality (r=-0.018). A positive relationship between price (r=0.422) and consumer loyalty showed a positive relationship between price and consumer loyalty.

Hypothesis Test

t test

To find out how each independent variable affects Consumer Loyalty (Y), a t-test is used.

Table 13. Partial Test Results (t-test)

Variabel	t hitung	Sig.	Keputusan
Kualitas Produk (X1)	3,497	0,001	Berpengaruh signifikan
Kualitas Layanan (X2)	-0,210	0,834	Tidak berpengaruh signifikan
Harga (Z)	4,513	0,000	Berpengaruh signifikan

Source: IBM SPSS Statistics data processing, 2026.

The Product Quality variable (X_1) in Table 13, has a significance value of 0.001 (< 0.05). Thus, product quality has a big impact on customer loyalty. For Quality of Service (X_2), the significance level of 0.834 is higher than the 0.05 cutoff. Customer loyalty is therefore unaffected by service excellence. The pricing variable (Z) has a significance value of 0.000 (< 0.05). Thus, pricing has a significant impact on customer loyalty.

F Test

If you want to know how price, service quality, and product quality interact with each other in influencing customer loyalty, you can use the F test.

Table 14. Simultaneous Test Results (F Test)

Models	Sum of Squares	df	Mean Square	F	Sig.
Regression	541,622	3	180,541	22,805	0,000
Residual	775,839	98	7,917	-	-
Total	1.317,461	101	-	-	-

Source: IBM SPSS Statistics data processing, 2026.

The results of the analysis have been obtained, with a significance level of 0.000 and an F value of 22.805 as listed in Table 14. Product Quality (X_1), Service Quality (X_2), and Price (Z) together have a significant influence on Consumer Loyalty (Y), considering that the significance value is below 0.05 (0.000). Therefore, it can be concluded that price, service quality, and product quality all affect customer loyalty.

Coefficient of Determination Test (R^2)

Table 15. Product Quality and Price Interaction (X1×Z)

Models	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0,641	0,411	0,393	2,81367	2,057

Source: IBM SPSS Statistics data processing, 2026.

Based on Table 15, Product Quality, Service Quality, Price, and Consumer Loyalty have a fairly strong relationship, with an R value of 0.641. Product quality, service quality, and price explain 41.1% variation in consumer loyalty, as shown by the R-squared value of 0.411. Meanwhile, variables outside the scope of the study accounted for 58.9% of the customer loyalty variance.

Moderated Regression Analysis (MRA)

Table 16. Interaction of Service Quality and Price (X2×Z)

Variable	B	Std. Error	Beta	t	Sig.
Constant	-9,206	6,549	–	-1,406	0,163
Product Quality (X1)	1,259	0,460	1,147	2,740	0,007
Quality of Service (X2)	-0,112	0,541	-0,117	-0,207	0,836
Price (Z)	1,137	0,340	1,133	3,350	0,001
X1Z	-0,048	0,023	-1,453	-2,071	0,041
X2Z	0,006	0,027	0,205	0,231	0,818

Source: IBM SPSS Statistics data processing, 2026.

If we want to find out whether Product Quality (X_1) and Quality of Service (X_2) have an effect on Consumer Loyalty (Y), we can use Moderation Regression Analysis to find out. The following is the moderation regression equation based on Table 16:

$$Y = -9.206 + 1.259X1 - 0.112X2 + 1.137Z - 0.048X1Z + 0.006X2Z + e$$

Based on the test results, Product Quality (X_1) has a significant effect on Consumer Loyalty with a significance value of 0.007 (< 0.05). Quality of Service (X_2) has no significant effect on Consumer Loyalty, as indicated by a significance value of 0.836 (> 0.05). Price (Z) has a significant effect on consumer loyalty because its significance value is 0.001 (< 0.05). Price moderates the influence of Product Quality on Consumer Loyalty, as shown by the significant interaction between Product Quality and Price (X1Z) with a significance value of 0.041 (< 0.05).

At the same time, with a significance level of 0.818 (> 0.05) for the interaction between Quality of Service and Price (X2Z), it can be concluded that Price does not act as a moderator between Quality of Service and Consumer Loyalty.

Table 17. Moderation Simultan Test

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	601,227	5	120,245	16,117	0,000
Residual	716,234	96	7,461	-	-
Total	1.317,461	101	-	-	-

Source: IBM SPSS Statistics data processing, 2026.

A significance threshold of 0.000 is used to produce an F-value of 16.117, as shown in Table 17. These four factors Price, Product Quality, Service Quality, and X1Z interaction contribute significantly to Consumer Loyalty because their significance value is less than 0.05.

Table 18. Moderation Coefficient of Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,676	0,456	0,428	2,73144

Source: IBM SPSS Statistics data processing, 2026.

Based on Table 18, the R-squared value is 0.456 and the R-value is 0.676. This means that the 45.6% variance in consumer loyalty can be explained by product quality, service quality, price, as well as the relationship between product quality and price and between service quality and price. As for consumer loyalty, 54.4% of the variance was due to variables not included in this study.

DISCUSSION

The Influence of Product Quality on Consumer Loyalty

Customer loyalty and product quality are positively and statistically significantly correlated, according to preliminary findings. The first regression model's Product Quality regression coefficient was 0.362, with a significance value of 0.001 ($p < 0.05$). These findings show that customer loyalty to Pouter Coffee has increased as customer perceptions of product quality have improved. A coefficient of 1.259 and a significance value of 0.007 ($p < 0.05$) show that product quality maintained its considerable effect in the moderation model. Thus, there is a consistent relationship between consumer loyalty and product quality. Uniformity of serving procedures, size or portion, taste, appearance, and selection of raw materials are aspects of product quality that must be maintained by Pouter Coffee.

The Influence of Service Quality on Consumer Loyalty

There was no statistically significant correlation between customer loyalty and quality of service, according to incomplete test data. A significance level of 0.834 (higher than 0.05) was recorded for a coefficient of -0.018 obtained from the initial regression model. Based on these findings, it is clear that changes in customer perception of service quality do not have a significant impact on customer loyalty.

The results of the moderation model are also consistent with these findings; The coefficient for Quality of Service is -0.112, with a significance level of 0.836 (higher than 0.05). These results show that customer loyalty is not affected by the quality of service. However, this in no way diminishes the importance of service quality for Pouter Coffee; On the contrary, providing fast, accurate, courteous, and responsive service to customers remains crucial to their satisfaction.

The Effect of Price on Consumer Loyalty

Price and customer loyalty were shown to be positively and statistically significantly correlated. In the first regression model, the price variable produced a coefficient of 0.422 with a significance value of 0.000 ($p < 0.05$). According to these results, customers' loyalty to Pouter Coffee has grown as their opinion of the company's prices has improved. The price also showed a significant impact in the moderation model, with a coefficient of 1.137 and a significance value of 0.001 ($p < 0.05$). Thus, price is a crucial factor in understanding customer loyalty. Pouter Coffee needs to create a balance between customer satisfaction through reasonable prices as well as product quality and excellence. If the pricing is reasonable and in line with the product's quality, there will be a higher likelihood of repurchasing.

Price Moderates the Influence of Product Quality on Consumer Loyalty

A t-value of -2.071, a significant value of 0.041 ($p < 0.05$), and an interaction coefficient of -0.048 were obtained from the moderation analysis of the Product Quality and Price variable. This demonstrates how price moderates the effect of product quality on customer loyalty. The negative interaction coefficient suggests that Price moderation has somewhat impaired the link between Product Quality and Customer Loyalty. This suggests that while customers tend to be more loyal to brands with high-quality products, the strength of those relationships can be influenced by their perception of price. These results show how important it is to provide customers with what they want at an affordable price. Quality is important, but consumers also consider whether the product is worth the price. Therefore, Pouter Coffee needs to ensure that every price change is accompanied by a real improvement that can be seen by customers, both in terms of quantity, taste, presentation, and quality of raw materials.

Price Does Not Moderate the Influence of Service Quality on Consumer Loyalty

The results of the moderation test on the interaction between Service Quality and Price showed a t-value of 0.231, a significance value of 0.818 (higher than 0.05), and a coefficient of 0.006. Therefore, no evidence was found that price moderates the relationship between service quality and customer loyalty. Although the interaction coefficient is positive, the impact is not statistically significant because the significance value is greater than 0.05. This indicates that the correlation between service quality and customer loyalty has not been shown to be influenced by changes in consumer perception of price. Based

on these results, the pricing approach has not succeeded in increasing the influence of service quality on customer loyalty. Therefore, enhancing order correctness, staff attentiveness, service speed, and reaction times to customer requests and complaints should be the main goals of efforts to improve service quality.

CONCLUSION

The results of a survey of 102 customers of Pouter Coffee Cempaka Putih show that high-quality products significantly increase brand loyalty. Consumers tend to make repeat purchases and give recommendations if they have a positive impression of product quality in terms of taste, consistency, appearance, menu diversity, cleanliness, and quality of raw materials. No statistical evidence was found to suggest that improving service quality can increase consumer loyalty, as service quality does not have a significant impact on customer loyalty. Loyalty increases when customers consider the price fair when compared to the quality and excellence of the product, which indicates that pricing plays a positive and substantial role in consumer loyalty. In addition, it was found that the correlation between product quality and customer loyalty was negatively affected by price. This suggests that the price variable acts as a moderator that weakens the strength of the relationship. In the meantime, it is recognized that pricing has no bearing on the relationship between customer loyalty and service quality.

SUGGESTION

The results of the research and current conditions show that Pouter Coffee Cempaka Putih needs to maintain and improve the quality of its products, both in terms of taste, consistency, cleanliness, presentation, and diversity of choices. Management is advised to review prices periodically to ensure they remain reasonable and commensurate with the value obtained by the customer. In addition, providing a faster, more accurate, friendly, and responsive response to customer needs and complaints is another step to improve service quality.

CREDIT AUTHORSHIP CONTRIBUTION STATEMENT

Anjar Pambudi: Conceptualization, Methodology, Investigation, Data Curation, Formal Analysis, Visualization, Writing – Original Draft. **Abriandi Abriandi**: provided guidance in developing the research title, directed the author throughout the manuscript preparation process, offered valuable suggestions to improve the structure and quality of the article, and supervised the overall research and writing process. Both authors reviewed and approved the final version of the manuscript.

DECLARATION OF COMPETING INTEREST

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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ETHICAL APPROVAL

This study did not involve respondent-identifying information; therefore, ethical approval was not required.

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