Customer Loyalty Analysis on Valuation of Price, Location, Facilities, and Service Standards with the Structural Equation Modeling Method - Partial Least Squares (SEM-PLS)

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Abstract - The world of business and industry, including the culinary industry, is rapidly developing in this modern era. Business owners have to compete in an increasingly tight situation. Compared to previous studies, this study is newer because it uses more variables. This quantitative study used 60 samples. SmartPLS software version 3.0 is used to perform the analysis with SEM. Outer model, inner model, mediation, and hypothesis tests are carried out. The results of the validity test show that the data is valid. The filling factor value is more than 0.7 and the AVE value is more than 0.5. In contrast, reliability tests show the reliability values of composites and Cronbach's alpha, which are also greater than 0.7 and are considered reliable. From the hypothesis analysis carried out, it can be concluded that; The consumer choice variable has a significant positive impact on customer loyalty, the facility infrastructure variable has a significant positive impact on consumer choice, the facility and infrastructure variable has a significant positive impact on customer loyalty, the business location variable has a significant positive impact on consumer choice, the business location variable harms customer loyalty, the price assessment variable has an impact negative on consumer choice, the price assessment variable has a significant positive impact on customer lovalty, the service standard variable has a significant negative impact on customer choice and customer loyalty. These results show the importance of paying attention to these variables in business strategy.

Keywords; Culinary Industry, SmartPLS, Loyalty, Consumer

1. Introduction

In this era marked by progress, the economic and industrial sectors have developed rapidly. Businesses face increasingly fierce competition as a result of this. Many Indonesians love to travel and check out typical foods from different regions, making the food industry one of the promising fields[1], [2]. This phenomenon opens up many opportunities for entrepreneurs who can create high-quality culinary products with tastes, compositions, attractive and presentations [3].

Kalitengah Canditunggal Culinary Station or better known as SKCK, SKCK is a culinary tourism destination located in Canditunggal Village, Kalitengah District, Lamongan Regency, just east of the entrance to the village. In running a business, marketing is a very important aspect, because the success of a business can be judged from the effectiveness marketing strategy[4]. Marketing is activity that aims to achieve the company's goals. This activity is carried out anticipating the needs of customers or clients and directing the flow of goods and services that meet their needs[5].

In the increasingly sharp competition among companies today, customer loyalty is the top priority where the level of customer interests and expectations as well as the implementation or performance carried out by the company must be appropriate. Companies must pay attention to the things that customers consider important so that they feel satisfied[6]. Purchase decision is the process of choosing from various alternatives according to the needs of the consumer by choosing [4].

Kalitengah Canditunggal Culinary Station, also known as SKCK, you will find a variety of appetizing menu options. In addition to the variety of dishes offered, the price is also very affordable. As consumers, the first thing we usually pay attention to before making a purchase is the price. Price perception is a way for consumers to understand and assess the price information they receive related to a product or service. It includes consumer judgments about how much sacrifice they have made (in terms of money) compared to the benefits or value they have gained from the product or service[7]

In addition to cost, the location factor is also very important to consider when setting up a business, because a strategic location can attract more customers [8]. After considering the location, the quality of service is also an important factor to consider. Location relates to the area where a company must have an office to run its operations [8]. When a site is easily accessible, customers are more likely to make repeat purchases. This statement is supported by the availability of adequate facilities. Facilities can be described as physical and affordable resources, which are meant to offer convenience to customers during the shopping experience. In addition to facilities, service quality is another important aspect that must be considered when promoting products[9], [10]. Service quality is an effort to meet the needs and desires of consumers, as well as the accuracy of service delivery in balancing consumer expectations [11]. If the service provided is satisfactory, there is a high possibility that the consumer will make a purchase again [12].

According to evaluations various published journals, there are three factors: price perception, quality of service, and location that significantly influence the purchase choice at TB Rajawali Demak, with findings showing that favorable location and excellent quality of service improve purchasing decisions[13]. Furthermore, the influence of location, facilities, and purchase decisions, found that these three variables have a positive impact on customer loyalty in the context of MSMEs [14]. There are two important variables: service quality and customer loyalty, indicating that quality improvement. Service contributes to customer loyalty [15]. This novel research aims to understand the influence of independent variables on dependent variables by using the SEM-PLS approach as an analysis tool [16]

Price perception refers to the consumer's view of the price offered by the seller, as well as its comparison with the price perceived by the buyer [13]. In this context, there are three indicators of price perception (PA) on price conformity with product quality, price conformity with the benefits provided, and the level of price competition in the market. Business location refers to the area where the operational activities of a business are carried out[8]. Location indicators (LB): Location affordability, smooth access to the location, proximity to the location, and a safe and spacious atmosphere [17]. Facilities and Infrastructure are defined as the provision of equipment that looks real to provide comfort to consumers in making purchases, Facility Indicators (FI) are: Special planning, Room Planning, Equipment, and furniture[18]

Service standards (SS) are a crucial concept in management that reflects consumer expectations before they make a purchase. The quality of service reflects the efforts made to effectively meet the [19][20] Consumer Choice is an election process that is carried out according to certain needs, where a person chooses the option that is considered the most appropriate and profitable. Some indicators that can be used to evaluate purchase choices (CC) include the product's suitability to consumer preferences, the level of satisfaction after purchase, and the condition of the item being sold[21] [22] [23].

Customer loyalty is not only reflected in the act of buying our products repeatedly, but also through the commitment and positive attitude shown towards the company [24]. Several indicators can be used as a benchmark in measuring customer loyalty (CL), including frequency of repeat purchases, habits in brand consumers, consistent interest in the brand, a belief that the products offered are of high quality, and the tendency to recommend products to other people.n[24] [25]

2. Methods

This study uses a quantitative approach by distributing questionnaires and using the Likert Scale [26]. The research *TiBuana*, *Vol.* 08, *No.1*, 2025 | 33

sample is 60 respondents, to measure the relationship between assumed variables. The research variables are price assessment variables, business location, infrastructure, consumer choice service standards, and customer loyalty. There are 19 indicators measured. The method used to process data in this study is Partial Least Square (PLS). PLS is a Structural Equation Modeling (SEM) model with a equation variance-based approach or component-based structural equation modeling [27].

PLS is used to explain the existence or absence of relationships between latent variables (prediction). PLS is a powerful analysis method because it does not assume current data with a specific scale measurement, and the number of samples is small[28]

3. Results and Discussion

Outer Model or Measurement Model

To assess the outer model in the data analysis technique with SmartPLS, three criteria namely Convergent Validity, were used, Discriminant Validity, and Composite Reliability. The convergent validity of the measurement model with reflective indicators is assessed based on the correlation between the estimated score/component score items with SmartPLS Software. If it correlates more than 0.70 with the measured construct, then the individual reflexive measure is said to be high[26]. In the initial stage of the research, the measurement scale of loading values of 0.5 to 0.6 was considered quite adequate. Based on this, this study will use a loading factor limit of 0.50.[29]. The results of the validity test were carried out in several stages, for 60 questionnaires, namely by eliminating invalid indicators, the following results were obtained:

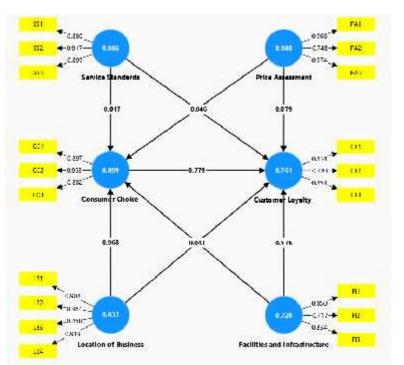


Figure 1. Final Stage Validity Test Source: SmartPls Algorithm Results (2024)

Table 1 Outer Loading, Composite Reliability, and Ave	erage Variance Extracted
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Variable	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Consumer Choice	0.899	0.901	0.937	0.833
Customer Loyalty	0.761	0.766	0.863	0.677
Facilities and Infrastructure	0.720	0.724	0.844	0.645
Location of Business	0.933	0.936	0.953	0.834
Price Assessment	0.888	0.994	0.927	0.812
Service Standards	0.886	0.959	0.926	0.808

Source; Data processed in 2024

The results of the reliability test in Table 1 show that the variables of service quality, customer satisfaction, and consumer loyalty have a composite reliability number above 0.8 and have a Cronbach's alpha number of 0.7. Thus, it can be concluded that the remaining indicators in each variable have good reliability and can measure their construct.

Testing Inner Model or Structural Model

To obtain the relationship of constructs, significance values and R-squares of the research model can be done by testing the inner model or structural model. In evaluating the structural model, R-square was used for the dependent construct of the t-test and the significance of the structural path parameter coefficient. In PLS, the structural model uses R² to evaluate the dependent variable and for the independent variable uses the value of the path coefficient. Meanwhile, the significance value is seen based on the t-statistic value of each path.

Table 2. R Square

Variable	R-square	R-square adjusted
Consumer Choice	0.979	0.978
Customer Loyalty	0.782	0.762

Source: Data processed (2020)

From Table 2 above, the R Square (R²) value of the Consumer Choice variable is 0.979 which indicates that 97.9% of service standards can explain the diversity of Consumer Choice. The remaining 2.1% was influenced by other variables that were not in the study. The Consumer Loyalty variable of 0.782 indicates that the diversity of consumer loyalty can be explained by the service

standard variable and Consumer Choice of 78.2% and the remaining 21.8% is influenced by other variables that are not in the research model.

Goodness of fit

The Q-Square value is the basis for assessing goodness of fit. The model is better or fits the data if the higher the Q-Square or the same as the coefficient determination (R-Square) in the regression analysis. The results of the calculation of the Q-Square value are as follows:

Q-Square
$$= 1 - [(1 - R^{2}1) \times (1 - R^{2}2)]$$

$$= 1 - [(1 - 0.979) \times (1 - 0.782)]$$

$$= 1 - (0.0210 \times 0.2180)$$

$$= 1 - 0.004578$$

$$= 0.995422$$

A value of 0.995 or 99.5% is the predictive relevance value of the structural model in this study. The use of Consumer Choice as an intervening variable in the prediction model can explain the influence of service standards on consumer loyalty by 99.5%. Thus the model has good predictability so that it can be used for hypothesis testing.

Hypothesis Test

The t-statistic value between the independent variable and the dependent variable in the Path Coefficient table in the Smart PLS output is the basis for the significance value of the prediction model in structural model testing as described in the following table:

Table 3. Path Coefficient

Hypothesis	Original sample (O)	T statistics (O/STDEV)	P values					
Consumer								
Choice ->								
Customer	0.779	1.293	0.196					
Loyalty								
Facilities and								
Infrastructure								
-> Consumer	0.043	0.948	0.343					
Choice								
Facilities and								
Infrastructure	0.576	2.808	0.005					
-> Customer								
Loyalty								
Location of								
Business ->	0.968	32,253	0.000					
Consumer			0.000					
Choice								
Location of	_							
Business ->	0.43	0.762	0.446					
Customer	3	0.702	0.440					
Loyalty	3							
Price	_							
Assessment -	0.01	0.769	0.442					
> Consumer	8	0.709	0.442					
Choice	0							
Price								
Assessment -	0.079	1.455	0.146					
> Customer	0.079	1.433	0.146					
Loyalty								
Service								
Standards ->	0.01	0.020	0.402					
Consumer		0.838	0.402					
Choice	7							
Service								
Standards ->	-	0.001	0.252					
Customer	0.04	0.891	0.373					
Loyalty	6							
Source: Data processed in 2024								

Source; Data processed in 2024

H₁ Hypothesis Testing; From table 4, it can be seen that the original sample estimate value is 0.779 with a significance below 5% which is shown by a t-statistical value of 1.293 greater than the t-statistical value of 1.67. A positive original sample estimate value indicates that consumer choice has a positive and significant effect on consumer loyalty or H₁ is accepted. H₂ Hypothesis Testing; The second test was carried out to see if the facilities and infrastructure had a positive effect on consumer choices. The test results can be seen in Table 4., the quality of service obtained an original sample estimate value of 0.043 with a statistical value of 0.948 > 1.67which means that facilities and infrastructure have a positive and significant effect on consumer choices with a significance level below 5%. Thus H_2 is accepted.

H₃ Hypothesis Testing; The third test was carried out to see if the facilities and facilities had a positive effect on customer loyalty. The test results can be seen in Table 4., the quality of service obtained an original sample estimate value of 0.576 with a statistical value of 2.808 >1.67 which means that facilities and facilities have a positive and significant effect on customer loyalty with a significant level below 5%. Thus H₂ is accepted. H₄ Hypothesis Testing; The fourth test was carried out to see if the location of the business had a positive effect on the choice of the community. The test results can be seen in Table 4., the quality of service obtained an original sample estimate value of 0.968 with a statistical value of 32,253 >1.67 which means that the location of the business has a positive and significant effect on consumer choices with a significance level below 5%. Thus H₄ is accepted.

H₅ Hypothesis Testing; The fifth test was carried out to see if the location of the business harmed customer loyalty. The test results can be seen from Table 4., the quality of service obtained an original sample estimate value of -0.433 with a statistical value of 0.762 > 1.67which means that the business location has a negative and significant effect on customer loyalty with a significance level below 5%. Thus H₅ is rejected. H₆ Hypothesis Testing; The sixth test was conducted to see if price appraisal harmed consumer satisfaction. The test results can be seen from table 4., the quality of service obtained an original sample estimate value of -0.018 with a statistical value of 0.769>1.67 which means that the price assessment has a positive and significant effect on consumer choices with a significance level below 5%. Thus H_6 is rejected.

H₇ Hypothesis Testing; The seventh test was carried out to see if price appraisal had a positive effect on consumer satisfaction. The test results can be seen in Table 4., the quality of service obtained an original sample estimate value of 0.079 with a statistical value of 2.1,455 >1.67 which means that the Price Assessment has a positive and significant

effect on consumer loyalty with a significance level below 5%. Thus H_7 is accepted. H_8 Hypothesis Testing; The eighth test was carried out to see if service standards harmed consumer choices. The test results can be seen from table 4., the quality of service obtained an original sample estimate value of -0.017 with a statistical value of 0.838 >1.67 which the service standard has a negative and significant effect on consumer choices with a significance level below 5%. Thus H_8 is rejected.

H₉ Hypothesis Testing; The ninth test was carried out to see if service standards harmed customer loyalty. The test results can be seen from table 4., the quality of service obtained an original sample estimate value of -0.046 with a statistical value of 0.891 >1.67 which means that the service standard has a negative and significant effect on consumer loyalty with a significance level below 5%. Thus H₉ was rejected.

4. DISCUSSION

The effect of consumer choice on consumer loyalty, The results of the hypothesis test show that the quality of service has a positive and significant effect on consumer loyalty. Consumer choice with the highest achievement. This can explain that loyalty from consumers can be formed from consumer choices that are always consistent with good service standards. Companies that continuously consistently and increase consumer choices will gain a positive perception of their customers, encouraging these customers to repurchase or reuse the products offered by the company. The influence of facilities and infrastructure on consumer choices Based on the test, the results were obtained that facilities and infrastructure have a positive and significant effect on consumer choices. This shows that various efforts to improve facilities and infrastructure are carried out by the company. These results show that facilities and infrastructure have a very important influence on consumers because complete facilities will consumers' choice to use products or services from the company.

The effect of facilities and infrastructure on consumer loyalty, the results of testing facilities and facilities have a positive effect on customer loyalty. Companies that can consistently and

continuously improve facilities and infrastructure will obtain a positive perception of their customers to encourage these customers to repurchase or reuse the products offered by the company. The Influence of Business Location on Consumer Choice. Based on the results of the test of business location on consumer choice has a positive and significant value where that business location greatly affects consumer choice, strategic business location also determines consumer choice to use products or services from the company. The effect of business location on consumer loyalty, the results of testing business location and consumer loyalty have a negative value on loyalty, this shows that business location does not affect consumers to use the services or products offered by the company.

The effect of business location on consumer loyalty. The results of the price assessment test have a positive effect on consumer loyalty. This shows that the location of the business affects consumers to buy or use products or services from the company. The effect of service standards on consumer choice The results of the service standard test have a negative value on the choice of customers, this shows that service standards have no effect on the choice of consumers to use the services or products offered by the company and the effect of service standards on consumer loyalty The results of the service standard test have a negative value on customer choice, this shows that service standards do not affect consumer loyalty to repurchase or use the services or products offered by the company.

5. Conclusion

Based on the results of the study, it can be concluded that customer loyalty is influenced consumer choices, facilities. infrastructure, price assessments that have a positive impact both directly and indirectly on the company. However, there is a negative influence on the business location variable that harms customer loyalty, the price assessment variable harms consumer choice, and the service standard variable has a significant negative impact on customer choice and customer loyalty. As a result, the company is expected to continue to make improvements. The results of this study are beneficial for consumers and companies. Consumers will get the best service standards and companies will be able to maintain and increase consumer loyalty if they can provide services that meet or exceed their customer expectations. This needs to be done because it is proven based on the results of research that service has a positive impact on consumer loyalty. In addition, the advantage obtained by the company is that if consumers are satisfied with the company's services, in addition to being loyal, they will also refer to new consumers.

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