

THE INFLUENCE OF PRODUCT QUALITY, SERVICE QUALITY, AND TIMELINESS OF DELIVERY ON REPURCHASE INTENTION AT CAKE BY TENGGILIS SURABAYA

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Abstract: The study entitled “The Influence of Product Quality, Service Quality, and Timeliness of Delivery on Repurchase Intention at Cake by Tenggilis Surabaya” has four objectives, namely: (1) Knowing the effect of product quality on repurchase intention, (2) Knowing the effect of service quality on repurchase intention, (3) Knowing the effect of timeliness of delivery on repurchase intention, (4) Knowing the effect of product quality, service quality, and timeliness of delivery on repurchase intention simultaneously. Cake by Tenggilis Surabaya is a business engaged in the food industry, specifically a cake shop. This research uses quantitative methods. The population in this study was the customers of Cake by Tenggilis. The sample in this study amounted to 150 respondents. Data were collected through questionnaires which were distributed online using google forms. In this study, the data were processed using SPSS 22 for windows. The results of this study are: (1) Product quality has a significant effect on repurchase intention, (2) Service quality has a significant effect on repurchase intention, (3) Timeliness of delivery has a significant effect on repurchase intention, also (4) Product quality, service quality, and timeliness of delivery simultaneously have a significant effect on repurchase intention.

Keywords: *Product quality, service quality, timeliness of delivery, repurchase intention*

1. Introduction

Surabaya is the capital city of East Java province. As a capital city, Surabaya became one of the concentrated economic growth areas, which was 24.3% of the total Gross Regional Domestic Product (GDP) of East Java in 2019 (Badan Perencanaan Pembangunan Daerah Provinsi Jawa Timur, 2019). Based on the data from Badan Pusat Statistik (2021), the growth of the food and beverage accommodation industry occupied second place with a percentage of 10.87%. This shows that the food and beverage sector of Micro, Small, and Medium Enterprises (MSME) has become one of the pillars of the Surabaya economy.

According to the data from Badan Pusat Statistik (2021), the cake consumption rate has increased from 2018 until 2020 which was shown in the following table.

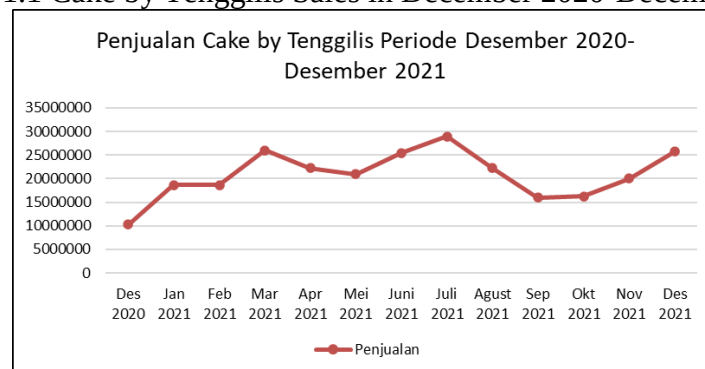
Table 1.1 Surabaya's Population Growth Rate in 2016 until 2020

Year	Cake Consumption Per Capita in a Week (pcs)
2018	1,252
2019	1,255
2020	1,278

Source: Badan Pusat Statistik (2021)

The increasing cake consumption and the importance of cake in celebratory events such as birthdays and weddings become a business opportunity that started Cake by Tenggilis. Cake by Tenggilis sells cakes and their variations, such as tortes, for many occasions. This business opportunity is also grabbed by many new small businesses. The emergence of new cake shops followed by business competition made Cake by Tenggilis reevaluate its business.

Figure 1.1 Cake by Tenggilis Sales in December 2020-December 2021



Source: Processed Data from Internal Data (2022)

As seen in Figure 1.1, the monthly income of Cake by Tenggilis was mostly unstable. Due to high competition, Cake by Tenggilis experiencing a lack of repeat customers. Kotler and Armstrong (2018) said that product quality can serve as one of the business positioning tools. Product quality itself is a whole of product features and its ability to satisfy the needs as it is intended (Kusuma and Utomo, 2020). Service quality is also said to be able to boost a business' performance because of its relationship with profit, increasing market share, and customer satisfaction. Service quality is the business' capability to serve and please their customer efficiently (Ramya et al., 2019; Mahsyar dan Surapati, 2020).

With the increasing mobility trend, customers want a service that is fast, simple, and practical. Delivery service is a way to satisfy that customers' needs. In delivering a product, a business has to pay attention to the timeliness of delivery which means the ability to deliver a certain product on the agreed date and time, sending the right amount and type of product, and also the capability to handle shipping problems (Mahfudz, 2018; Hafizha et al., 2019; Ridho et al., 2021) Timeliness of delivery is often used to evaluate whether a business' delivery service is good or bad.

2. Research Method

The final results of this research are obtained using the quantitative research method. This study obtained its data by distributing an online questionnaire to its respondents. The population in this study were the customers of Cake by Tenggilis Surabaya. According to Hair et al. (2014), The ideal number of samples used in a study is a minimum of five times to a maximum of ten times the number of indicators used in the study. Researchers used a total of 15 indicators and thus the number of samples used is 15 x 10 which equals 150 respondents. In determining the samples of this study, researchers have a few criteria: customers who have purchased Cake by Tenggilis' product twice or more and customers between the age of 17 to 50 years old.

3. Results and Discussion

3.1. Respondent Description

The subject of this study were customers from Cake by Tenggilis Surabaya who at least made a transaction twice on Cake by Tenggilis Surabaya and was aged 17-50 years old.

Table 3.1 Characteristics of Respondents

Variable		Frequency	Percentage
Gender	Male	21	14%
	Female	129	86%
Age	17-23 Years	52	34.7%
	24-30 Years	50	33.3%
	31-37 Years	29	19.3%
	38-44 Years	15	10%
	45-50 Years	4	2.7%

Source: Processed Data (2022)

As seen in Table 3.1, from a total of 150 respondents, 21 of them are male and the other 129 are female. In terms of age, 34.7% of the respondents are between 17-23 years old, 33.3% of them are between 24-30 years old, 19.3% of them are between 31-37 years old, 10% of them are between 38-44 years old, and 2.7% of them are between 45-50 years old.

3.2. Validity and Reliability Test

This study uses the Pearson correlation method to test the validity of the research instrument used. If the value of Sig. < 0.05, means that the instrument is valid. Meanwhile, for the reliability test, researchers use Cronbach's Alpha of which if the Cronbach's Alpha value > 0.60, then the instrument is considered reliable to use.

Table 3.2 Validity and Reliability Test Result

Indicator	Correlation	(Sig.)	Description	<i>Cronbach's Alpha if Item Deleted</i>	<i>Cronbach's Alpha</i>	Description
X1.1	0.828	0.000	Valid	0.782	0.834	Reliable
X1.2	0.845	0.000		0.769		
X1.3	0.786	0.000		0.813		
X1.4	0.810	0.000		0.796		
X2.1	0.898	0.000	Valid	0.831	0.886	Reliable
X2.2	0.915	0.000		0.838		
X2.3	0.831	0.000		0.876		
X2.4	0.811	0.000		0.884		
X3.1	0.892	0.000	Valid	0.861	0.891	Reliable
X3.2	0.917	0.000		0.822		
X3.3	0.909	0.000		0.849		
Y.1	0.776	0.000	Valid	0.824	0.842	Reliable
Y.2	0.833	0.000		0.791		
Y.3	0.850	0.000		0.782		
Y.4	0.834	0.000		0.799		

Source: Processed Data SPSS 22 (2022)

According to Table 4.2, four statements on the Product Quality variable (X_1) are eligible and valid because their significance values are less than 0.05. Four statements on the Service

Quality variable (X_2) are eligible and valid because their significance values are less than 0.05. Three statements on the Timeliness of Delivery variable (X_3) are eligible and valid because their significance values are less than 0.05. Four statements on the Repurchase Intention variable (Y) are eligible and valid because their significance values are less than 0.05.

As seen in Table 4.2, the Cronbach's Alpha value of all indicators is more than 0.60, therefore all indicators used in this study are reliable. Aside from that, the value of Cronbach's Alpha of each variable is higher than the value of Cronbach's Alpha if the item is deleted which shows all the items contributed to the internal consistency of the study, thus declared reliable.

3.3. Classical Assumption Test

3.3.1. Normality Test

This study uses the Kolmogorov-Smirnov to test the normality of the regression model residual data distribution of the regression model. If the value of significance < 0.05 , means that the data is normally distributed.

Table 3.3 Normality Test Result

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		150
Normal Parameters ^{a,b}	Mean	0,0000000
	Std. Deviation	1,57190498
Most Extreme Differences	Absolute	0,038
	Positive	0,038
	Negative	-0,026
Test Statistic		0,038
Asymp. Sig. (2-tailed)		0.200 ^{c, d}
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

Source: Processed Data SPSS 22 (2022)

According to Table 3.3, the Kolmogorov-Smirnov test has a significance value of 0.200, which is greater than 0.05, therefore the data can be concluded to have a normal distribution.

3.3.2. Multicollinearity Test

This study uses a multicollinearity test to verify whether there is multicollinearity happening between one independent variable and other independent variables or not. Researchers used Variance Inflation Factor (VIF) to detect multicollinearity. If the VIF value < 10 , means there is no multicollinearity happening.

Table 3.4 Multicollinearity Test Result

Coefficients ^a		
Model	Collinearity Statistics	
	Tolerance	VIF

1	(Constant)		
	Product Quality (X ₁)	0.603	1.659
	Service Quality (X ₂)	0.651	1.536
	Timeliness of Delivery (X ₃)	0.663	1.509
a. Dependent Variable: Repurchase Intention (Y)			

Source: Processed Data SPSS 22 (2022)

According to Table 4.11, the VIF value of all variables is less than 10, this shows the absence of multicollinearity in this study.

3.3.3. Heteroscedasticity Test

This study uses a heteroscedasticity test to determine whether there is an inequality of residual variance in a regression model. Research is considered good if there is no heteroscedasticity. Researchers used the Glejser method in this study, in which a study is concluded to have no heteroscedasticity in its regression model if the significance value > 0.05.

Table 3.5 Heteroscedasticity Test Result

Variable	t	Sig.	Description
Product Quality	1.438	0.153	There is no heteroscedasticity
Service Quality	-1.142	0.255	There is no heteroscedasticity
Timeliness of Delivery	1.262	0.209	There is no heteroscedasticity

Source: Processed Data SPSS 22 (2022)

As seen in Table 3.5, the product quality variable has a significance value of 0.153, the service quality variable has a significance value of 0.255, and the timeliness of delivery has a significance value of 0.209. All the variables' significance value is greater than 0.05 which means there is no heteroscedasticity.

3.4. Hypothesis Testing

3.4.1. t-Test

A t-test was used to determine the significance of each of the independent variables' influence on the dependent variable partially. If the significance value < 0.05, then the independent variable partially influences the dependent variable.

Table 3.6 t-Test Result

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.671	0.444		3.767	.000
	Product Quality	0.258	0.059	.248	4.369	.000
	Service Quality	0.251	0.053	.258	4.724	.000
	Timeliness of Delivery	0.588	0.063	.506	9.341	.000
a. Dependent Variable: Repurchase Intention						

Source: Processed Data SPSS 22 (2022)

Researchers use the following criteria to test the hypothesis of three independent variables, namely product quality, service quality, and timeliness of delivery:

1. If the value of sig. < 0.05, then H_0 is rejected and H_1 is accepted.
2. If the value of sig. > 0.05, then H_0 is accepted and H_1 is rejected.

According to Table 3.6, product quality has a Sig value. < 0.05, which means H_0 is rejected and H_1 is accepted. So it's concluded that the product quality variable partially influences the repurchase intention variable. Service quality has a Sig value. < 0.05, which means H_0 is rejected and H_1 is accepted. It's concluded that the service quality variable partially influences the repurchase intention variable. Timeliness of delivery has a Sig value. < 0.05, which means H_0 is rejected and H_1 is accepted. So it's concluded that the timeliness of delivery variable partially influences the repurchase intention variable.

3.4.2. F-Test

An F-test was used to determine the significance of the independent variables' influence on the dependent variable simultaneously. If the significance value < 0.05, then the independent variables simultaneously influence the dependent variable.

Table 3.7 F-Test Result

ANOVA ^a						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	926.798	3	308.933	122.512	.000 ^b
	Residual	368.162	146	2.522		
	Total	1294.960	149			
a. Dependent Variable: Repurchase Intention						
b. Predictors: (Constant), Timeliness of Delivery (X3), Service Quality (X2), Product Quality (X1)						

Source: Processed Data SPSS 22 (2022)

Researchers use the following criteria to test the hypothesis of three independent variables, namely product quality, service quality, and timeliness of delivery:

1. If the value of sig. < 0.05, then H_0 is rejected and H_1 is accepted.
2. If the value of sig. > 0.05, then H_0 is accepted and H_1 is rejected.

According to Table 3.7, the independent variables have a Sig value. < 0.05, which means H_0 is rejected and H_1 is accepted. It's concluded that all the independent variables, which are product quality, service quality, and timeliness of delivery, simultaneously affect the dependent variable which is repurchase intention.

3.4.3. Coefficient of Determination Analysis (R^2)

Coefficient of determination analysis (R^2) is used to measure the percentage of occurring variation on the dependent variable (Y) that can be explained with independent variables (X). The range of R^2 is between 0 and 1, the bigger the value means the bigger influence of independent variables on the dependent variable.

Tale 3.8 Coefficient of Determination Analysis (R^2) Result

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.846 ^a	0.716	0.710	1.58797
a. Predictors: (Constant), Timeliness of Delivery (X1), Service Quality (X2), Product Quality (X1)				

Source: Processed Data SPSS 22 (2022)

According to Table 3.8, the coefficient determination value is 0.716. It means the influence of the product quality variable (X_1), service quality variable (X_2), and the timeliness of delivery variable (X_3) on the repurchase intention variable (Y) is 71.6%. The remaining percentage (28.4%) is influenced by other variables outside this regression model

3.5. Discussion

3.5.1. The Influence of Product Quality on Repurchase Intention

The results of the first hypothesis show that product quality (X_1) has a significant influence on the repurchase intention (Y) of Cake by Tenggilis Surabaya's customers. It means with the increasing product quality, the repurchase intention will also increase. This result is in line with the previous studies results done by Nugraha and Wiguna (2021) and also Ekaprana et al. (2020) which stated that product quality significantly influences repurchase intention.

3.5.2. The Influence of Service Quality on Repurchase Intention

The results of the second hypothesis test show that service quality (X_2) has a significant influence on the repurchase intention (Y) of Cake by Tenggilis Surabaya's customers. It means with the increasing service quality, the repurchase intention will also increase. This result is supported by previous studies by Ekaprana et al. (2020) and also Hartanto and Andreani (2019) who stated that service quality significantly influences repurchase intention.

3.5.3. The Influence of Timeliness of Delivery on Repurchase Intention

The results of the third hypothesis show that timeliness of delivery (X_3) has a significant influence on the repurchase intention (Y) of Cake by Tenggilis Surabaya's customers. It means the better the timeliness of delivery, the higher the repurchase intention. This result is in line with the previous study results done by Ekaprana et al. (2020) which stated that timeliness of delivery significantly influences repurchase intention. Ali and Bhasin (2019), as well as Chaturvedi and Agnihotri (2019), also stated that delivery quality and time have an influence on repurchase intention.

3.5.4. The Influence of Product Quality, Service Quality, and Timeliness of Delivery on Repurchase Intention

The results of the fourth hypothesis test show that product quality (X_1), service quality (X_2), and timeliness of delivery (X_3) have a significant influence on repurchase intention (Y). The increasing product quality, service quality, and product delivery timeliness will simultaneously increase the customer of Cake by Tenggilis Surabaya's repurchase intention.

4. Conclusion

Based on the results of the research that has been done, these are the conclusions obtained:

1. Product quality significantly influences repurchase intention.
2. Service quality significantly influences repurchase intention.
3. Timeliness of delivery significantly influences repurchase intention.
4. The product quality, service quality, and timeliness of delivery simultaneously influence repurchase intention.

Suggestions for further research are as follows: in terms of variables, future researchers could change one or more variables as well as add new variables that haven't been used in

this study. Future researchers could use a different subject to obtain new study results that are varied and have different characteristics.

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