

Influence of Service Quality and Delivery Speed on Customer Satisfaction in Logistics Business

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Abstract. The purpose of this research is to measure whether there is any influence of service quality and delivery speed on customer satisfaction. This research employs a quantitative method using three variables: service quality and delivery speed as independent variables and customer satisfaction as dependent variable. The sample used in this research employed Probability Sampling Method utilizing Slovin formula, and was rounded to 100 respondents from buyer/end-users population of PT. XYZ (excluding seller/vendor users). Data analysis method used in this research is multiple linear regression analysis. Results from data analysis, T-Test and F-Test indicate: both service quality and delivery speed, individually and simultaneously, have positive influence on customer satisfaction. Hopefully, this research can provide insights into the impact of factors on customer satisfaction and guide companies in improving service strategies, enabling them to maintain and enhance customer satisfaction in the rapidly evolving e-commerce era through better services and faster delivery.

Keywords : service quality, delivery speed, customer satisfaction, logistics business, e-commerce.

Abstrak. Tujuan dari penelitian ini adalah untuk mengukur apakah ada pengaruh kualitas layanan dan kecepatan pengiriman terhadap kepuasan pelanggan. Penelitian ini menggunakan metode kuantitatif dengan tiga variabel: kualitas layanan dan kecepatan pengiriman sebagai variabel independen dan kepuasan pelanggan sebagai variabel dependen. Sampel yang digunakan dalam penelitian ini menggunakan Metode Probability Sampling dengan rumus Slovin, dan dibulatkan menjadi 100 responden dari populasi pembeli/pengguna akhir PT. XYZ (tidak termasuk pengguna penjual/vendor). Metode analisis data yang digunakan dalam penelitian ini adalah analisis regresi linier berganda. Hasil dari analisis data, Uji-T dan Uji-F menunjukkan: baik kualitas layanan maupun kecepatan pengiriman, secara individu dan simultan, memiliki pengaruh positif terhadap kepuasan pelanggan. Diharapkan penelitian ini akan dapat memberikan wawasan tentang dampak faktor-faktor tersebut terhadap kepuasan pelanggan dan membimbing perusahaan dalam meningkatkan strategi layanan, memungkinkan mereka untuk mempertahankan dan meningkatkan kepuasan pelanggan di era e-commerce yang berkembang pesat melalui layanan yang lebih baik dan pengiriman yang lebih cepat.

Kata Kunci : kualitas layanan, kecepatan pengiriman, kepuasan pelanggan, bisnis logistik, e-commerce.

1. Introduction

Before the Covid-19 pandemic, Indonesia had a relatively low internet penetration rate compared to developed countries. However, this pandemic forced the people and businesses in

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Indonesia to quickly adapt to the utilization of the internet in various aspects of life, such as online education, virtual meetings, and electronic commerce (e-commerce).

Covid pandemic has triggered rapid growth in e-commerce in Indonesia. Tokopedia, Shopee, Bukalapak, and Lazada, which are leaders in the e-commerce industry, have partnered with logistics companies such as Pos Indonesia, Tiki, JNE, and J&T to provide reliable delivery services to their customers. Even Gojek and Grab, which initially focused on ride-sharing services, have entered the goods delivery business.

Rapid growth in the number of courier companies and delivery services has created increasingly fierce competition among them. This has forced these companies to offer various types of services and diverse prices to meet customer needs. Furthermore, service quality and delivery speed have become the main determinants of customer satisfaction.

Customer satisfaction in this context is closely related to the ease of using applications, accuracy of data input such as the recipient's address and contact, order handling time, and delivery speed. Errors or delays in these processes can significantly reduce the level of customer satisfaction. Therefore, service quality and delivery speed are crucial aspects in maintaining and improving customer satisfaction.

This research aims to investigate the influence of service quality and delivery speed on customer satisfaction, especially in the logistics process. By understanding the extent to which these factors affect customer satisfaction, e-commerce and logistics companies can enhance their strategies in providing better services to their customers. Additionally, this research can provide valuable insights into how technology and operational efficiency can impact customer satisfaction in the rapidly growing e-commerce era in Indonesia.

Several previous studies have analyzed the relationship between service quality and customer satisfaction (Sri et al., 2022), (Pribadi et al., 2022), (Paryanti & Sumarsid, 2022), (Veronica et al., 2018), (Andriyana et al., 2021), (Wuntara et al., 2016), and (Ahmad Zikri, 2022). In the research (Lisnasari et al., 2016), the independent variable was not service quality but factors such as timeliness and delivery rates, and in (Davis & Heineke, 1998), the independent variables were perceived disconfirmation and actual wait time, both having customer satisfaction as the dependent variable. However, other influencing independent variables on customer satisfaction always vary, where in the studies (Marina et al., 2014) and (Lin et al., 2016), the dependent variables were not customer satisfaction but customer loyalty and service quality in e-commerce. Research from (Nugraha et al., 2017) delves into the fluency of goods delivery, which is the independent variable in this research, as delivery speed. In the research (Ayu Hapsari et al., 2023), the independent variables were logistics integration and delivery speed, with business growth as the dependent variable. This research aims to analyze the influence of both service quality and delivery speed on customer satisfaction in logistics companies that are part of an Indonesian e-commerce business, both separately and simultaneously, which has not been done by previous studies.

According to (P. dan K. L. Keller. Kotler, 2016), service quality is defined as the consumer's evaluation of the level of service received compared to the expected level of service. If the perceived or received service is in line with expectations, then the service quality is considered good, and the resulting satisfaction can encourage consumers to make repeat purchases and ideally become loyal customers. Service quality can encourage customers to establish a good relationship with the business (P. dan K. L. Keller. Kotler, 2016).

Several indicators of service quality, as outlined by (P. dan K. L. Keller. Kotler, 2016), can be explained as follows: Reliability is the business' ability to deliver promised, dependable, accurate, and consistent service. Responsiveness is the ability to provide service to customers quickly, listen to and resolve customer complaints. Assurance measures the ability and courtesy of an employee and their trustworthiness. Empathy involves providing sincere and personal attention to customers by trying to understand their needs. Tangibility is the external appearance of facilities and equipment used to provide services to customers.

According to (P. dan K. L. Keller. Kotler, 2016), delivery is the act of moving goods from one location to another. By delivering goods promptly, it ensures that the logistics of any business operations run smoothly, and the shipper's operations can also proceed according to the predetermined schedule. With smooth performance, it can satisfy service users, attract the interests of other consumers, and help businesses grow and thrive. In the logistics world, besides requiring fast delivery, it also certainly requires accurate delivery.

Delivery activities are an integral part of the supply chain, including the documentation process, loading and unloading of goods at the receiving location, temporary and final storage, and transportation to the destination. Delivery speed refers to the smooth preparation of sending logistics goods from the warehouse to the destination according to the cargo handling requirements to achieve the specified targets on time.

As (Gunawan, 2014) explained, several indicators in the activity of delivery are as follows: timeliness, existence of purchase documents, existence of delivery documents, good condition of goods upon receipt, careful selection of transportation.

In accordance with (P. dan A. Kotler, 2018), satisfaction is the feeling of pleasure or disappointment that arises from comparing the perceived performance (or outcome) of a product with one's expectations. If the performance falls short of expectations, the customer will feel dissatisfied. If the performance meets expectations, the customer will be satisfied. Additionally, if the performance exceeds expectations, the customer will be very satisfied or delighted.

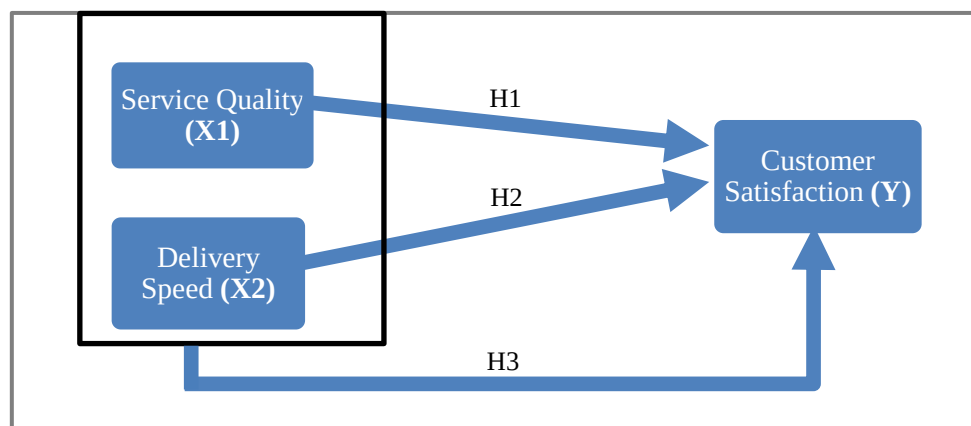
According to (Fandy, 2017), customer satisfaction is a fundamental part of modern marketing thinking and practice. Based on the theory above, it can be concluded that customer satisfaction is customer feedback in the form of emotions or evaluations of the use of a product that meets their expectations and needs.

Some indicators of customer satisfaction explained by (P. dan K. L. Keller. Kotler, 2016) are as follows: Expectation matching, which is the level of alignment between the expected product

performance and the one perceived by the customer. Intent to revisit, which is the customer's willingness to make repeat purchases of the purchased product. Willingness to recommend, which is the customer's willingness to recommend the product to others.

This research was conducted with the aim of determining the extent of the influence of service quality (X1) and delivery speed (X2) on customer satisfaction (Y). The research was carried out by distributing questionnaires randomly to logistics service users from PT. XYZ, using a quantitative method and employing the technique of multiple linear regression analysis.

Surveys using questionnaires are one of the tools for measuring customer satisfaction, which also reflects customers' assessments of the products provided by the business. The quantitative method was used in this research to measure the extent of the influence between two or more variables (three variables in this research) and can illustrate this relationship with the following model:



Source: Author (2023)

Figure 1 Research Model

Based on the background of the research described on the introduction above and existing studies, the author has formulated several hypotheses: H1, Service Quality has a partial influence on Customer Satisfaction. H2, Delivery Speed has a partial influence on Customer Satisfaction. H3, Service Quality and Delivery Speed have a simultaneous mutual influence on Customer Satisfaction

2. Research Method

This research employs a quantitative method, using three variables, namely two independent variables (Service Quality as X1 and Delivery Speed as X2) and one dependent variable (Customer Satisfaction as Y). In this research, author used questionnaires for data collection method that will be used for calculation and analysis. While the logistics service users at PT. XYZ may consist of vendor or seller and buyers or end consumers, the research questionnaire involved the population of logistics service users at PT. XYZ, aimed specifically only on buyers or end consumers.

The sample used in this research employed the Probability Sampling Method using the Slovin formula. The Slovin formula for determining the sample is:

$$\text{Slovin's Formula} = n : \frac{N}{1+N(e)^2}$$

Source: Author (2023)

Figure 2 Slovin's Formula (1)

Based on (1) calculation, the minimum sample score obtained is 90.80, which is then rounded to 91 respondents. However, the author used 100 respondents to complete the research sample.

The data analysis method used in this research is multiple linear regression analysis, where in the previous step, data quality tests were conducted using validity and reliability tests. Classical Assumption Tests are statistical requirements that must be met in multiple linear regression analysis (Duli, 2019). There are four Classical Assumption Tests: Normality Test, Multicollinearity Test, Heteroskedasticity Test, and Autocorrelation Test. In this research, only three tests were conducted, excluding the Autocorrelation Test.

$$Y = \alpha + \beta_1 X_1 + \beta_2 x_2$$

Source: Author (2023)

Figure 3 Multiple Linear Regression's Formula (2)

Notes:

- Y = Customer Satisfaction
- α = Constant
- $\beta_1 X_1$ = Service Quality Regression Coefficient
- $\beta_2 X_2$ = Delivery Speed Regression Coefficient

The purpose of hypothesis testing is to measure the influence of service quality (X1), delivery speed (X2) on customer satisfaction (Y), testing the hypothesis that ρ is the main factor in forming the coefficient of determination. Decisions in hypothesis testing are almost always made based on testing the hypothesis 0. Hypotheses tested in this research are: Partial Hypothesis Test (T Test), Simultaneous Hypothesis Test (F Test), Coefficient of Determination Test (R^2), and Correlation Coefficient Test (R).

3. Results and Discussion

Table 1 Results of Service Quality Variable Recapitulation

No.	Statements	Score	Interpretation
1	Employees are careful in arranging and storing goods according to categories.	4.25	Good
2	Employees are capable of neatly packaging items.	4.31	Very Good
3	Employees are always meticulous in receiving packages.	4.29	Good
4	Employees confirm with customers when recording item data and destination addresses into the system.	4.29	Good
5	Employees are careful and thorough in matching the contents of the goods with the description.	4.22	Good
6	Employees make corrections if there are errors in writing/packaging/weighing the goods.	4.22	Good
7	Employees always report any errors and discrepancies to the supervisor.	4.17	Good
8	Employees welcome, greet, and provide guidance when customers arrive.	4.33	Very Good
9	The business is responsive to customer feedback and complaints.	4.30	Very Good
10	The business always provides sufficient training and knowledge to employees.	4.31	Very Good
11	The business always strives to improve the quality of service provided.	3.39	Fairly good
Total		46.08	
Interpretation Average		4.18	Good

Source: Author (2023)

On an interval scale, the service quality variable has a value of 4.18 with a Good rating.

Table 2 Results of Delivery Speed Variable Recapitulation

No.	Statements	Score	Interpretation
1	The business is able to deliver goods on time, even earlier than scheduled.	4.09	Fairly good
2	The business has a sufficient delivery fleet to meet delivery deadlines.	4.31	Very Good
3	The business has better delivery timeliness than its competitors.	4.24	Good
4	The business is committed to delivering goods as quickly as possible.	4.35	Very Good
5	The business always ensures that each order is accompanied by clear purchase, payment, description, and address documents.	4.25	Good
6	The business provides delivery confirmation to customers.	4.33	Very Good
7	The business provides information about working days and holidays for delivery and receipt of goods to customers.	4.32	Very Good
8	The business has a good item tracking system.	4.37	Very Good

9	The business always provides good understanding and solutions to customers in the event of road/weather conditions affecting the delivery of goods.	4.27	Very Good
10	The business always conducts quality checks on goods before and after delivery.	4.22	Good
11	The business provides adequate protection for goods during the delivery process.	4.30	Very Good
12	The business always evaluates and selects the most efficient delivery routes.	4.21	Good
13	The business ensures that all delivery vehicles meet safety and eligibility standards.	4.30	Very Good
Total		55.56	
Interpretation Average		4.27	Very Good

Source: Author (2023)

On an interval scale, the delivery speed variable has a value of 4.27 with a Very Good rating.

Table 3 Results of Customer Satisfaction Variable Recapitulation

No.	Statements	Score	Interpretation
1	The services provided are in line with the expected results.	4.22	Good
2	The rates and fees provided are in line with my expectations.	4.09	Fairly good
3	I did not have difficulty finding my address or destination.	4.21	Good
4	The rates and fees are in line with the quality of service and delivery speed provided.	4.20	Good
5	I am inclined to use this business again because of the good quality of service and delivery speed.	4.19	Good
6	I do not feel confused when buying or sending goods through this business' application.	4.16	Good
7	I feel that this business prioritizes customer service and delivery speed.	4.26	Good
8	I feel the employees of this business are friendly and efficient.	4.24	Good
9	I am willing to recommend this business to relatives, neighbors, and friends.	4.28	Good
Total		37.85	
Interpretation Average		4.20	Good

Source: Author (2023)

On an interval scale, the customer satisfaction variable has a value of 4.20 with a Good rating.

Table 4 Service Quality Validity Test

Question Item	r-value	r-table	Remarks
X1.1	0.817	0.196	Valid
X1.2	0.669	0.196	Valid
X1.3	0.650	0.196	Valid

X1.4	0.790	0.196	Valid
X1.5	0.722	0.196	Valid
X1.6	0.637	0.196	Valid
X1.7	0.756	0.196	Valid
X1.8	0.744	0.196	Valid
X1.9	0.643	0.196	Valid
X1.10	0.746	0.196	Valid
X1.11	0.566	0.196	Valid

Source: (SPSS Output Result, n.d.) processed by SPSS 26

Table 5 Delivery Speed Validity Test

Question Item	r-value	r-table	Remarks
X2.1	0.700	0.196	Valid
X2.2	0.798	0.196	Valid
X2.3	0.823	0.196	Valid
X2.4	0.866	0.196	Valid
X2.5	0.799	0.196	Valid
X2.6	0.829	0.196	Valid
X2.7	0.500	0.196	Valid
X2.8	0.696	0.196	Valid
X2.9	0.332	0.196	Valid
X2.10	0.536	0.196	Valid
X2.11	0.744	0.196	Valid
X2.12	0.701	0.196	Valid
X2.13	0.761	0.196	Valid

Source: (SPSS Output Result, n.d.) processed by SPSS 26

Table 6 Customer Satisfaction Validity Test

Question Item	r-value	r-table	Remarks
Y.1	0.790	0.196	Valid
Y.2	0.447	0.196	Valid
Y.3	0.782	0.196	Valid
Y.4	0.509	0.196	Valid
Y.5	0.721	0.196	Valid
Y.6	0.713	0.196	Valid
Y.7	0.774	0.196	Valid
Y.8	0.731	0.196	Valid
Y.9	0.402	0.196	Valid

Source: (SPSS Output Result, n.d.) processed by SPSS 26

From the Validity Test table above, it can be explained that all statements of the service quality variable (X1), delivery speed (X2), and customer satisfaction (Y) have r values > the r table based on the significance test of 0.05 (0.196), meaning that the variables of service quality (X1), delivery

speed (X2), and customer satisfaction (Y) are deemed valid, and thus these variables can proceed to the next testing phase.

Tabel 7 Reliability Test Results

Variable	Cronbach's Alpha	No. of item	Remarks
Service Quality (X1)	0.897	11	Reliable
Delivery Speed (X2)	0.911	13	Reliable
Customer Satisfaction (Y)	0.823	9	Reliable

Source: (SPSS Output Result, n.d.) processed by SPSS 26

Based on the results of the reliability test above, it is indicated that the service quality variable (X1) has a *Cronbach's Alpha* value of 0.897, delivery speed (X2) has a *Cronbach's Alpha* value of 0.911, and customer satisfaction (Y) has a *Cronbach's Alpha* value of 0.823, indicating that these variables are considered reliable as each has a *Cronbach's Alpha* value > threshold value (0.60). Therefore, these variables can proceed to the next testing phase.

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		100
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	2.22630072
Most Extreme Differences	Absolute	.082
	Positive	.082
	Negative	-.052
Test Statistic		.082
Asymp. Sig. (2-tailed) ^c		.090
Monte Carlo Sig. (2-tailed) ^d	Sig.	.095
	99% Confidence Interval	
	Lower Bound	.088
	Upper Bound	.103

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 743671174.

Source: (SPSS Output Result, n.d.) processed by SPSS 26

Figure 4 Normality Test

From the data above, it can be seen that the Kolmogorov-Smirnov test result's Asymptotic Significance (2-tailed) value is 0.90 > 0.05, which means that the variable is normally distributed.

Coefficients ^a			
		Collinearity Statistics	
Model		Tolerance	VIF
1	Total_X1	.129	7.778
	Total_X2	.129	7.778

a. Dependent Variable: Total_Y

Source: (SPSS Output Result, n.d.) processed by SPSS 26

Figure 5 Multicollinearity Test

Constant Variable: Service Quality (X1), Delivery Speed (X2). Dependent Variable: Customer Satisfaction (Y). From the multicollinearity test results above, it can be seen that the service quality variable (X1) and the delivery speed (X2) have a Variance Inflation Factor value of $7.78 < 10$ and a Tolerance value of $0.129 > 0.01$. Therefore, it can be concluded that these data are free from multicollinearity.

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	Beta	
1	(Constant)	3.440	1.393		.015
	Total_X1	-.020	.079	-.072	.797
	Total_X2	-.016	.069	-.063	.822

a. Dependent Variable: ABS_RES

Figure 6 Heteroskedasticity Test

Source: (SPSS Output Result, n.d.) processed by SPSS 26

If the significance value is greater than 0.05, the conclusion is that there is no heteroskedasticity in the regression model. From the results of the heteroskedasticity test above, it can be seen that the service quality variable (X1) has a significance value of 0.797, and the delivery speed variable (X2) has a significance value of 0.822, indicating that there is no heteroskedasticity in the regression model.

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	Beta	
1	(Constant)	7.925	2.045		<.001
	Total_X1	.267	.117	.360	.024
	Total_X2	.314	.101	.487	.003

a. Dependent Variable: Total_Y

Source: (SPSS Output Result, n.d.) processed by SPSS 26

Figure 7 Multiple Linear Regression Analysis

From the multiple linear regression analysis above, the following equation is obtained:

$$Y = 7.925 + 0.267 (X1) + 0.314 (X2) \quad (3)$$

Therefore, the results obtained from (3) are as follows:

The constant has a value of 7.925, indicating that when the values of service quality and delivery speed are both 0, the value of Y is 7.925. This implies that any change in the service quality and delivery speed variables contributes positively to customer satisfaction.

Service Quality (X1) has a value of 0.267, meaning that for every 1% increase in the service quality variable, customer satisfaction will increase by 0.267. Thus, the author concludes that the service quality variable has a positive effect on customer satisfaction.

Delivery Speed (X2) has a value of 0.314, indicating that for every 1% increase in the delivery speed variable, customer satisfaction will increase by 0.314. Thus, the author concludes that the delivery speed variable has a positive effect on customer satisfaction.

Source: (SPSS Output Result, n.d.) processed by SPSS 26

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.925	2.045		3.875	<.001
	Total_X1	.267	.117	.360	2.292	.024
	Total_X2	.314	.101	.487	3.101	.003

a. Dependent Variable: Total_Y

Figure 8 Partial Test

From the results of the partial hypothesis test (T-test) above, the following can be inferred:

The Sig. value for the influence of service quality (X1) on customer satisfaction (Y) is $0.024 < 0.05$, and the t-value is $2.292 > 1.984$. Therefore, it is concluded that H1 is accepted, indicating that there is an influence of service quality (X1) on customer satisfaction (Y).

The Sig. value for the influence of delivery speed (X2) on customer satisfaction (Y) is $0.003 < 0.05$, and the t-value is $3.101 > 1.984$. Therefore, it is concluded that H2 is accepted, indicating that there is an influence of delivery speed (X2) on customer satisfaction (Y).

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1107.275	2	553.637	109.445	<.001 ^b
	Residual	490.685	97	5.059		
	Total	1597.960	99			

a. Dependent Variable: Total_Y

b. Predictors: (Constant), Total_X2, Total_X1

Source: (SPSS Output Result, n.d.) processed by SPSS 26

Figure 9 Simultaneous Test

Based on the results of the simultaneous test (F-test) output above, it is known that the significance value for the simultaneous influence of service quality (X1) and delivery speed (X2) on customer satisfaction (Y) is $0.001 < 0.05$, and the F-value is $109.4 > F\text{-table } 3.09$. Therefore, it can be concluded that H3 is accepted, indicating that there is a simultaneous influence of service quality (X1) and delivery speed (X2) on customer satisfaction (Y).



Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.832 ^a	.693	.687	2.249
a. Predictors: (Constant), Total_X2, Total_X1				

Source: (SPSS Output Result, n.d.) processed by SPSS 26

Figure 10 Calculation of the Coefficient Test R and R²

From the coefficient test calculation above, the result of the R score is 0.832, indicating a very strong correlation between customer satisfaction and the service quality variable (X1) and delivery speed (X2). This is because the R score > 0.5. The result of the R Square (R²) value is 0.693, meaning that the correlation between the service quality variable (X1) and the delivery speed (X2) and customer satisfaction is 69%, while the remaining percentage is influenced by other variables not examined in this research.

Based on the results of the research above, the influence of service quality and delivery speed on customer satisfaction can also be seen from the recapitulation results in the table above. The author will describe the recapitulation results of each variable as follows:

The average score of the Service Quality Recapitulation (X1) is 4.18 with a Good rating. Among the 11 statements provided, there is one indicator that scored below average, which is "The business always strives to improve the quality of service provided" with a total score of 3.39, indicating a Less Good rating.

The average score of the Delivery Speed Recapitulation (X2) is 4.27 with an Excellent rating. Among the 13 statements provided, there is one indicator that scored below average, which is "The business is able to deliver goods on time, even earlier than expected," with a total score of 4.09, indicating a Fairly Good rating.

The average score of the Customer Satisfaction Recapitulation (Y) is 4.20 with an Excellent rating. Among the 9 statements provided, there is one indicator that scored below average, which is "The rates and fees provided are in line with my expectations," with a total score of 4.09, indicating a Fairly Good rating.

4. Conclusion

Based on the analysis and data testing results above, the author can provide the following conclusions:

There is a significant influence between the service quality variable (X1) and customer satisfaction (Y). This is evident from the partial test results (T-test) where the service quality variable (X1) has a calculated t-value of 2.292, greater than the tabulated t-value of 1.984, with a significance value of 0.024, less than 0.05, thus, it is concluded that service quality (X1) has an influence on customer satisfaction (Y).

There is a significant influence between the delivery speed variable (X2) and customer satisfaction (Y). This is evident from the partial test results (T-test) where the delivery speed variable (X2) has a calculated t-value of 3.101, greater than the tabulated t-value of 1.984, with a significance value of 0.003, less than 0.05, thus, it is concluded that the delivery speed (X2) has an influence on customer satisfaction (Y).

There is a significant influence between the service quality (X1), delivery speed (X2) variables, and customer satisfaction (Y) together. This is evident from the simultaneous test results (F-test) where the service quality (X1) and delivery speed (X2) variables have an F-calculated value of 109.4, greater than the F-table value of 3.90, with a significance value of 0.003, less than 0.05, thus, it is concluded that service quality (X1) and delivery speed (X2) together have an influence on customer satisfaction (Y).

The practical contribution of the research is expected to provide input for the university and be a reference for fellow students, contributing to expanding the research collection at the Trisakti Institute of Transportation and Logistics library. The research results can be used as learning material and considerations for similar companies in making decisions in the future to improve the quality of their systems and staff to enhance the quality of service and delivery speed, ultimately increasing customer satisfaction.

The theoretical contribution of the research is expected to expand the data from previous studies by adding new data analysis, deepening the application of theories from previous studies in new situations (Novelty), and can be used as an additional reference for future research.

This research was conducted on the population of logistics service users from PT. XYZ, specifically on users who are buyers or end consumers. The logistics service users of PT. XYZ could also be product vendors, opening up opportunities for further research. At the time this research was conducted, there were not many e-commerce companies with a subsidiary focusing on logistics like PT. XYZ, which limited this research. Besides service quality and delivery speed, there are still many other factors that affect customer satisfaction, such as facility quality, price levels, and others. Customer satisfaction itself can be further studied, such as customer loyalty, therefore, it is expected that this research can serve as a basis and open opportunities for further research in the future.

The recommendation given by the author to PT. XYZ, as the result of the discussion, is that PT. XYZ should improve the quality of the service provided to affect customer satisfaction with the pricing tariff offered, as it aligns with customer expectations with the quality of service received, leading to an increase in the service quality indicator value and will affect an increase in customer satisfaction.

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