TESTING THE INFLUENCE OF LOGISTICS SERVICE QUALITY ON CUSTOMER INTENTIONS TO REUSE THE LOGISTICS INDUSTRY FOR SHIPPING SERVICES THROUGH THE MEDIATION OF CUSTOMER SATISFACTION

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Abstract

Logistics services play a crucial role in enhancing competitiveness, particularly in the e-commerce sector. This study aims to assess the impact of operational quality, resource quality, information quality, personal contact quality, and customization quality on customer satisfaction and reuse intention in utilizing logistics services. The research employed a quantitative method, gathering data from 392 respondents who are e-commerce users utilizing logistics services. The findings indicate that customization quality and information quality do not significantly influence customer satisfaction. However, the three main aspects of logistics service quality—operational quality, personal contact quality, and resource quality—positively and significantly affect customer satisfaction. Furthermore, customer satisfaction is proven to be the primary factor influencing reuse intention in logistics services. These findings highlight the importance of comprehensive service quality management, particularly in enhancing direct interactions with customers.

Keywords: Service Quality, Logistics, Customer Satisfaction, Repurchase Intention

INTRODUCTION

Logistics services are very important to increase competitiveness, especially in the field of e-commerce. It is closely related to e-commerce and logistics, so online shopping must be distributed via highways, trains, ships, flights, and other logistics methods (He et al., 2022). Report from The World Bank (2024) identified that logistics has a key role in improving supply chain efficiency, which directly supports international trade. Many large companies around the world utilize e-commerce as a platform to support various activities, including marketing, customer payment processes, service, product development, sales, and shipping (Risald, 2021).

Reliable and efficient logistics service quality is the key to competitive advantage, especially in the realm of online business and e-commerce. In recent years, the world of e-commerce has experienced rapid development and is increasingly complex compared to conventional business (Lin et al., 2023). Customers can buy goods online and choose logistics delivery. In this fast-paced digital era, business actors are required to always be adaptive and innovative in providing the best service for consumers. Consumer satisfaction in online transactions is known to affect the level of customer trust, which ultimately has an impact on consumer attitudes and their desire to make repeat purchases (Cahyono & Anjani, 2019).

This is due to the various business opportunities offered, such as selling goods and services online, while providing the potential for significant revenue increases. Improving the quality of e-commerce services in the context of supply chain management and customer satisfaction is considered a crucial factor in determining the success or failure of the supply chain in the world of e-commerce (Giao et al., 2020; Alamsyah & Safitri, 2024). In the context of supply chain management, improving service quality involves integrating technology to monitor and manage the flow of goods, information, and payments more efficiently. The importance of logistics services is increasingly prominent, considering that online shopping logistics covers everything from ordering to delivery of the final product (Choi et al., 2019).

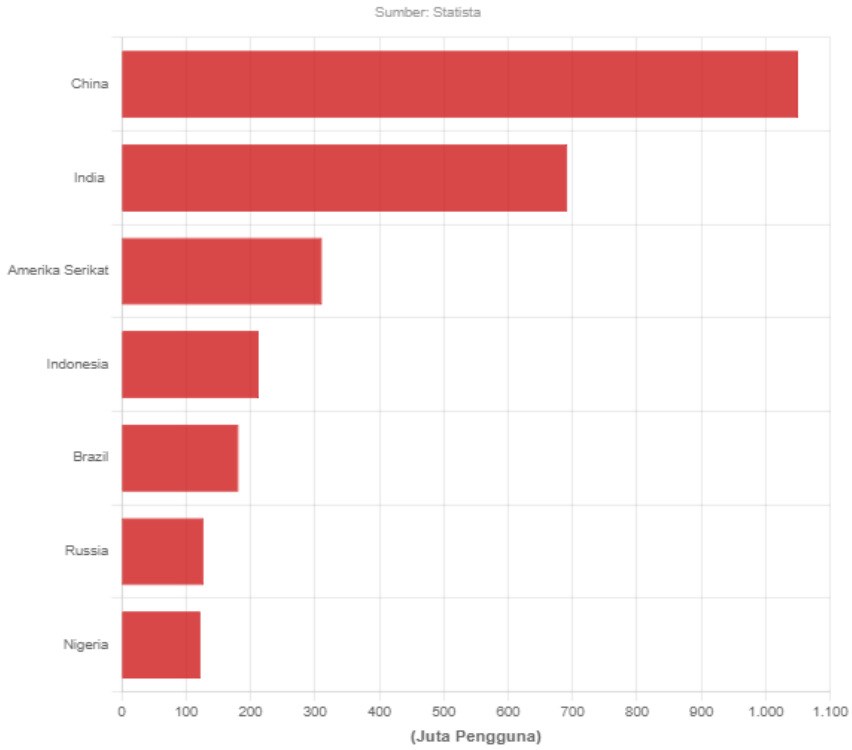

Figure 1.
Logistics Performance Index (2023)

Based on the latest data fromThe World Bank (2024), In 2023, Indonesia's Logistics Performance Index (LPI) dropped to 63rd place globally, compared to its previous position of 46th. Based on LPI 2023 data, Indonesia's logistics performance was ranked 63rd out of a total of 139 countries evaluated, with a score of 3.0. This figure shows a decrease of 17 places compared to 2018, when Indonesia was ranked 46th with a score of 3.15. With the rapid growth of the e-commerce industry in Indonesia, the decline in the LPI ranking in 2023 shows the need for improvements in the quality of logistics services. This condition indicates that Indonesia still faces significant challenges in effective logistics management, which can ultimately affect the level of customer satisfaction and loyalty in the e-commerce sector.

This study shows that delivery stability, delivery service quality, and information services provided through delivery play a major role as determinants of customer repeat purchasing behavior (Yang et al., 2010). In addition, green logistics services are able to moderate the impact between these elements and also customer satisfaction, leading to future usage scenarios. This means that logistics service quality is seen as a general term consisting of various components such as delivery timeliness, product condition, receipt, accuracy of

orders made, and other factors that customers perceive from their interactions with the party providing logistics support. Recent studies have also shown that customer satisfaction acts as a mediator that links logistics service quality with reuse intention in e-commerce platforms. This is evidenced by a study conducted in China, which revealed that operational quality, resources, information, and personal interaction in logistics services contribute significantly to customer satisfaction, which in turn increases their intention to shop again in the future (Lin et al., 2023). A positive experience in using a service can create a sense of satisfaction, and this positive satisfaction will encourage the desire to use the service again (Yoon, 2019). This can be a basis for logistics providers and e-commerce players to develop better strategies in increasing competitiveness and retaining customers in an increasingly competitive market.

The importance of logistics service quality (LSQ) in e-commerce is interesting to study for several reasons. First, poor logistics service management can negatively impact customer satisfaction, which ultimately affects customer loyalty and repeat purchase intention. Customer satisfaction in e-commerce is greatly influenced by the performance of the logistics company. Consumers often feel disappointed with sellers and give negative reviews due to the quality of logistics services. For example, when a product arrives in a damaged condition, customers will feel dissatisfied and blame the seller, even asking for a replacement. Delays in delivery, damaged goods, and inaccurate shipping information are often the main sources of customer dissatisfaction. Decreased logistics quality can negatively impact the reputation of e-commerce and reduce customer loyalty levels. This study aims to identify key factors that influence customer satisfaction and intention to reuse logistics services. Given that this topic is still rarely studied, a deeper exploration of the relationship between customer satisfaction and intention to reuse logistics services in the city of Batam is needed. Through a literature review, case study analysis, and evaluation of relevant data, this study seeks to provide new insights. Thus, the results of this study are expected to be a practical guide for leaders and professionals in the logistics sector.

REVIEW OF LITERATURE

Logistics Service Quality

Providing high-quality services can strengthen a company's brand image while increasing customer satisfaction. Therefore, service quality has become an important issue that attracts attention from both practitioners and academics. To compete effectively in the future, companies need to define how service quality is perceived by customers and understand how it differs from competitors.(Leuschner & Lambert, 2016). On the other hand, logistics service quality is defined as the result of comparing customer expectations with their perceptions of the services provided (Giao et al., 2020). Since customer perceptions of quality can vary, it is important to accurately identify the factors that influence it. In addition, the characteristics of service quality vary depending on the nature of the service provided (Chaisaengduean, 2019).

Customer Satisfaction

Customer satisfaction is defined as the customer's perception that is the result of their response to one or more experiences that match their expectations (Gonu et al., 2023). In addition, customer satisfaction describes the feeling of satisfaction felt when the service provided is able to meet or even exceed customer expectations (Benaglia et al., 2023). Customer satisfaction can also be defined as an element related to customer evaluation and their repeat purchasing patterns of a particular product or service (Tahanisaz & Shokuhyar, 2020).

Reuse Intention

According to Keller (2016), reuse intention refers to consumer actions after using a product or service, which is influenced by their level of satisfaction. Reuse intention can also be interpreted as a consumer's decision to reuse a service or product from a brand or company repeatedly, and be willing to recommend it to others.(Visakha & Keni, 2022). Meanwhile, Gupta & Duggal (2020) define reuse intention as consumer behavior to re-select products they have previously consumed.

RESEARCH METHOD

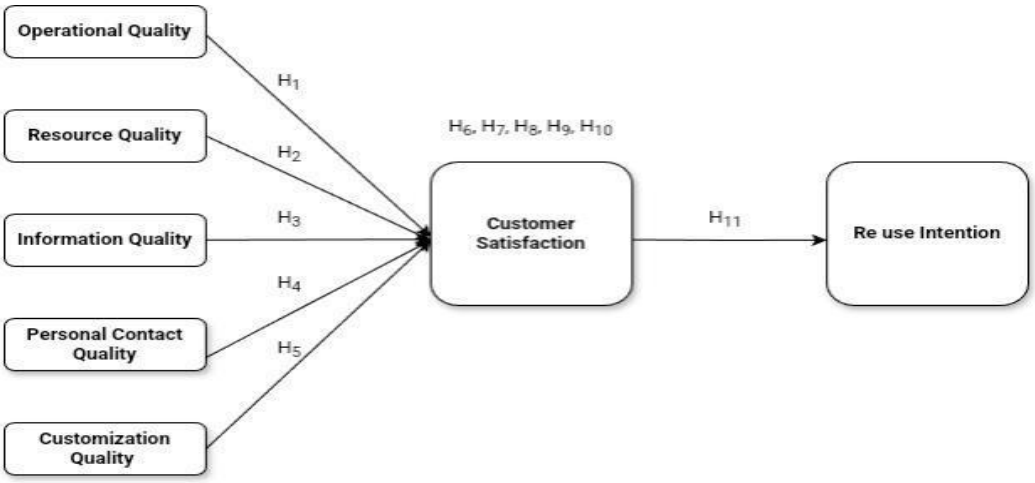

Figure 1.
Research Model

This study uses a quantitative method by collecting data online using Google Forms involving 392 respondents from e-commerce users who use logistics service options in Batam city. This sample was selected as part of the population to represent the entire population in this study. Based on the formula suggested by Hair et al. (2019) each question is multiplied by 10. The quantitative approach was chosen because it can test the relationship and influence between variables systematically and measurably.

This questionnaire was designed by including statements from the variables that are the focus of the research, such as operational quality, resource quality, information quality, personal contact quality, customization quality, customer satisfaction, and intention to reuse the service. The data analysis process was carried out using the Partial Least Squares Structural Equation Modeling (PLS-SEM) technique with the help of SmartPLS software. A 5-point Likert scale was used as a measurement instrument, with a value range of 1 for "strongly disagree" to 5 for "strongly agree". The component-based PLS-SEM technique, developed by Wold in 1973, allows for the analysis of causal relationships in the designed model. This approach offers flexibility and accuracy in identifying relationships between research variables (Rahmayu & Siantono, 2023).

RESULTS AND DISCUSSION

Table 1.
Respondent Characteristics

Characteristics		Total	Percentage
Gender	Woman	175	44.6%
	Man	217	55.4%
Age	<20	25	6.4%
	20-25 Years	3	0.8%
	26-30 Years	90	23.0%
	31-30 Years	48	12.2%
	36-40 Years	19	4.8%
	41-45 Years	7	1.8%
	>46 Years	3	0.8%
Education	Junior High School/Equivalent	4	1.0%
	High School/Equivalent	190	48.5%
	Diploma (D1 / D2 / D3)	71	18.1%
	Bachelor (S1 / S2 / S3)	126	32.1%
Delivery service	JNE	108	27.6%
	JNT	163	41.6%
	Fast	76	19.4%
	SAP Express	24	6.1%
	Ninja Express	21	5.4%
Online Shopping Frequency	Every day	19	4.8%
	Once a Week	60	15.3%
	Several Times a Week	91	23.2%
	Once a month	96	24.5%
	Several Times a Month	102	26.0%

Source: Data according to the author (2024)

Based on the analysis of the characteristics of the survey respondents, it is known that most respondents are male (55.4%) with a dominant age range between 26 to 35 years (35.2%). Most respondents have a high school/equivalent education background (48.5%) or

a bachelor's degree (32.1%), indicating a relatively high level of education among respondents. The most widely used delivery service is JNT (41.6%), followed by JNE (27.6%) and SiCepat (19.4%). Most respondents shop online several times a month (26.0%), indicating that online shopping is a common activity among them. Further analysis of online shopping preferences and behavior can provide valuable insights for the e-commerce and shipping logistics industries.

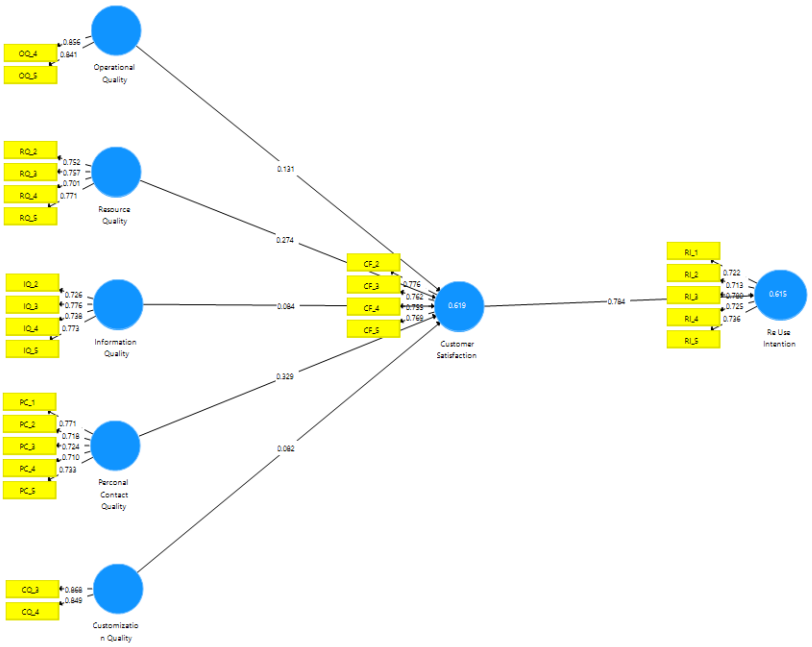

Figure 2.
PLS Model Test Results
Source: Data according to the author (2024)

In this study, the validity of the indicator is an important aspect that must be considered. According toAlvin & Marsella (2023), an indicator is considered valid if its outer loading value exceeds 0.7, while a value below 0.7 indicates the invalidity of the indicator. Based on the SmartPLS model used, all indicators show outer loading values above 0.7, so they are declared valid. Therefore, all indicators have met the convergent validity criteria, allowing further data analysis to be carried out without constraints related to indicator validity.

Table 2.
CMB/CMV Test Results

Variables	VIF
CF_2	1,498
CF_3	1,488
CF_4	1,413
CF_5	1,499
CQ_3	1,289
CQ_4	1,289
IQ_2	1,363
IQ_3	1,482
IQ_4	1,362
IQ_5	1,468
OQ_4	1,239
OQ_5	1,239
PC_1	1,596
PC_2	1,418
PC_3	1,466
PC_4	1,480
PC_5	1,499
RI_1	1,464
RI_2	1,408
RI_3	1,603
RI_4	1,466
RI_5	1,476
RQ_2	1,398
RQ_3	1,437
RQ_4	1,343
RQ_5	1,443

Source: Data according to the author (2024)

In this study, the Common Method Bias (CMB) or Common Method Variance (CMV) test was conducted to ensure that the data obtained were free from bias and error. Only data that is free from CMB/CMV can be continued to the next stage of analysis. According to the opinion of Hair et al. (2019), if the Variance Inflation Factor (VIF) value is less than 5, then the data is considered free from CMB/CMV. The test results show that the data in this study meets these criteria because the VIF value is below 5. Thus, the analysis using SmartPLS can be carried out correctly and according to plan.

Table 3.
Outer Loadings Test Results

	Customer Satisfaction	Customization Quality	Information Quality	Operational Quality	Personal Contact Quality	Re-Use Intention	Resource Quality
CF_2	0.776						
CF_3	0.762						
CF_4	0.755						
CF_5	0.769						
CQ_3		0.868					
CQ_4		0.849					
IQ_2			0.726				
IQ_3			0.776				
IQ_4			0.738				
IQ_5			0.773				
OQ_4				0.856			
OQ_5				0.841			
PC_1					0.771		
PC_2					0.718		
PC_3					0.724		
PC_4					0.710		
PC_5					0.733		
RI_1						0.722	
RI_2						0.713	
RI_3						0.780	
RI_4						0.725	
RI_5						0.736	
RQ_2							0.752
RQ_3							0.757
RQ_4							0.701
RQ_5							0.771

Source: Data according to the author (2024)

The output in the table above shows that all indicators have fulfilled the Rule of Thumb, which is more than 0.6.

Table 4.
Validity and Reliability Test Results

Variables	Composite Reliability	(AVE)
Customer Satisfaction	0.850	0.586
Customization Quality	0.848	0.737
Information Quality	0.840	0.568
Operational Quality	0.837	0.719
Personal Contact Quality	0.852	0.535
Re-Use Intention	0.855	0.541
Resource Quality	0.834	0.556

Source: Data according to the author (2024)

According to Hair et al. (2019), validity is an important aspect in research. The validity of a study is considered acceptable if the Average Variance Extracted (AVE) value for each variable exceeds 0.5. The results of the calculations in this study, all indicators show AVE values that exceed the threshold, indicating that these indicators have met the convergent validity criteria.

Furthermore, Hair et al. (2019) state that the composite reliability value must exceed 0.6 for each construct to be considered acceptable. In this study, the results showed that all constructs had composite reliability values greater than 0.6. Therefore, it can be concluded that all variables tested have a high level of reliability. This confirms the existence of strong internal consistency between items in each variable, indicating that the measuring instrument in this study can be relied on to measure the intended construct accurately and consistently.

Table 5.
Cross-Loading Test Results

	Customer Satisfaction	Customization Quality	Information Quality	Operational Quality	Personal Contact Quality	Re-Use Intention	Resource Quality
CF_2	**0.776**	0.499	0.496	0.491	0.541	0.612	0.551
CF_3	**0.762**	0.468	0.510	0.453	0.568	0.569	0.524
CF_4	**0.755**	0.464	0.509	0.473	0.567	0.631	0.549
CF_5	**0.769**	0.434	0.484	0.497	0.546	0.587	0.540
CQ_3	0.539	**0.868**	0.552	0.456	0.551	0.569	0.556
CQ_4	0.506	**0.849**	0.615	0.507	0.571	0.578	0.581
IQ_2	0.465	0.487	**0.726**	0.462	0.537	0.503	0.492
IQ_3	0.503	0.546	**0.776**	0.486	0.540	0.511	0.509
IQ_4	0.493	0.520	**0.738**	0.503	0.527	0.504	0.573

IQ_5	0.504	0.492	**0.773**	0.487	0.567	0.521	0.532
OQ_4	0.542	0.524	0.616	**0.856**	0.569	0.600	0.547
OQ_5	0.518	0.424	0.473	**0.841**	0.549	0.505	0.548
PC_1	0.559	0.512	0.532	0.490	**0.771**	0.605	0.531
PC_2	0.569	0.493	0.572	0.507	**0.718**	0.600	0.561
PC_3	0.525	0.463	0.546	0.486	**0.724**	0.528	0.499
PC_4	0.494	0.457	0.506	0.456	**0.710**	0.513	0.512
PC_5	0.499	0.460	0.471	0.468	**0.733**	0.544	0.504
RI_1	0.539	0.451	0.453	0.430	0.513	**0.722**	0.461
RI_2	0.577	0.424	0.502	0.473	0.526	**0.713**	0.491
RI_3	0.630	0.544	0.520	0.548	0.603	**0.780**	0.558
RI_4	0.560	0.491	0.475	0.465	0.565	**0.725**	0.504
RI_5	0.573	0.540	0.535	0.475	0.604	**0.736**	0.541
RQ_2	0.554	0.461	0.573	0.517	0.589	0.534	**0.752**
RQ_3	0.521	0.514	0.541	0.464	0.525	0.508	**0.757**
RQ_4	0.473	0.494	0.458	0.459	0.502	0.479	**0.701**
RQ_5	0.555	0.510	0.509	0.484	0.511	0.552	**0.771**

Source: Data according to the author (2024)

Cross-loading testing aims to assess the correlation of each indicator with the measured variable, which is one way to evaluate the validity of the discriminant. According to Ghazali (2021), the cross-loading requirement is that each indicator must have a minimum correlation of 0.7 with the variable it measures. The test results show that all indicators have met this criterion, with a correlation value of more than 0.7 to their respective variables.

Direct Effect Hypothesis Test Results→ path coefficients

The following are the results of direct analysis to determine the influence of the variables studied. The value that shows the significance of the influence between variables directly is considered significant if it meets the Rule of Thumb criteria of T-statistics with a value of more than 1.96 and P-value with a value of less than 0.05 (Hair et al., 2019). In addition, to determine the direction and level of influence between variables, it can be known through the average value of the sample (M). The following is a table of the results of the direct effect test.

Table 6.
Direct Hypothesis Test Results

Variables	Sample Mean (M)	T Statistics (|O/STDEV|)	P Values	Conclusion
Customer Satisfaction -> Reuse intention	0.773	24,205	0,000	Significant Positive
Customization Quality -> Customer Satisfaction	0.084	1,441	0.150	No Significant Positive
Information Quality -> Customer Satisfaction	0.121	1,771	0.077	No Significant Positive
Operational Quality -> Customer Satisfaction	0.120	2,190	0.029	Significant Positive
Personal Contact Quality -> Customer Satisfaction	0.305	3,886	0,000	Significant Positive
Resource Quality -> Customer Satisfaction	0.278	3,223	0.001	Significant Positive

Source: Data according to the author (2024)

Hypothesis 1: Significant Influence of Customer Satisfaction on Reuse Intention

The analysis of this hypothesis shows that there is a positive and significant relationship between customer satisfaction and the intention to reuse a product or service. The results of the analysis revealed a T-statistic value of 24.205 and a P value of 0.000. Based on the general rule for testing direct effect hypotheses, a relationship is considered significant if the T-statistic value is greater than 1.96 and the P value is less than 0.05. In this case, the very high T-statistic value (24.205) far exceeds the required threshold, and the very low P value (0.000) indicates that the results did not occur by chance. The interpretation of these results indicates that customer satisfaction does have a significant impact on customers' intention to reuse the product or service in the future. Thus, this finding supports the initial hypothesis that increasing customer satisfaction can significantly increase their intention to reuse the product or service. This is important for companies in designing marketing and customer service strategies, because focusing on increasing customer satisfaction can have a direct impact on increasing customer loyalty and business sustainability. This finding is in line with research conducted by Fitri & Nugroho (2023) and Kuswanadji et al. (2024).

Hypothesis 2: The Effect of Customization Quality on Customer Satisfaction

The results of the analysis show that there is a positive but insignificant influence between customization quality and customer satisfaction. This analysis produces a T-statistic value of 1.441 and a P value of 0.150. Based on the general criteria in testing the direct effect hypothesis, a relationship is considered significant if the T-statistic value is greater than 1.96 and the P value is less than 0.05. In this case, the T-statistic value of 1.441 which is below 1.96, and the P value of 0.150 which exceeds 0.05, indicate that the relationship is not statistically significant. Thus, although there is an indication that increasing customization quality can contribute to increasing customer satisfaction, this influence is not strong enough to be considered significant in the statistical analysis conducted. This finding suggests that other factors may have a greater influence on customer satisfaction than customization quality, or that the sample size or measurement method used in this study may not be sensitive enough to detect more subtle effects. Thus, these results suggest that companies may need to consider additional or alternative approaches to improving customer satisfaction, other than just focusing on customization quality. Further studies with different methodological approaches or using larger samples may be needed to dig deeper into the dynamics between customization quality and customer satisfaction. The results of this study are also in line with the findings of previous studies conducted by Saputra & Ardani (2020) and Purnomo (2022).

Hypothesis 3: The Effect of Information Quality on Customer Satisfaction

The results of the analysis show a positive but insignificant influence between information quality and customer satisfaction. The T-statistic value obtained is 1.771, while the P value is 0.077. Based on the general criteria in testing the direct effect hypothesis, the relationship is considered significant if the T-statistic value is greater than 1.96 and the P value is less than 0.05. In this case, the T-statistic value of 1.771 has not reached the threshold of 1.96, and the P value of 0.077 is still greater than 0.05, so the relationship is declared statistically insignificant. In conclusion, although there is an indication that information quality can have a positive impact on customer satisfaction, this influence is not strong enough to be considered significant in the statistical analysis conducted. This finding indicates that information quality, although important, may not be the main factor influencing customer satisfaction in this context. Other factors, such as product quality, customer service,

or price, may have a greater contribution to customer satisfaction. The findings in this study contradict research conducted by Marie et al. (2023) and Kusumajaya & Zusrony (2020).

Hypothesis 4: Operational Quality has a significant positive effect on Customer Satisfaction.

This study aims to explore the relationship between operational quality and customer satisfaction in order to understand the complex interaction between operational aspects and consumer perceptions. The results of the study indicate a significant positive relationship between the two variables, supported by strong and convincing statistical results. Quantitative analysis shows that operational quality has a significant impact on customer satisfaction, evidenced by a T-statistic value of 2.190 and a P value of 0.029. This finding is in line with the (rule of thumb) in testing the direct effect hypothesis, confirming the statistical validity of the relationship studied. Interpretation of these results highlights the importance of optimizing internal processes and service consistency in shaping positive customer perceptions. The implications of these findings emphasize the urgency for business entities to prioritize continuous improvement in their operational aspects. By focusing on operational quality, organizations have the potential to achieve higher levels of customer satisfaction. Furthermore, this can lead to strengthening consumer loyalty and supporting sustainable business growth. To enrich the understanding of this phenomenon, it is recommended that future research explore specialized and effective operational strategies in various industry sectors. Such investigations are expected to provide in-depth insights into innovative ways to continuously improve operational quality. This study also received support from the existing research corpus, as presented in scientific papers. Tahfizah et al. (2024) as well as Budiarno et al. (2022) which also strengthen the conceptual and empirical basis of the findings produced.

Hypothesis 5: Personal Contact Quality has a positive effect on Customer Satisfaction.

The results of the analysis indicate a significant positive impact of (personal contact quality) on (customer satisfaction), indicated by the T-statistic value of 3.886 and the P value of 0.000. Following the (rule of thumb) for testing the hypothesis of direct effects on (path coefficients), these values exceed the set threshold (T-statistic > 1.96; P < 0.05), confirming the statistical validity of the studied relationship. This finding underlines that high-quality

personal interactions—characterized by friendly service, empathy for customer needs, and responsiveness in handling problems—play a vital role in shaping positive customer perceptions. Consequently, business entities that prioritize this aspect have the potential to witness a substantial increase in their customer satisfaction index. This is in line with previous research conducted by Putri & Susanti (2023) and Husain et al. (2023).

Hypothesis 6: Resource Quality has a positive effect on Customer Satisfaction.

The results of the analysis revealed that resource quality has a positive impact on customer satisfaction, as evidenced by the T-statistic value of 3.223 and the P value of 0.001. The interpretation of these statistics, referring to the general rules of direct effect hypothesis testing, confirms the significance of the relationship. The implication is that excellence in technology, personal competence, and infrastructure reliability tends to result in higher levels of customer satisfaction. Thus, strategic investment in improving resource quality can be seen as a crucial step to enhance customer satisfaction and strengthen organizational performance. This conclusion is confirmed by previous studies, as presented by Edo & Hendayani (2023) and Rustanti et al. (2023).

Indirect Effect

Indirect Effect, an important result of bootstrapping analysis, shows the role of mediating and moderating variables in the research model. It provides a deeper understanding of how the relationship between variables develops through indirect pathways. To be considered meaningful, the indirect impact between variables must meet the general standard, namely, having a T-statistic value greater than 1.96 and a P value less than 0.05. In addition to describing the direction and magnitude of the indirect relationship between variables, we can see the sample mean value (M). Thus, through the results of the Indirect Effect test listed in the table, we can understand more clearly the role of mediating and moderating variables in the research model.

Table 7.
Indirect Hypothesis Test Results

Variables	Sample Mean (M)	T Statistics (|O/STDEV|)	P Values	Conclusion

Customization Quality -> Customer Satisfaction -> Reuse intention	0.065	1,437	0.151	No Significant Positive
Information Quality -> Customer Satisfaction -> Reuse intention	0.094	1,745	0.082	No Significant Positive
Operational Quality -> Customer Satisfaction -> Reuse intention	0.093	2,162	0.031	Significant Positive
Personal Contact Quality -> Customer Satisfaction -> Reuse intention	0.236	3,761	0,000	Significant Positive
Resource Quality -> Customer Satisfaction -> Reuse intention	0.214	3,310	0.001	Significant Positive

Source: Data according to the author (2024)

Hypothesis 7: Customization Quality has a significant positive effect on Reuse Intention through the mediation effect of Customer Satisfaction.

The results of the hypothesis test indicate that although customization quality has the potential to influence reuse intention through the mediation of customer satisfaction, this influence is not statistically significant. This indicates that although there is reason to believe that the better the customization quality, the higher the reuse intention, in this case, other factors may play an important role, or the influence is not strong enough to be considered statistically significant. The T-statistic value of 1.437 and the P value of 0.151 indicate a discrepancy with the general standards used in testing direct effects, highlighting the importance of considering additional variables or complexity in the relationship between variables. This suggests the potential for further research in understanding the dynamics behind the relationship between customization quality, customer satisfaction, and reuse intention. This study is also supported by findings from previous studies conducted by Al Firdaus & Rachmawati (2024) and Andriputra et al. (2021).

Hypothesis 8: Information Quality has a significant positive effect on Reuse Intention through the mediation effect of Customer Satisfaction.

The results of the hypothesis test indicate that although information quality has the potential to influence reuse intention through positive mediation of customer satisfaction, the

effect is not proven to be statistically significant. The T-statistic value obtained is 1.745, and the P value is 0.082 does not meet the general criteria in testing direct effects (Path Coefficients). Therefore, this finding indicates that in this context, there is insufficient evidence to support a strong relationship between information quality, customer satisfaction, and reuse intention. Although there is an indication that information quality can have a positive effect on reuse intention, this result indicates that other factors may also influence, or the effect is not strong enough to be considered statistically significant. This indicates the need for further research to better understand the dynamics of the relationship between information quality, customer satisfaction, and reuse intention. This finding is supported by research conducted by Kristy & Sinambela (2022) and Chandra et al. (2022).

Hypothesis 9: Operational Quality has a significant positive effect on Reuse Intention through the mediation effect of Customer Satisfaction.

The results of the hypothesis analysis show that (Operational Quality) or operational quality has a positive and significant influence on Reuse Intention, with Customer Satisfaction as a mediator in the relationship. This indicates that good operational quality specifically affects customers' desire to reuse products or services offered by the company. The T-statistic value of 2.162 and the P value of 0.031 indicate that this influence is a fairly significant result, in accordance with the general standards used in testing direct effects. Thus, this finding highlights the importance of aspects such as efficiency, reliability, and operational process quality in influencing customer perceptions and satisfaction, which in turn affect their tendency to reuse the company's products or services. This suggests that investment in improving operational quality can provide significant results in maintaining and increasing customer loyalty and increasing the company's long-term success. This finding is also supported by Prawira & Sidhartha (2021) and Kartikasari & Oentario (2024)..

Hypothesis 10: Personal Contact Quality has a significant positive effect on Repurchase Intention through the mediation effect of Customer Satisfaction.

The results of the hypothesis analysis confirm this finding, showing that Personal Contact Quality significantly influences the intention to reuse, with Customer Satisfaction acting as an intermediary in the process. In this analysis, the high T-statistic value of 3.761 and the very small P value (0.000) indicate the statistical significance of the relationship

between personal contact quality and customer intention to reuse a product or service. This finding is in accordance with the general guidelines used in testing direct effects (Path Coefficients). This indicates that the relationship is not coincidental but is supported by valid data. Thus, investment in improving the quality of personal interactions can be an effective strategic step in maintaining and increasing customer loyalty and strengthening the company's position in the market. This finding is also supported by Imanda & Anandya (2020) and Wilson (2022).

Hypothesis 11: Resource Quality has a significant positive effect on Reuse Intention through the mediation effect of Customer Satisfaction.

The results of the hypothesis analysis show that resource quality has a positive and significant effect on the intention to reuse, with customer satisfaction as a mediator. The T-statistic value of 3.310 and a very small P value (0.001) confirm the statistical significance of the relationship between resource quality and customer intention to reuse a product or service. This finding is in accordance with the general principle used in testing the direct effect hypothesis. Thus, this result confirms that resource quality plays an important role in shaping customers' desire to reuse a company's products or services. The availability and quality of adequate resources not only contribute to increasing customer satisfaction but also strengthen their likelihood of re-interacting with the company. Therefore, investment and effort in improving resource quality can provide significant benefits to the company. This finding is also supported by research by Lin et al. (2023) and Al-Bashayreh et al. (2022).

Table 8.
R Square Test Results

Variables	R Square
Customer Satisfaction	0.619
Re-Use Intention	0.615

Source: Data according to the author (2024)

In understanding the complexity of consumer behavior, this study explores the various factors that influence customer satisfaction and intention to reuse services through statistical modeling. The results of the analysis provide valuable insights into the predictive ability of the model and identify areas that require further exploration. Evaluation of the coefficient of determination (R-squared) for the customer satisfaction construct yields a value

of 0.619. This figure indicates that approximately 61.9% of the variation in customer satisfaction levels can be explained by the variables included in the model. This finding reflects the model's substantial capability in mapping and predicting the dynamics of customer satisfaction based on the selected predictors.

However, it is important to note that there is about 38.1% of the variability in customer satisfaction that has not been accommodated by the explanatory variables in the model. This phenomenon suggests the existence of other determinants outside the scope of the current study that contribute to the fluctuation of customer satisfaction, or the possibility of the existence of additional variables that have not been integrated in the analysis. Regardless, the R-squared magnitude of 0.619 confirms the strength of the model in explaining most of the variation in customer satisfaction, an indicator that deserves to be appreciated in the context of consumer satisfaction analysis. Similarly, the analysis of reuse intention produces an R-squared value of 0.615, which can also be categorized as "strong". The interpretation is that about 61.5% of the variability in customer intention to reuse a product or service can be explained by the variables in the model. This confirms the reliability of the model in describing and projecting the tendency of customers to make repeat purchases based on the factors considered. However, it should be underlined that there is still 38.5% of the variation in reuse intention that has not been explained by the model variables. This situation opens up the possibility of external factors that also influence the customer's desire to reuse a product or service, or the existence of potential variables that have not been accommodated in the analysis framework. Overall, the results of this determination coefficient evaluation highlight the predictive power of the model while also underlining the complexity inherent in consumer behavior. These findings stimulate further research to identify and integrate additional variables, to increase the explanatory power of the model, and deepen the understanding of the dynamics of customer satisfaction and loyalty.

Table 9.
SRMR Test Results

	Saturated Model	Estimation Model
SRMR	0.061	0.078

Source: Data according to the author (2024)

Standardized Root Mean Square Residual (SRMR) can be considered as a measure of how well the model replicates the correlation matrix of the observed data. As per the rule of thumb, when the SRMR value is less than 0.1, it indicates that the model satisfactorily fits the observed data. The output results show that the SRMR value satisfies this rule of thumb. Thus, as per the stated rule of thumb, an SRMR value less than 0.1 indicates that the developed model fits the observed data.

Ghozali & Latan (2012) revealed that GoF has three assessment categories, namely a value of 0.10 is categorized as a weak GoF, a value of 0.25 is categorized as a moderate GoF, and 0.36 is categorized as a strong GoF. The greater the GOF value, the better the resulting model.

Table 10.
GoF Test Results

Variables	Results	Conclusion
GoF	0.6115	Strong

Source: Data according to the author (2024)

Based on the calculation above, the GoF result is 0.6115. This value indicates that the GoF value is "strong" or it can be said that this research model is fit and suitable for use.

CONCLUSION

This study revealed four accepted hypotheses, namely the relationship between customer satisfaction and reuse intention, operational quality and customer satisfaction, personal contact quality and customer satisfaction, and resource quality and customer satisfaction. Meanwhile, two rejected hypotheses are the relationship between customization quality and customer satisfaction, and information quality and customer satisfaction. For indirect relationships, two rejected hypotheses include customization quality and reuse intention mediated by customer satisfaction, and information quality and reuse intention mediated by customer satisfaction. The three accepted hypotheses are operational quality, personal contact quality, and resource quality, all of which are related to reuse intention through the mediation of customer satisfaction. Theoretically, this study provides an important contribution to the logistics industry by providing in-depth insights into the factors that influence service performance. This information can be utilized by industry players and

decision makers to improve efficiency, service quality, and customer satisfaction. In addition, companies can design more effective strategies to increase competitiveness. In the future, research can be expanded into logistics services.

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