

THE EFFECT OF SERVICE QUALITY AND CUSTOMER SATISFACTION ON CUSTOMER LOYALTY LOGISTIC SERVICES

(STUDY CASE ON SICEPAT EXPRESS INDONESIA)

Imelda¹, Maghfironi Julianto², Sonya Sidjabat³, Andri Primadi⁴

^{1,2,3,4} Trisakti Institute of Transportation and Logistics, Jakarta, Indonesia

✉ Corresponding author: imeldamel29.id@gmail.com

Abstract: SiCepat Express is a shipping company that is engaged in the delivery of goods. This study aims to determine how the influence of service quality and customer satisfaction on customer loyalty. The method used in this study is descriptive statistics and uses the PLS model. The data of this research are customers who have used the services of SiCepat Company by distributing questionnaires to 100 respondents who were analyzed with Smart PLS 3 software. The results showed that service quality had no positive and insignificant effect on customer loyalty. However, customer satisfaction has a positive and significant effect on customer loyalty.

Keywords: Service Quality, Customer Satisfaction, Customer Loyalty.

INTRODUCTION

The progress of national development in the infrastructure sector, such as the construction of district, provincial and national roads and toll roads as road infrastructure. Transport routes are very important for the flow of people and goods. With good transportation facilities and infrastructure (land, sea, and air), forwarding service activities (delivery of documents, goods, etc.) will be faster to help meet consumer wants and needs. One of the companies that are growing rapidly at this time is the expedition service business or commonly called courier services. Freight transportation services (expedition) are all efforts carried out individually or together in an organization to provide effective and efficient services. An expedition service company that has grown and developed in various countries such as TIKI, JNE, J&T, DHL, FedEx, dan POS Indonesia (Siti Hadijah, 2016).

In this era of globalization, with the development of freight forwarding services, business entities must run or be guided by service quality customer satisfaction, and customer loyalty. With a professional freight forwarder, of course the distribution or logistics of goods to different locations is easier, the most important thing is how the shipping company consistently manages the company by serving customers as much as possible. The maximum service in this case treats customers with friendly, cheap service, clearer explanations, easy procedures, and provides goods insurance when needed. Quality is a dynamic condition that affects products, services, people, processes and the environment that meet or exceed expectations (Fandy Tjiptono, 2001). The definition of service is any action or activity that can be offered by one party to another party, which is basically intangible and does not result in any ownership (Fandy Tjiptono, 2007). So the definition of service quality can be interpreted as an effort to fulfill the needs and desires of consumers.

The biggest challenge for service providers depends on the quality of services provided and high customer satisfaction. Customer satisfaction is a personal assessment after using a product or service which is strongly influenced by the customer's own expectations. Customer satisfaction refers to the overall evaluation of the customer towards performance of a service (Mahmoudi Maymand, 2005).

Convincing customers to use landline facilities and services is not easy, one way is by utilizing customer loyalty behavior. The use of customer loyalty is caused by the long-term effect of loyalty itself, with the hope that customers will continue to use the delivery service continuously and repeatedly. This is explained by (Hasan, 2008) who says that customer loyalty is defined as people who buy, especially those who buy regularly and repeatedly. It should be emphasized, this is different from repurchase behavior, customer loyalty includes aspects of feelings, does not involve affective aspects in it (Dharmayanti & Dharmesta, 2006).

Therefore, to survive in the fierce competition from shipping companies, it is necessary to formulate an effective strategy that is customer-oriented. As companies become more and more commercially competitive, future competition will increase and the demand map for these services will also change. If the transportation company does not improve the quality of service that affects customer satisfaction, the company will not be able to maintain customer loyalty. One of the expedition services that is currently developing is SiCepat Express Shipping Company, this shipping company was founded in 2014, where 15-hour delivery to the Greater Jakarta area (Bogor, Depok, Tangerang, and Bekasi) and Bandung, as well as 1-day delivery to major cities throughout Indonesia is the main focus in its services (Thidi, 2019). Based on the description above, we as writers will conduct research that aims to determine the relationship between service quality, customer satisfaction on customer loyalty, and what efforts should be made by SiCepat Express Shipping Company in maintaining customer loyalty.

Literature Review

Services Quality

Service quality is a global attitude or assessment of service excellence, although the true scope of this attitude is not uniformity of opinion, (Sari et al., 2018), has developed measures of service quality. Service Quality is a multi-item scale with several questions that can be used to measure respondents' perceptions of service quality, i.e *tangibles, reliability, responsiveness, assurance and empathy*.

Customer satisfaction

The theory of customer satisfaction is a feeling of pleasure or disappointment that arises after comparing the product results of the expected performance (Hasfar M. et al., 2020). It means a kind of assessment of the privilege of goods or services or itself, providing a level of comfort associated with meeting needs, including meeting needs below expectations or meeting

needs exceeding customer expectations. Customer satisfaction is the extent to which the perceived benefits of a product match what customers expect.

Customer Loyalty

Customer loyalty is the customer behavioral intention to maintain a relationship with a service provider (Surahman et al., 2020). Customer loyalty can also be interpreted as a commitment from consumers to continue to be loyal or loyal to a service product indicated by repeated purchases by customers and recommending the company's products and services to the surrounding environment.

Hypothesis

H1: The Positive Effect of Service Quality on Customer Loyalty.

Service quality is a company's way of working that seeks to continuously improve the quality of processes, products and services produced by the company. The relationship between service quality and customer satisfaction in this study is based on the idea that: (Normasari, 2013) which states that service quality has a positive effect on customer satisfaction.

H2: The Positive Effect of Customer Satisfaction on Customer Loyalty

The effect of customer satisfaction on customer loyalty shows a significant effect. Stating that customer loyalty is a combination of satisfaction so that customer loyalty is a function of satisfaction. (Rahmawati, 2014). If the connection between satisfaction and customer loyalty is positive, and stated customer satisfaction is a factor of customer loyalty.

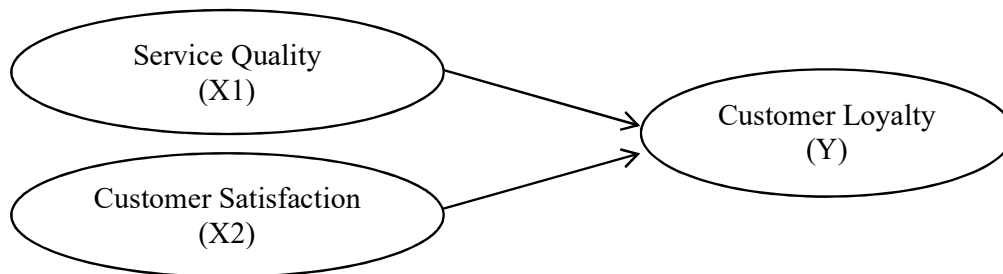


Image 1. framework

RESEARCH METHODS

This study uses quantitative methods by distributing questionnaires through Google Form. This study uses descriptive statistics. Descriptive analysis is used to describe the identity of the respondents consisting of gender, age, and profession. The population that will be used in this study are customers who have used the logistics services of SiCepat Express Shipping Company in Indonesia. The existing population will determine several customers who have used the logistics services of SiCepat Express Shipping Company in Indonesia which is will be the sample in the study The sampling technique in this research is using *non-probability sampling* with *purposive sampling*. Quoted from Hair Jr, J., Black, W., Babin, B., Anderson, R., & Tatham, (2006) in the process of determining the number of samples that must pass the calculation is at least 5 times the number of constructs or parameters used in the study. Because the population in this study is erratic in number, the authors refer to Hair Jr, J., Black, W., Babin, B., Anderson, R., & Tatham, (2006) that is, the calculation will be even better if it reaches 5-10 times the number of model coefficients to be estimated. In this study there are 20 indicators which are multiplied by 5, so a total of 100 respondents.

Methods Data analysis was carried out by measuring the model construction and the relationship between variables using the multivariate Structural Equation Modeling (SEM) - Partial Least Square (PLS) technique, which is often referred to as the second generation of multivariate analysis (Fornell, 1987). Analysis of PLS is carried out in three stages:

1. Measurement Model (Outer Model)
2. Structural Model (Inner Model)
3. Hypothesis Testing

The aspects studied in this study include 3 (three) variables, 2 (two) independent variables (X), and 1 (one) dependent variable (Y). The measurement scale that will be used is the Likert scale with a score of 1–5. Information regarding the distribution of scores and categories is as follows:

1. Strongly Disagree (STS), 2. Disagree (TS), 3. Disagree (KS), 4. Agree (S),
5. Strongly Agree (SS). The following table operationalization of variables in this study:

Table 1. Variable Operationalization

Variable Concept	Dimension	Indicator	Statements and Symbols
Service quality Independent Variable (X1) (Kotler, 2009)	Tangibility	- The physical appearance of learning facilities - Learning equipment - Employee - Communication materials	- The SiCepat delivery service agency has up-to-date and reliable learning facilities (KL1) - The SiCepat delivery service agency has a complete and good learning equipment. (KL2) - The SiCepat delivery service agency has qualified employees (KL3) - The SiCepat delivery service agency has quality materials/materials that are by partner needs (KL4)
	Reliability	Ability to carry out promised learning services convincingly and accurately	The SiCepat delivery service agency provides learning services as promised convincingly and accurately (KL5)
	Responsiveness	Willingness to help customers quickly and responsively	Employees are very responsive and fast in helping customer service (KL6)
	Assurance	- Knowledge and courtesy of employees/ teachers/ instructors - The ability of employees to foster trust and confidence in customers	- Employees have good knowledge and attitude (KL7) - Employees at the SiCepat delivery service agency can develop a sense of trust and confidence regarding the customer service

Variable Concept	Dimension	Indicator	Statements and Symbols
			system (KL8)
	<i>Empathy</i>	Willingness to give deep and special attention to each customer	Employees at the SiCepat delivery service agency are very concerned about service quality (KL9)
Customer satisfaction Independent Variable (X2) (Irawan, 2004)	<i>Price</i>	Low prices are a source of satisfaction (<i>value for money</i>)	The SiCepat delivery service agency provides prices that match the quality of service (KP1)
	<i>Service Quality</i>	- System - Technology - Human Resources (HR)	- The SiCepat delivery service agency has a good service system (KP2) - The SiCepat delivery service agency provides very complete shipping facilities (KP3) - The SiCepat delivery service agency has very good and qualified employees (KP4)
	<i>Product Quality</i>	Customer satisfaction after using delivery services for good service quality	Testimonials of good service quality satisfaction at the SiCepat delivery service agency (KP5)
	<i>Emotional Factor</i>	The satisfaction obtained by customers creates a sense of trust in the quality of SiCepat's services	Have a sense of trust in being a customer of the SiCepat delivery service agency (KP6)
	<i>Efficiency</i>	- Easy registration process - Ease of payment	- The SiCepat delivery service agency has an easy registration process (KP7) - The SiCepat delivery service agency

Variable Concept	Dimension	Indicator	Statements and Symbols
			provides an easy payment system (KP8)
Customer loyalty Dependent Variable (Y) (Parasuraman, A., Zeitham V.A. & L.L., 1986)	<i>Say Positive Thing</i>	Convey to others in positive words about the service process at the SiCepat delivery service	Partners explained positive things about the SiCepat (LP1) delivery service process system
	<i>Recommend Friends</i>	He/she process of inviting other parties to participate in using the SiCepat delivery service due to the positive experiences that have been felt	Partners always recommend using the SiCepat (LP2) delivery service
	<i>Continue Purchasing</i>	Attitudes that can lead to repeated use of SiCepat services based on loyalty	Partners are willing to cooperate regularly and continuously with the SiCepat delivery service agency (LP3)

DISCUSSION AND RESULT

Characteristics of Respondents

Based on gender, the number of respondents in this study was 54.5% male and 45.5% female. When viewed from the age, the respondents of this study were dominated by the age of 17-28 years, which was 86%. When viewed from the profession/occupation, the respondents of this study were dominated by students, which was 58%, and 42% by employees .

Evaluation of the Structural Model (Outer Model)

Evaluation of the measurement model consists of three stages; convergent validity test, discriminant validity test, and reliability test.

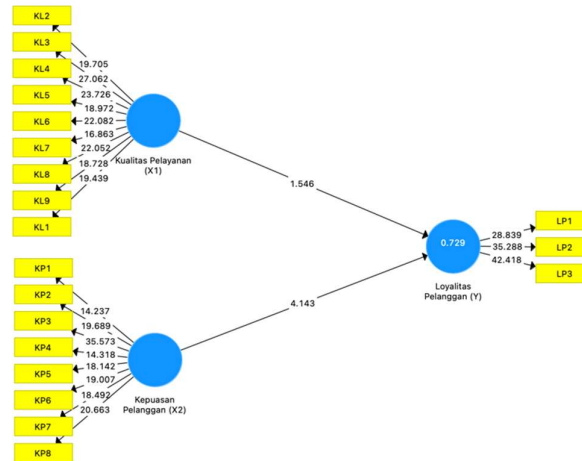


Figure 2. PLS Model, Outer Model

Convergent Validity Test

Testing the validity of the reflective indicators can be done by using the correlation of the indicator scores with the construct scores. The following are the results of calculations using the smartPLS 3.0 program:

Tabel 2. Outer Loading

	Service Quality (X1)	Customer Satisfaction (X2)	Customer Loyalty (Y)
KL1	0,875		
KL2	0,859		
KL3	0,895		
KL4	0,882		
KL5	0,855		
KL6	0,851		
KL7	0,834		
KL8	0,859		
KL9	0,855		
KP1		0,842	
KP2		0,862	
KP3		0,897	
KP4		0,824	
KP5		0,861	
KP6		0,843	
KP7		0,874	
KP8		0,855	
LP1			0,898
LP2			0,914
LP3			0,920

source: data processed, 2021

According to Chin, W.C. dan Todd, (1995), a correlation can be said to meet convergent validity if it has a loading value of greater than 0.5. The output shows that the loading factor gives a value above the recommended value of 0.5. So that the indicators in this study have met convergent validity.

Discriminant Validity Test

Discriminant Validity can be tested by looking at the cross-loading table. An indicator is declared valid if the value of the highest loading factor to the intended construct is compared to the value of the loading factor to other constructs.

Tabel 3. Cross Loading

	Service Quality (X1)	Customer Satisfaction (X2)	Customer Loyalty (Y)
KL1	0,875	0,806	0,707
KL2	0,859	0,764	0,665
KL3	0,895	0,795	0,688
KL4	0,882	0,781	0,687
KL5	0,855	0,801	0,713
KL6	0,851	0,788	0,697
KL7	0,834	0,748	0,703
KL8	0,859	0,841	0,766
KL9	0,855	0,828	0,728
KP1	0,758	0,842	0,69
KP2	0,794	0,862	0,707
KP3	0,85	0,897	0,792
KP4	0,766	0,824	0,734
KP5	0,804	0,861	0,674
KP6	0,822	0,843	0,703
KP7	0,751	0,874	0,789
KP8	0,783	0,855	0,713
LP1	0,749	0,825	0,898
LP2	0,748	0,747	0,914
LP3	0,741	0,739	0,92

source: data processed, 2021

Reliability Test

Stating that a latent variable can be said to have good reliability if the *composite reliability* value is greater than 0,7 and Cronbach's alpha value is

greater than 0,7 (Oda et al., 2014). According to Indrawati, (2018). A construct is said to be valid if it has a value of AVE > 0,5.

Table 4. Results of Latent Variable Reliability Test

Variable	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)	Description
Service Quality (X1)	0,957	0,963	0,745	Reliable
Customer Satisfaction (X2)	0,948	0,957	0,735	Reliable
Customer Loyalty (Y)	0,897	0,936	0,829	Reliable

source: data processed, 2021

Based on Table 4 shows that all latent variables measured in this study have Cronbach's Alpha and Composite Reliability values greater than 0.7. And the AVE value is greater than 0.5, so it can be said that all latent variables are reliable.

Structural Model Evaluation (Inner Model)

Evaluation of the structural model on SEM with PLS is done by performing the R-square test (R^2).

R-square test (R^2)

The R-Square (R^2) test is a goodness-fit test for a model, as shown in Table 5 below. The output for the value of R^2 is obtained by:

Table 5. R^2 Calculation Output

Variable	R-square (R^2)
Customer Loyalty (Y)	0,729

source: data processed, 2021

The value of R-square (R^2) is used to measure how much influence certain independent latent variables have on the dependent latent variable. (Oda et al., 2014), R^2 result of 0.67 indicates that the model is categorized as good. The R^2 value of this study is 0.729, which means > 0.67. So the above modeling is categorized as a good and moderate model.

Hypothesis test

To review the results of hypothesis testing on PLS, namely the bootstrap test. The rules of thumb for the support of a research hypothesis are: (1) if the coefficient or variable direction of the relationship (indicated by the original sample value) is in line with the hypothesis, and (2) if the t-statistical value is more than 1.96 and the p-value is less than 0.05 or 5%.

Table 6. Results of Research Data Bootstrapping Calculations

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T-Statistics (O/STDEV)	P-Values
Service Quality (X1) > Customer Loyalty (Y)	0,252	0,258	0,163	1,546	0,123
Customer Satisfaction (X2) > Customer Loyalty (Y)	0,616	0,608	0,149	4,143	0,000

source: data processed, 2021

- **The Effect of Service Quality on Customer Loyalty**

Based on the test results, it shows that the T-statistical value is 1.546 < 1.96 with a p-value of 0.123 > 0.05 and the original sample estimate value shows a value of 0.252 where the increase in the service quality variable has no positive and insignificant effect on the customer loyalty variable. Then the first hypothesis (H1) is rejected.

- **The Effect of Customer Satisfaction on Customer Loyalty**

Based on the test results, it shows that the T-statistic value is 4.413 > 1.96 with a p-value of 0.000 < 0.05, and the original sample estimate value shows a value of 0.616 where the increase in the customer satisfaction variable has a positive and significant effect on the customer loyalty variable. Then the second hypothesis (H2) is accepted.

CONCLUSION

Based on the results of the analysis that has been done, the researchers can draw the following conclusions:

1. Service Quality has no positive and insignificant effect on Customer Loyalty. It means, if the quality of service offered by SiCepat Express Shipping Company increased, so Customer Loyalty did not experience a significant increase. Because many customers are not satisfied with the services provided by SiCepat Express Shipping Company so that many customers are disloyal and loyal to SiCepat Express Shipping Company.
2. Customer Satisfaction has a positive and significant effect on Customer Loyalty. It means, if Customer Satisfaction increases, then Customer Loyalty to SiCepat Express Shipping Company also experienced a significant increase. SiCepat Express Shipping Company is expected to be able to maintain the level of customer satisfaction by paying attention to shipping costs and prioritizing the speed of product delivery so that it is expected that there will be repeat orders SiCepat Express Shipping Company.

REFERENCES

- Chin, W.C. dan Todd, P. A. (1995). *On the Use, Usefulness and Ease of Use of Structural Equation Modelling in MIS Research: A Note of Caution* (Vol. 19 No). MIS Quarterly.
- Dharmayanti, D., & Dharmesta. (2006). Analisis Dampak Service Performance dan Kepuasan Sebagai Moderating Variable Terhadap Loyalitas Nasabah (Studi Pada Nasabah Tabungan Bank Mandiri Cabang Surabaya). *Jurnal Manajemen Pemasaran*, Vol. 1(No. 1).
- Fandy Tjiptono. (2001). *Manajemen Jasa* (A. Offset (ed.); Edisi Kedu).
- Fandy Tjiptono. (2007). *Strategi Pemasaran* (Andi Offset (ed.); Edisi Kedu).
- Hair Jr, J., Black, W., Babin, B., Anderson, R., & Tatham, R. (2006). *Multivariate Data Analysis* (6th ed.). Upper Saddle River.
- Hasan, A. (2008). *Marketing* (M. Utama (ed.)).
- Hasfar M., Militina, T., & Achmad, G. N. (2020). Effect of Customer Value and Customer Experience on Customer Satisfaction and Loyalty Pt Meratus Samarinda. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 4(01), 84–94.
<https://doi.org/10.29040/ijebar.v4i01.909>
- Indrawati, F. (2018). Pengaruh Kualitas Produk terhadap Loyalitas Pelanggan dengan Kepuasan Pelanggan sebagai Variabel Intervening

- di Cincau Station Surabaya. *Agora*, 6(2).
- Irawan, H. (2004). *Kepuasan Pelayanan Jasa*. Erlangga.
- Kotler, P. and K. L. K. (2009). *Manajemen Pemasaran*. Indeks.
- Mahmoudi Maymand. (2005). *Global Strategic Management*.
- Normasari, S. (2013). PENGARUH KUALITAS PELAYANAN TERHADAP KEPUASAN PELANGGAN, CITRA PERUSAHAAN DAN LOYALITAS PELANGGAN Survei pada Tamu Pelanggan yang Menginap di Hotel Pelangi Malang. *Jurnal Administrasi Bisnis SI Universitas Brawijaya*, 6(2), 77767.
- Oda, N., Kurashina, S., Miyoshi, M., Doi, K., Ishi, T., Sudou, T., Morimoto, T., Goto, H., & Sasaki, T. (2014). Microbolometer terahertz focal plane array and camera with improved sensitivity at 0.5-0.6 THz. *International Conference on Infrared, Millimeter, and Terahertz Waves, IRMMW-THz*, 59–71. <https://doi.org/10.1109/IRMMW-THz.2014.6956015>
- Parasuraman, A., Zeitham V.A., & B., & L.L. (1986). A Conceptual Model of Service Quality and Its Implications for Future Research. *Journal of Marketing*, 49.
- Rahmawati, R. (2014). Pengaruh kepuasan terhadap loyalitas pelanggan (Sebuah kajian terhadap bisnis makanan). *Teknobuga*, 1(1), 66–79.
- Sari, S. W., Sunaryo, S., & Mugiono, M. (2018). The Effect of Service Quality on Customer Retention Through Commitment and Satisfaction As Mediation Variables in Java Eating Houses. *Jurnal Aplikasi Manajemen*, 16(4), 593–604. <https://doi.org/10.21776/ub.jam.2018.016.04.05>
- Siti Hadijah. (2016). *Perbedaan Jasa Pengiriman Pos Indonesia, JNE, Tiki, Fedex, dan Online*. <https://www.cermati.com/artikel/perbedaan-jasa-pengiriman-pos-indonesia-jne-tiki-fedex-dan-online>
- Surahman, I. G. N., Yasa, P. N. S., & Wahyuni, N. M. (2020). The Effect of Service Quality on Customer Loyalty Mediated by Customer Satisfaction in Tourism Villages in Badung Regency. *Jurnal Ekonomi & Bisnis JAGADITHA*, 7(1), 46–52. <https://doi.org/10.22225/jj.7.1.1626.46-52>
- Thidi. (2019). *Fokus Layanan SiCepat Sebagai Pendukung Ekspedisi E-commerce*. <https://thidiweb.com/sejarah-sicepat/>