Analysis of the Quality of Package Delivery Services in the Decision to Use Postal Services

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Info Artikel	Abstract
Keywords: Service Quality, Usage Decision ISSN (print): 1978-6387 ISSN (online): 2623-050X	The purpose of this research are find out the service quality at PT. Pos Indonesia Cibinong and the decision customers to use package delivery services at PT. Pos Indonesia Cibinong. The kind of research used is exploratory descriptive. This study uses qualitative primary data and quantitative secondary data. The Determination of the sampling method of sample uses the method accidental. The method of analysis that used descriptive analysis that is data using application SPSS 22. Furthermore, using tabulation analysis. The result show that the service quality at PT. Pos Indonesia Cibinong already good, but for reliability of package delivery it is still not good because it produces 70.20% and it's so small when compared to other statements, and then customers decide to use package delivery services at PT. Pos Indonesia Cibinong because of the distributors regarding the location and ease of accessing package information.
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1. Introduction

The advancement of digital technology in Indonesia is very help economic growth in Indonesia, one of which is business actors who take advantage of the development of digital technology to conduct a business venture. E-commerce is a clear example of the development of digital technology that exists today, because e-commerce (Electronic Commerce) or in Indonesian, namely Electronic Commerce, is a means of disseminating, selling, purchasing, marketing products (goods and services), by utilizing telecommunication networks such as the internet and computer networks. E-commerce is not only profitable for business people, namely sellers of products (goods and services) and consumers, but e-commerce is also profitable for courier and logistics service business people.

The delivery service business or courier of goods or packages at this time is growing very rapidly and after the passage of Law No. 38 of 2009 concerning Posts. The presence of a new Postal Law opens up opportunities for private courier and logistics companies, both local and foreign, to enter Indonesia's postal industry in the form of package delivery. Maintaining the quality of delivery services to consumers is a must that must be done by companies that provide delivery services so that it becomes a consumer decision in using these delivery services. Service quality according to Tjiptono and Chandra (2019) defines service quality as a measure of how good the level of service provided is able to meet customer expectations.

In Indonesia, there are several large companies engaged in freight forwarding services. One of them is PT. Pos Indonesia (Persero) which is a state-owned company engaged in services and is a pioneer of freight forwarding service companies in Indonesia because it was established in 1746. PT. Pos Indonesia has several branch offices that are widely spread across Indonesia. One of them is the Cibinong branch office which is the headquarters for 11 branches in Bogor Regency. PT. Pos Indonesia Cibinong branch office has also followed current technological advances such as the free shipment pick-up system and the delivery of goods can now be tracked online through the delivery receipt number, in addition to that there are delivery services via air cargo (aircraft), land cargo (train), and also via trucking, then PT. Pos Indonesia has also collaborated with several e-commerce such as Mataharimall, Lazada, Bukalapak, and Shopee.

The position of PT. Pos Indonesia (Persero) in the top brand of courier service companies in the last five years has never been the first or second position and is defeated by similar delivery service companies which can still be said to be new when compared to PT. Pos Indonesia (Persero). The following is the position of PT. Pos Indonesia and various similar companies engaged in the same field between 2015-2019:

Table 1. Top Brand Ranking Number of Courier Service Companies 2015-2019

Peringkat	Nama Perusahaan				
	2015	2016	2017	2018	2019
1	JNE	JNE	JNE	JNE	JNE
2	Tiki	Tiki	Tiki	J&T	J&T
3	Pos Indonesia	Pos Indonesia	Pos Indonesia	Tiki	Tiki
4	DHL	DHL	DHL	Pos Indonesia	Pos Indonesia
5				DHL	DHL

Source : Secondary Data, topbrand- award.com, 2020)

In table 1, it can be seen that the position of Pos Indonesia has never been in the first position. It can also be seen that in 2018 when J&T came in, J&T immediately took second place and the position of Tiki, Pos Indonesia and DHL declined due to the entry of J&T.

Initial observation to PT. Pos Indonesia Cibinong branch office obtained information about customer complaints for the period of July 2019-June 2020 which showed that there were 70% of customers complaining about untimely delivery and also obtained the number of customers at PT. Pos Indonesia Cibinong branch office which shows that there is a significant decrease in the number of customers. The following is related data:

Table 2. Customer data of PT. Pos Indonesia Cibinong branch office

Year	Number of Customers
2017	22.674
2018	19.287
2019	13.712

Source : Skunder Data, PT. Pos Indonesia Cibinong branch office, 2020)

Table 2 shows that the number of customers who use the Indonesian Post service as a courier service for sending packages and goods, especially the Cibinong branch office, continues to decrease.

The number of companies engaged in the logistics delivery service industry in Indonesia today, makes some consumers turn to other similar service providers. This condition made the author to conduct a research entitled "Analysis of Service Quality on the Decision to Use Package Delivery Services of PT. Pos Indonesia (Case Study on PT. Pos Indonesia Cibinong Branch Office)".

Problem Formulation

Based on the research background that has been described above, the basis of this research problem is:
1. How is the quality of service at PT. Pos Indonesia Cibinong branch office.
2. How is the decision to use package delivery services made by customers of PT. Pos Indonesia Cibinong branch office.

Research Objectives

The purpose of this research in order to prepare a thesis is to find out:
1. To analyze the quality of service at PT. Pos Indonesia Cibinong branch office.
2. To analyze the decision to use package delivery services made by customers of PT. Pos Indonesia Cibinong branch office.

2. Research Method

Type of Research

This study uses an exploratory descriptive type of research. This study aims to collect data and comprehensively describe a situation regarding service quality to the decision to use PT. Pos Indonesia, especially the Cibinong branch office.

Research Object

The object of the study is service quality as an independent variable used while the decision to use is a dependent variable.

Types and Data Sources

The types of data used in this study are qualitative data sourced from primary data and quantitative data sourced from secondary data.

Sample Withdrawal Method

This study uses a nonprobability sampling method with an accidental sampling method that is a sample determination based on chance, that is, anyone who happens to meet the researcher can be used as a sample. The number of population in this study is the number of customers in 2019 who use package delivery services at PT. Pos Indonesia Cibinong branch office is 13,712 customers. To find out the number of samples, the Slovin formula is used, namely:

$$n = \frac{N}{1+N\,(e)^2}$$

$$n = \frac{13.712}{1+13.712\,(0,1)^2}$$

$$n = 99,27$$

(rounded up to 100 respondents)
Where:
n= Number of samples
N = Number of population
e = Error limit in sampling 10%

Test Instrument

Validity Test

To find out the level of validity of the research instrument, it is necessary to conduct a trial first and then the results can be analyzed. According to Ghozali (2016) states that validity tests are used to measure validity or validity if the questions on the questionnaire are able to reveal something that will be measured by the questionnaire. To test the validity level of an instrument, the researcher uses the product correlation formula. With the following formula:

$$r_{xy} = \frac{N(\Sigma xy) - (\Sigma x).(\Sigma y)}{\sqrt{(N.\Sigma x^2 - (\Sigma x)^2(N.\Sigma y^2 - (\Sigma y)^2)}}$$

RXY = Correlation coefficient between variable X and variable Y

Σxy = The sum of the multiplication between variables X and Y

Σx2 = Sum of variable values X

Σy2 = Sum of variable values Y

(Σx)2 = Sum of X values then squared

(Σy)2 = Sum of Y values then squared

N = Number of Sample Decision Rules:

If r counts > r table means valid, and vice versa if r counts < r table means invalid

Table 3. Test the Validity of Service Quality Variables and Usage Decisions

Item Question	r count	r table	information
Quality of Service (X)			
kehandalan *(Reliability)*			
P1	0,807	0,306	Valid
P2	0,712	0,306	Valid
P3	0,866	0,306	Valid
Responsiveness			
P1	0,751	0,306	Valid
P2	0,806	0,306	Valid
P3	0,721	0,306	Valid
Jaminan *(Assurance)*			
P1	0,906	0,306	Valid
P2	0,797	0,306	Valid
P3	0,709	0,306	Valid
Empathy			
P1	0,517	0,306	Valid
P2	0,586	0,306	Valid
P3	0,842	0,306	Valid
Physical Evidence *(Tangibles)*			
P1	0,485	0,306	Valid
P2	0,612	0,306	Valid
P3	0,709	0,306	Valid
Usage Decision (Y)			
Product Options			
P1	0,684	0,306	Valid
P2	0,711	0,306	Valid

P3	0,740	0,306	Valid
Brand Choice			
P1	0,816	0,306	Valid
P2	0,796	0,306	Valid
Distributor Options			
P1	0,713	0,306	Valid
P2	0,851	0,306	Valid
Purchase Time			
P1	0,707	0,306	Valid
P2	0,844	0,306	Valid
Purchase Amount			
P1	0,719	0,306	Valid
P2	0,832	0,306	Valid
Payment Methods			
P1	0,828	0,306	Valid
P2	0,733	0,306	Valid

Source : Primary data processed by researchers, 2021

Based on the above results, it can be seen that the statements for the service quality variables and the decision to use have a valid status, because the value of the calculation > r table. So that the statement item can be used in the next analysis.

Reliability Test

According to Ghozali (2016), the reliability test is a tool to measure a questionnaire which is an indicator of a variable. A questionnaire is said to be reliable or reliable if the answers to the questions are consistent or stable over time. To test the reliability of this study, the researcher used Cronbach's alpha formula analysis technique, this alpha formula is used for alternative answers that are more than two formulas as follows:

$$r_{ii} = \frac{k}{(k-1)}\left(1 - \frac{\Sigma\sigma b^2}{\sigma t^2}\right)$$

Information:
rii   = Instrument reliability coefficient
K   = Number of instrument items
Σσb2   = Varians butir
F2   = Varians total

In the research questionnaire, a variable is said to be reliable if it has a cronbach alpha > 0.6. In this study, before the researcher distributed a questionnaire of 100

respondents, the researcher distributed an initial questionnaire of 30 respondents to look for cronbach alpha > 0.6.

Table 4. Reliability Test

Variable	Alpha Cronback	Information
Quality of Service	0,934	Reliable
Usage Decision	0,940	Reliable

Source : Primary data processed by researchers, 2021

Based on the results of the reliability test above, it can be seen that the service quality variable is 0.934 and the variabe of the decision to use is 0.940, then it can be said that both variables have a reliable status or meet the requirements, because the alpha cranback value > 0.6.

Descriptive Analysis Data Analysis Method

In this study, the researcher uses a descriptive analysis of independent and dependent variables which will then be grouped based on the same answer, then the results will be presented in the form of a frequency distribution table and the total responses of the respondents are searched with the formula:

Total respondent responses

$$= \frac{Skor\ Total\ Jawaban\ Responden}{Skor\ Tertinggi\ Tanggapan\ Responden} \times 100\%$$

Information:
a. The actual score is the answer score obtained from all respondents on the questionnaire that has been submitted.
b. The ideal score is the maximum score or the highest score that may be obtained if all respondents vote with a high score.

Analysis with Tabulation

In this study, the researcher used simple tabulation where the data obtained was processed into a percentage form.

3. Results

Table 5. Service quality tabulation

It	Indicator	Respondent's Response	Installment per indikator (%)
1	Accuracy of actions taken in dealing with problems	9,6	
2	Delivery timeliness	70,2	77,13
3	Wide range	81,6	
4	Speed of handling complaints	76,8	
5	Willingness employee Offer help	73,2	76,20
6	Speed in providing information	78,6	
7	Provides a guarantee for loss and damage to goods	82,0	
8	Providing certainty of delivery time for customers	70,8	77,80
9	Guarantee security Shipped goods	80,6	
10	Providing hospitality regardless of social status	82,2	
11	Politeness and courtesy of employees in serving	83,6	81,60
12	Willingness to listen to customer complaints	79,0	
13	Strategic location so that you can reach	81,8	
14	Clean and comfortable waiting room	79,0	80,47
15	Have a website that makes it easier for customers	80,6	

Source : Primary data processed by researchers, 2021

Based on the results of the above study, it shows that the average respondent's response to the service quality variable has a value of 78.64, the value is included in the good category, which means that this condition illustrates that in general, the quality of service at PT. Pos Indonesia Cibinong branch office has been good and satisfactory. However, for the response of the respondent regarding the delivery timeliness indicator, it is still considered not good because it produces 70.2 and is also followed by the indicator regarding the certainty of delivery time for customers which

produces 70.8 when compared to other indicators, both indicators are considered small and are still said to be lacking.

Table 6. Tabulation of Usage Decisions

No	Indicator	Respondent's Response	Installment per indikator
1	Choosing products or services based on the speed and responsiveness of employees in providing services	78,2	76,47
2	Choosing a product or service based on a wide area coverage.	79,0	
3	Choosing products or services based on the timeliness given.	72,2	
4	Choosing a product or service based on brand trust	79,2	77,10
5	Choosing a product or service based on brand reputation	75,0	
6	Choosing a distributor based on the location of the destination	82,6	80,10
7	Choosing a distributor based on ease of access to information	77,6	
8	Choosing products or services based on the speed of handling employees in the purchasing process.	77,8	77,00
9	Deciding to buy based on a friendly and polite service process.	76,2	
10	Sum Purchase based on Number of Essentials	78,4	74,70
11	The number of purchases based on the given promotion	71	
12	Choose a payment method based on convenience	80,4	76,50
13	Choose a payment method based on the certainty provided by the employee.	72,6	
Average		76,97	

Source : Primary data processed by researchers, 2021

Based on the results of the above study, it shows that the average respondent's response to the use decision variable has a value of 76.97, the value is included in the good category, which means that this condition illustrates in general that the respondents are satisfied with using package delivery services at PT. Pos Indonesia Cibinong branch office. However, it can be seen that 82.6 customers choose PT. Pos Indonesia Cibinong branch office because of its easy-to-reach location and for the selection of services because the delivery time shows the number 72.2 which means that customers choose package delivery services at PT. Pos Indonesia Cibinong branch office is not because of the reliability in the delivery time of the package.

4. Discussion

The results of the analysis explained that the quality of service provided by PT. Pos Indonesia Cibinong branch office is currently considered good and satisfactory by the majority of respondents. This is supported by the results seen in the service quality tabulation table which produces the largest number regarding providing hospitality regardless of social status, courtesy in serving and strategic location so that it is easy to reach. The results regarding providing hospitality and manners are in line with the research conducted by Perdana and Hidayat (2019) which shows that politeness and attention to consumers will be considered in consumer use decisions, then for the results regarding strategic locations are also in line with the research of Nurlina, Milasari and Rosa (2019) which shows that strategic locations (locations here refer to the sub-dimension of physical evidence of quality variables service) has a significant influence on the decision to use, it can be interpreted that a strategic location is able to make customers choose a service.

5. Conclusions and Suggestions

Conclusion

Based on the results of research that has been carried out by researchers regarding the analysis of service quality on the decision to use PT. Pos Indonesia (Case Study on PT. Pos Indonesia Cibinong Branch Office), then it can be concluded that several things are for the quality of service provided by PT. Pos Indonesia Cibinong branch office is considered good for customers, but for the timeliness of the package delivery carried out is still felt to be lacking because for this statement it shows a result of 70.20%, indeed the result is still in the good category but when compared to other statements the result is still below other statements. This is in line with the statement in figure 1.2 which shows that there are many complaints of untimely delivery felt by consumers.

The customer decided to use a package delivery service at PT. Pos Indonesia Cibinong branch office because of its easy-to-reach location and also easy access to information about packages through the website provided by PT. Pos Indonesia Cibinong branch office. Because indeed PT. Pos Indonesia Cibinong branch office is located near the local government (local government) so that it makes it easier for customers if they want to send their packages at the same time as managing documents at the local government and for easy access to the package through the website, it can be for packages that will be exported abroad and imported from abroad are always updated compared to similar package delivery services.

Analysis from the quality of service to the decision to use PT. Pos Indonesia Cibinong branch office, it can be seen that respondents choose to use package delivery services at PT. Pos Indonesia Cibinong branch office because of the sub-dimension of

service quality, namely physical evidence, is said to be so because this is in line with the results of the study which showed that respondents chose because of the location and ease of accessing package information with the definition of physical evidence related to the attractiveness of physical facilities and company equipment.

Suggestion

Based on the results of the analysis that has been carried out, the researcher provides suggestions that can be done by PT. Pos Indonesia Cibinong branch office in order to improve its services:

1. Because there are more and more competitors in the same logistics service business, PT. Pos Indonesia Cibinong branch office must further improve the service provided by customers, especially for reliability in providing services in the form of handling complaints and also speed and accuracy in sending packages by increasing the number of customer service and providing training to its employees so that the services provided are more optimal.

2. It is hoped that PT. Pos Indonesia Cibinong branch office provides services and offers that can make customers feel satisfied so they still decide to use package delivery services at PT. Pos Indonesia Cibinong branch office, such as increasing the number of courier postal agents to minimize delivery delays experienced by consumers, and also providing offers and even guarantees that can ease consumer anger if they experience delays in delivery and package damage.

For the next researcher, it is hoped that the research object can be further expanded in order to obtain more complete information about the quality of services that can affect the decision to use services.

6. References

Firmansyah, M Anang. (2018). Perilaku Konsumen (Sikap dan Pemasaran). Yogyakarta: Penerbit DEEPUBLISH.

Ghozali, Imam. (2016). Aplikasi Multivariete Dengan Program IBM SPSS 23. (Edisi 8). Cetakan ke VIII. Semarang: Badan Penerbit Universitas Diponegoro

Kotler, Philip and Gary Amstrong. (2015). Principles of Marketing. (15e Global Edition). Pearson.

Kotler, Philip and Kevin Lane Keller. (2016). Marketing Management. (15e Global Edition.) Pearson.

Sugiyono. (2017). Metode Penelitian Bisnis. Bandung : Alfabeta.

Tjiptono, Fandy, dan Gregorius Chandra. (2019). Service, Quality & Customer Satisfaction. (Edisi lima). Yogyakarta : Penerbit ANDI

Trisliatanto, Agung, Dimas. (2019). Metodologi Penelitian (Panduan Lengkap Penelitian dengan Mudah). Surabaya: Penerbit ANDI

Prabowo, Widyantoro, Yudha, Apriatni, dan Prabawani, Bulan (2015), Pengaruh Citra Perusahaan dan Kualitas Pelayanan Terhadap Keputusan Penggunaan Jasa Pengiriman Paket PT. Pos Indonesia (Studi Pada Kantor Pos Johar Kota Semarang). Jurnal Ilmiah Mahasiswa Universitas Diponegoro (Administrasi Bisnis). Tersedia di : https://ejournal3.undip.ac.id/index.php/ijab/article/view/8329 (Diakses pada 03 September 2020)

Rohman, Altofu dan H, Andhita, Aglis (2017). Analisis Pengaruh Citra Merek dan Kualitas Layanan Terhadap Keputusan Pengguna Jasa Pengiriman (Studi Kasus pada Pengguna jasa JNE Express Across Nations cabang Nganjuk). Jurnal Ilmiah Mahasiswa Universitas PGRI Madiun. Vol.1. Tersedia di : https://e-journal.unipma.ac.id/index.php/capital/article/view/2133 (Diakses pada 05 November 2020)

Wahyuni, Dwi (2018). Analisis Pengaruh Kualitas Pelayanan, Citra Perusahaan dan World Of Mouth Terhadap Keputusan Penggunaan Jasa (Studi pada Pengguna JNE di Kebumen). Jurnal Ilmiah Mahasiswa Manajemen STIE Putra Bangsa Kebumen. Tersedia di : https://lib.stiebangsa.ac.id/repository/1455016 67.pdf (Diakses pada 05 November 2020)

Indah, Milasari, Nurlina (2019). Pengaruh Kualitas Pelayanan, Harga dan Lokasi Terhadap Keputusan Penggunaan Jasa Pengiriman Barang PT. Citra Van Titipan

Kilat Kota Langsa. Jurnal Samudra Ekonomika. Vol.3, No.1. Tersedia di : https://www.ejurnalunsam.id/index.php/jse/article/view/1292 (Diakses pada 09 September 2020)

Perdana, Ferdy Irawan dan Imam Hidayat (2019). Pengaruh Kualitas Pelayanan, Harga, dan Lokasi Terhadap Keputusan Penggunaan Jasa PT. Pos Indonesia Surabaya. Jurnal Ilmu dan Riset Manajemen. Vol.8, No.7. Tersedia di https://jurnalmahasiswa.stiesia.ac.id/index.php/jirm/article/view/2313 (Diakses pada 03 September 2020)

Wahyuni, Retno Candra dan Handojo Djoko Waloejo. (2020). Pengaruh Kualitas Pela- yanan, Harga, dan Citra Perusahaan Terhadap Keputusan Penggunaan Jasa PT. Pos Indone- sia (PERSERO) Kantor Semarang. Jurnal Ilmu Administrasi Bisnis. Tersedia di : https://ejournal3.undip.ac.id/index.php/jiab/article/view/26438 (Diakses pada 18 Desember 2020)