

The Effect of E-Tracking, Logistics Service Quality and Complaint Handling on Customer Satisfaction (Case Study at JNE EXPRESS)

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Abstract: This study aims to determine and analyse the effect of E-Tracking, logistics service quality, and customer complaint handling, so as to see how satisfied customers are. This research uses a quantitative descriptive method by distributing questionnaires to respondents. The data taken were 100 respondents. This research uses the Partial Least Square (PLS) Structural Equation Model (SEM) path analysis method using SmartPLS software. Based on the results of the study, it can be concluded that E-Tracking, Logistics Service Quality and Complaint Handling have a great influence on Customer Satisfaction of JNE Express service users. However, it is not so significant because there is still complaint handling to improve and create trust in customers.

Keywords: *E-Tracking, logistics service quality, complaint handling, customer satisfaction*

1. Introduction

The Industrial Revolution 4.0 occurs through basic technological advances, the impact of physical and digital activities will be greater. According to Savitri and Astrid (2019), the true industrial revolution is a major change in the industrial field that can change our lives, work, and the way we do business. Companies must face or adapt to current technological advancements. Online commerce is usually called e-commerce. In the midst of the current pandemic, many people are using e-commerce. This is because almost anything can be done in the modern era, so most of the product delivery partners are none other than companies that sell products over the internet.

PT Tiki Lintas Nugraha Ekakurir, also known as JNE Express, is a company that handles and operates goods in Indonesia with its headquarters in West Jakarta. The company has a setting and hauling zone that includes more than 83 cities, more than 8,000 transaction points, more than 11,000 fleets, and more than 50,000 employees. The notoriety of JNE EXPRESS started to rise as a moving company in Indonesia in the mid-2000s, in line with the developing internet shift for online exchanges and buying and offering exchanges on stages like Kaskus and Duplicate commercial centre. JNE's specialist conveyance that is simple to discover in major cities and operating hours with 24-hour benefit made JNE famous among online trading individuals.

(Kotler, P., & Keller, 2019) state that electronic-based service quality has a positive impact on customer satisfaction. E-based service quality includes company efforts to meet customer needs and wants and determine the right delivery method through electronic media to meet customer satisfaction. According to Shin et al customer satisfaction in the shipping service industry can be shaped by several factors including: service quality, tracking system technology and the price offered. A service is also applied to courier services (logistics delivery) with the concept of logistics service quality. (Thai, 2014) 'Customer perceptions of logistics service quality are derived from a series of interactions in the interface process with logistics service providers'.

Customer satisfaction varies from customer to customer and is influenced by the comparison between perceived and expected services, and the customer's short-term emotional response to specific service performance. Satisfaction itself is influenced by two factors: trust and discomfort. The previous study was conducted by (HARIYANI & YUDI RAFANI, n.d.) entitled

Analysis of the impact of delivery timeliness factors and customer trust on customer satisfaction (PT Lintas Nugraha Erakurir (JNE) in Pangkalpinang Case Study).

2. Literature review

E-Tracking

According to (Fihartini et al., 2017), an online tracking system is a company system that focuses on the logistics business designed by companies to make it easier for customers to find out information about their goods while they are still in the process of being delivered by writing down the receipt number. According to (Sibero, 2013), the Web is a document system that is used as a medium to display text, images, multimedia, and other elements on the internet network. The tracking system, according to Sukisno and Yuni (2017), is intended to ensure that all processes run correctly so that accurate information can be obtained.

Logistics Service Quality

Service quality is defined as the level of excellence expected and the control of this excellence to fulfil customer desires, according to Wickof in Tjiptono (2007). According to (Japariato & Edwin, 2018) the quality of service logistics is a type of company that acts by optimising the network of goods and services to meet the needs and desires of consumer goods and services. However parassuraman, (Lupiyoadi, 2001) that service quality can be defined as how far the difference between what actually happens and what customers expect about the service they receive. Service quality has been a major topic in marketing and logistics research since the mid-1980s. Management quality, business satisfaction, and service quality are in line (K. Saura, 2008)

Complaint Handling

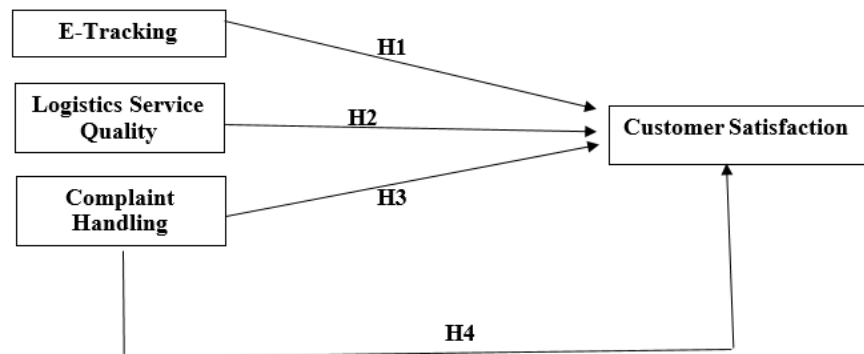
According to (Tjiptono, 2014) complaint handling is a method in which customers can convey their wishes through suggestions, criticism, and complaints. This allows suppliers to mitigate the negative impact of actual or possible complaints (Dwyer, F. R., & Tanner, 1999) Suppliers' ability to handle complaints includes preventing possible complaints, resolving complaints before they arise, and conducting open discussion and problem resolution (Kwon & Suh, 2006; Dubisi, 2005).

Customer Satisfaction

According to (Irawan, 2015)satisfaction is when products and services can meet customer needs. Customer satisfaction is the condition that customers feel about a product that meets their needs, desires, and expectations (Sudaryono, 2016) Customer satisfaction is the result of consumer judgment whether a product or service provides different levels of enjoyment. According to Tjiptono (2014) "the attributes that form satisfaction consist of: 1. Suitability of expectations 2. Interest in revisiting 3. Willingness to recommend".

Of the four variables above, E-Tracking, Logistics Service Quality, and Customer Handling which can have a good effect on JNE EXPRESS will affect and increase customer satisfaction in using JNE EXPRESS services. With this, more and more people are choosing JNE EXPRESS services in the world of expeditions.

3. Research Framework and Hypothesis



Hypothesis

H1 : E-Tracking has an effect but not directly on customer satisfaction.

H2 : The quality of logistics services affects customer satisfaction of JNE Express service users.

H3 : Complaint handling directly affects customer satisfaction of JNE Express service users.

H4: E-Tracking, Logistics service quality and complaint handling simultaneously affect customer satisfaction of JNE Express service users.

4. Research Methods

No.	Approach	Description
1.	Quantitative	The type of research used in this study is descriptive research with a quantitative approach method.
2.	Analysis Tool	The technique used in this research is purposive sampling technique. This study uses the entire population of people who have used JNE EXPRESS services. The purposive sampling method was used to collect data through a questionnaire via Google Form, and a Likert scale of 1-5 was used to obtain responses consisting of 22 indicators from 4 variables. The sample collected was 100 respondents with the criteria of having used JNE EXPRESS more than twice, aged 17 - 50 years, and domiciled in Jabodetabek.
3.	Variable Measurement	Some of the variables used in this study include independent variables, namely E-Tracking, Quality of logistics services and handling customers, and involve the dependent variable, namely Customer satisfaction. The instruments in this study were measured using a Likert scale consisting of 5 points including (1) Strongly Disagree, (2) Disagree, (3) Neutral, (4) Agree, (5) Strongly Agree. The software uses SmartPLS-4, and the data is analysed using SEM-PLS (Structural Equation Modeling Partial Least Squares) technique.

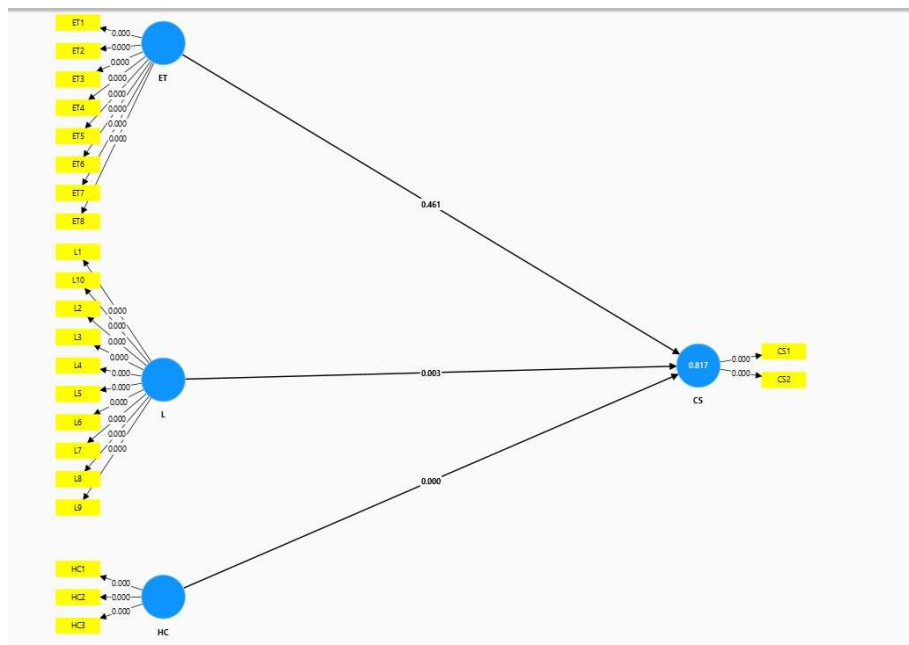
5. Results and discussion

Respondent Profile

Researchers involved 100 respondents with the following conditions consumers aged over 17-18 years 18 respondents (18.1%), age 21-25 years 60 respondents (60.6%), age 26-35 years 13 respondents (12.9%), age 36 years and over 9 respondents (9.4%) who have used JNE Express at least 2 times. Based on gender, female data totalled 57 (57.1%) and male data totalled 43 (43.9%). Data shows that JNE Express is more widely used by women because JNE Express collaborates with e-commerce to provide special promotions or free shipping, which is attractive to female buyers who often buy fashion and skincare products that suit women's needs. Meanwhile, Anteraja's delivery service offers a variety of features and benefits to suit men's needs, making it a popular choice.

Therefore, the data can be concluded that with so many JNE Express users and users will use shopee JNE Express as their delivery service. Based on domicile, Jakarta as many as 100 respondents (100%), Because of the Jakarta domicile data, more people use JNE Express as a delivery service than the Bogor, Depok, Tangerang and Bekasi areas. Because more sellers come from Jakarta, buyers will look for more shops in the Jakarta area, so that shipping for postage costs is more economical. Based on occupation, students and college students totalled 53% of respondents (53.2%), private employees totalled 30 respondents (30.4%), and others totalled 17 respondents (16.4%). Based on occupational data, students use JNE Express more often, making it a popular choice among students to fulfil their shipping needs. This is due to the many features that appeal to women, such as free shipping and cash on demand (COD) as a payment method. JNE Express also offers a wide selection of delivery services, including regular, express, and same-day delivery, providing flexibility to suit the delivery needs of women. as students and college students are less likely to have access to credit cards or online payment methods, compared to employees, and others.

Validity and Reliability



The validity test results in the figure above show that the loading factor value of each dimension has a loading factor value > 0.70 (Hair et al., 2019) so it can be concluded that it meets the criteria for convergent validity.

Table 1
Validity Test.

Variable	E-Tracking (X1)	Logistics Service Quality (X2)	Complaint Handling (X3)	Customer Satisfaction (Y)	Result
X1.1	0.801				Valid
X1.2	0.824				Valid
X1.3	0.796				Valid
X1.4	0.796				Valid
X1.5	0.798				Valid
X1.6	0.776				Valid
X1.7	0.869				Valid
X1.8	0.871				Valid
X2.2		0.741			Valid
X2.2		0.836			Valid
X2.3		0.863			Valid
X2.4		0.855			Valid
X2.5		0.846			Valid
X2.6		0.873			Valid
X2.7		0.812			Valid
X2.8		0.841			Valid
X2.9		0.908			Valid
X2.10		0.927			Valid
X3.1			0.927		Valid
X3.2			0.931		Valid
X3.3			0.944		Valid
Y1				0.947	Valid
Y2				0.947	Valid

Reliability test

Reliability test is a test conducted to determine whether the variable can be trusted or reliable.

Table 2

Reality Indicator			
Variable	Composite Realibility	Cronbach' s Alpha	Result
E-Tracking	0.946	0.886	Reliable
Logistics Service Quality	0.958	0.950	Reliable
Complaint Handling	0.954	0.927	Reliable
Customers Satisfaction	0.963	0.958	Reliable

Source : Processed Data (SmartPLS 4.0) 2024

Based on the results of the validity and reliability tests, all indicators used in this study are valid, with the results of the load factor > 0.5. All variables in this trial are reliable by obtaining Cronbach alpha > 0.70 and Ave > 0.5.

Suitability Test

Table 3

R Square.

Variable	R square	R square adjusted	Result
Customer Satisfaction	0,817	0,811	Strong

Hypothesis Test

Table 4

Path coefficients and T-values.

Path	Original Sample (O)	T Statistics	P Values	Result
ET > CS	-0,076	0,738	0,461	Not Significant
CH > CS	0,638	7,975	0,000	Significant
L > CS	0,374	2,990	0,003	Significant

Table 3, R Square (0.817) means that 81.7% of the variation in Customer Satisfaction can be explained by the model I used, which may involve some independent variables such as E-Tracking, Logistics Service Quality, and Customer Handling. The Adjusted R Square (0.811) is slightly lower than the R Square because it adjusts for the number of independent variables in the model and the sample size. This indicates that about 81.1% of the variability in Customer Satisfaction is still well explained by the model, even after adjustment. Results: With high R Square and Adjusted R Square values (above 0.8), these results indicate a strong relationship between the independent variables and Customer Satisfaction.

T-statistic obtained is more significant than the T-table value, the hypothesis is accepted. Based on Table 4, the following details can be provided to test the research hypothesis:

Based on the table above, Logistics Service Quality has an effect on customer satisfaction which is shown by the calculation of $2,290 > 1.97$. This shows that Logistics Service Quality has a direct influence on customer satisfaction as measured by a correlation coefficient of 0.374. Handling Customer had a positive effect on the purchase decision with a T count of $7,975 > 1.97$ and with an original sample of 0,638. However, the E-Tracking value on the Customer Satisfaction coefficient is -0.076 with a count of $0.738 > 1.97$, meaning that E-Tracking has an effect but not directly on customer satisfaction.

6. Discussion

Impact of E-Tracking on Customer Satisfaction

The results showed that the online tracking system, especially in the question item section, had an influence on customer satisfaction, but was not very significant to customer satisfaction because the questionnaire result data did not meet the screening criteria. This shows that every customer will be satisfied if the tracking system is online, especially with the web view that is considered appropriate, and saves on the entry quota. This research supports the research of Septiani (2019) and Eviani & Hidayat (2021).

Impact of Logistics Service Quality on Customer Satisfaction

According to this research, service quality can increase customer satisfaction if the service is fast, which means customers do not have to wait long to receive their complaints and make them feel satisfied; conversely, if the service takes time, customers will be less (Cesariana, C., Juliansyah, F., & Fitriyani, n.d.)

Impact of Complaint Handling on Customer Satisfaction

Companies that handle complaints fairly can turn complaining customers into loyal customers. This fosters the customer's trust and commitment to the company, and ultimately the customer will become loyal to the company. Grievance handling aims to make dissatisfied customers into loyal customers. Apart from increasing satisfaction, handling complaints also increases loyalty. Complaints provide an opportunity to create and strengthen relationships (Mustaghfiroh, 2016)

Conclusion

The results showed that there are 3 factors that affect customer satisfaction: E-Tracking, Logistic Service Quality, and Handling customers. In this study there is an influence, but not directly, namely on E-Tracking. JNE EXPRESS service users feel that E-Tracking is not very influential if they use Handling Customer. Handling Customer, customers feel enough to get the right solution for customers.

7. Implications

Increased customer satisfaction can be achieved through the use of E-Tracking, improved logistics service quality, and enhanced customer care services. In providing transparency, efficiency, and responsive customer handling, these three elements are interconnected, which contributes to JNE EXPRESS customer satisfaction.

8. Research Limitation

This research was conducted in approximately 3 months, so we were unable to disseminate this research more widely due to the short time. This research method uses quantitative methods. This research was conducted at a logistics service company. This study only uses data from respondents who have used JNE EXPRESS delivery services. So that further research is needed, it can be done using the mix method method so that the data is stronger and the data collection is more extensive.

Referensi

- Cesariana, C., Juliansyah, F., & Fitriyani, R. (n.d.). No Title. *Model Keputusan Pembelian Melalui Kepuasan Konsumen Pada Marketplace: Kualitas Produk Dan Kualitas Pelayanan (Literature Review Manajemen Pemasaran)*. *Jurnal Manajemen Pendidikan Dan Ilmu Sosial*, 3(1), 211–224., 2022, 3(1), 211–224.
- Dwyer, F. R., & Tanner, J. F. (1999). No Title. *Business Marketing: Connecting Strategy*,

Relationships, and Learning.

Fihartini, Yuniarti, & Kabul Prasetyo. (2017). Pengaruh Dimensi Kualitas Layanan Sistem Pelacakan On-Line (Web Trace And Tracking) Terhadap Kepuasan Konsumen,. *Jurnal Bisnis Dan Manajemen*, 13.

HARIYANI, & YUDI RAFANI, A. (n.d.). *Analisis Pengaruh Faktor Ketepatan Waktu Pengiriman Barang Dan Kepercayaan Pelanggan Terhadap Kepuasan Pelanggan (Studi Kasus Pada PT Jalur Nugraha Ekakurir (JNE) Pangkalpinang)*. 17(2), 49–61.

Irawan, H. (2015). No Title. “10 Prinsip Kepuasan Pelanggan, Jakarta: Elex Media Kompuindo Gramedia, 2009 Ikatan Akuntan Indonesia.” *Pernyataan Standar Akuntansi Keuangan. Jakarta: IAI*.

Japarianto, & Edwin. (2018). Pengaruh Logistics Service Quality Terhadap Customer Retention Dengan Customer Satisfaction Sebagai Variabel Intervening Pada Industri Ekspedisi Laut Di Surabaya. *Jurnal Manajemen Pemasaran*, 12.

K. Saura, e. a. (2008). No Title. *Logistics Service Quality: A New Way to Loyalty. Industrial Management & Data Systems*, 108, No. 5, pp.650– 668.

Kotler, P., & Keller, K. L. (2019). *Marketing Management 14e. Pearson Education Limited. In Pearson*.

Lupiyoadi, R. (2001). *Manajemen pemasaran jasa: teori dan praktek. Manajemen Pemasaran*.

Mustaghfiroh, F. (2016). No Title. *Analisis Pengaruh Kualitas Layanan, Penanganan Keluhan, Nilai Nasabah Terhadap Kepuasan Nasabah Dan Word Of Mouth (Studi Kasus PT Bank Pembangunan Daerah Jawa*.

Sibero, A. (2013). No Titl. *Web Programming Power Pack. Yogyakarta: MediaKom*.

Sudaryono. (2016). No Title. *Manajemen Pemasaran Teori Dan Implementasi. Andi Offset*.

Thai, V. (2014). *Logistics Service Quality : Conceptual Model and Empirical Evidence . I. International Journal of Logistics*, 1–13.