

The Effect of Service Quality on Customer Satisfaction of An Indonesian E-commerce Website

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Abstract: - A tech company based in Indonesia, aims to create online economic equality. A Super Ecosystem where anyone can start anything and learn anything is what our subject of research, Tokopedia, wants to build. The purpose of this study was to determine how customer satisfaction with Tokopedia is impacted by service quality. One of the analytical techniques utilized in the quantitative research methodology is a simple linear regression test. 100 participants made up the research sample, which used non-probability sampling. The results show that the significant value of the t test is 0.000, which is less than 0.05. The conclusion drawn is that service quality affects customer happiness

Key-Words: - e-business; systems; Indonesia, Customer Satisfaction, Service Quality, e-commerce

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1 Introduction

Online shopping through digital platforms has increased as a result of the pandemic-related changes in consumer behavior as well as the rapid development of e-commerce. According to the Indonesian E-Commerce Association (idEA), e-commerce would rise in Indonesia by more than 40% in 2021. Men will account for 63% of all consumers who purchase online in 2021. More than 70% of them are Millennials and members of Generation Z who are 35 years old or younger [1].

The quantity and value of e-commerce transactions will continue to focus on Tier 1 cities or cities with a gross regional product (GDP) of at least \$1 trillion each year until 2021. These cities have 59% and 64% more and more expensive e-commerce transactions, respectively [2]. On the island of Java, these major cities can be found in areas with a high internet penetration rate, improved digital infrastructure, and higher population average incomes. The fact that internet users in Java and Sumatra are still evolving makes this situation not all that different from the previous year [3].

According to data from the Internet Service Providers Association (APJII), Java will continue to have the majority of internet users (56.4%) and Sumatra will have the least (22.1%) in Q1–Q2 2020. Additionally, the Java (77%) and Sumatra (18%) regions receive the majority of e-commerce shipments, according to the 2021 Central Statistics Agency (BPS) data. It's interesting to note that since 2020, e-commerce activity in tier 2 cities has grown

both in volume and value. Transaction volume climbed from 31% to 34%, while transaction value increased from 28% to 30%. The government's initiatives to improve infrastructure fairness, including supply chains and digital infrastructure, are also contributing to the rise in e-commerce transactions in lower-tier cities (Gusfei & Pradana, 2022). Due to this equity, residents of medium-sized and smaller cities have the capacity to engage in new online purchases. Due to the disparities in development between the cities, it is difficult for e-commerce to reach more local consumers [3].

The goal of Indonesian tech business Tokopedia is to establish economic equality online. The goal of Tokopedia is to create a Super Ecosystem where anyone can start and learn about anything [5]. Through digital marketplaces and products, finance and payments, logistics and fulfillment, as well as Tokopedia Partners, Tokopedia is currently mowing down millions of vendors and users. The largest digital ecosystem in Indonesia, the GoTo group includes Gojek, Tokopedia, and GoTo Financial.

2 Literature Review

Marketing is one of the essential duties that organizations must accomplish in order to increase sales and maintain themselves. To maintain the seamless functioning of the business, companies must merge operations and harness their expertise in addition to marketing initiatives. In this case, it's crucial to comprehend a few marketing definitions.

Through the creation, presentation, and exchange of valuable goods with other parties, marketing is a social and managerial process in which people and groups fulfill their needs and desires [4]. "A entire system of commercial activities aimed to plan, decide pricing, advertise, and distribute want-satisfying goods and services to both existing and future consumers, as well as potential consumers" is how the marketing process includes organizing, deciding on prices, advertising, and providing goods and services that can meet the needs of both present and new clients [2].

2.1 E-commerce

According to [4], electronic commerce, usually referred to as e-commerce, is a commercial idea that enables people or firms to buy or sell goods through the internet (online). You may purchase practically everything on the internet, including almost all services and things, including food, music, books, household items, airline tickets, and investments [1]. As a result, the advancement of technologies for electronic commerce is seen as a disruption to the economy. There are many different ways to do e-commerce, including the internet, phone, and television. See also: Defining the Terms. Distributor and Dropship The promotion, distribution, sale, and acquisition of goods and services that rely on electronic systems like the internet, television, or other technological networks are collectively referred to as e-commerce [5].

2.2 Online store categories

Business to Business first (B2B)

This type of e-commerce is most common since it focuses specifically on business-to-business (B2B) transactions. Each B2B transaction often involves several product transactions.

Business to Consumer (B2C)

One of the newest e-commerce models is business-to-consumer, or B2C. We probably encounter these types of transaction the most frequently in daily life. Because producers employ a B2C strategy to sell and market their goods directly to consumers.

Customers to Customers (C2C)

Customers can offer and buy products from one another using the C2C concept. A trading system like this often requires a medium or container that can arrange things to make the buying, selling, and transaction operations easier.

Business to Consumer (C2B)

C2B is an idea that has an opposite relationship to B2C. Here, the buying and selling processes are used to conduct transactions between the consumer and the corporation.

Online-to-Offline 5 (O2O) (O2O)

This form of e-commerce typically conducts business both online and offline. Execution can be done offline even when the network is a component of an online system.

From Client to Administration (C2A)

The concepts of C2A and C2B are nearly identical. The discrepancy is explained by the sales objectives. With contrast to C2B, where the client sells his good or service to the business, in C2A the activity is offered to the government.

Public-to-Business Management (B2PA)

In this type of e-commerce, producers or enterprises offer and advertise their products and services to the government. Trades and buy/sell transactions are frequently conducted using tenders.

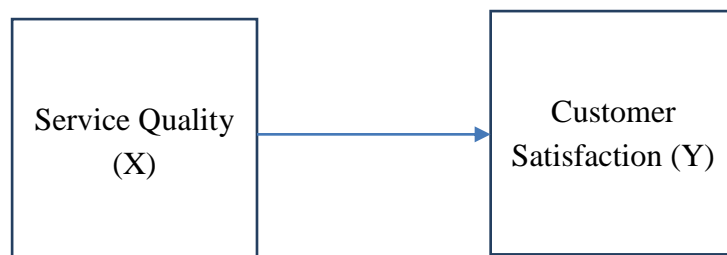


Figure 1: Research Framework

3 Methodology

According to [5], a researcher employs quantitative research approaches to provide data in the form of numbers in an effort to understand more. Simply said, quantitative research is scientific inquiry that is methodically arranged on components and to find causal relationships. The data obtained is used to conduct an information analysis.

3.1 Sample and Population

The population, according to [2], is a big category made up of things or subjects that have certain characteristics and numbers that have been formed

via research in order to be looked at and conclusions drawn. Users of Tokopedia are the study's subjects. According to [6], the sample accurately captures the characteristics and size of the population. The sample for the research consists of consumers who have made a purchase on Tokopedia during the past month. Because Tokopedia consumers made up the sample for this research, non-random sampling, or a method where the sample is not randomly picked, was used. Since the population size is unknown or unlimited and the findings need a minimum of 100 respondents who match the following criteria, the Lemeshow technique is utilized to calculate the number of samples in this research.

3.2 Data Collection Techniques

The main data utilized in this research was gathered from Tokopedia users who responded to questionnaires given to them using a Google form. The primary source of information for this research is the answers given in the questionnaire by the respondents. The replies include of both responses relating to the study variables, namely service quality and customer happiness, as well as personal information about the respondents.

3.3 Validity check

An instrument is considered to be valid when it shows that the measuring equipment used to gather data is accurate or can measure what needs to be measured [7]. This test assesses the validity of survey findings that demonstrate the scope of a measurement device. To meet the legal requirements, the rcount must be greater than the r table, or 0.195. The validity test for this research use the Pearson Product Moment Correlation method with the following conditions:

1. The statement item under examination is judged legitimate if r count exceeds r table.
2. The statement item under consideration is regarded invalid if r count r table.

3.4 Reliability Test

Reliability is the extent to which a measure consistently yields the same result across time and in different settings. It is considered dependable if the measuring tool yields measurements that are steady and constant [7]. the method (formula) of calculating the Cronbach's Alpha coefficient to assess the author's degree of reliability. The criteria

consider the questionnaire to be trustworthy if the Alpha Cronbach score is more than 0.7 [8].

3.5 Traditional Assumption Test

Graphical analysis and statistical tests may be used to assess whether or not the residuals are consistently distributed [9]. The rationale is as follows:

Analysis with Illustrations (Normal Probability Plot)
The histogram graph is one method for visually analyzing the residuals to assess their normality since it compares the actual data with distributions that are close to the normal distribution. However, the histogram alone might be misleading, particularly for samples with tiny numbers. A more realistic approach is to examine the normal probability plot, which compares the cumulative distribution of the normal distribution. The normal distribution will result in a single diagonal straight line. If the residual data distribution is normal, the line representing the actual data will follow the diagonal line.

Statistical Assessment (Kolmogorov-Smirnov test)
The normality test using a graph may be misleading if it is not visually correct and seems normal even if statistically it may be the reverse, thus the Kolmogorov-Smirnov (K-S) test is employed in combination with the test that was completed. The K-S test is conducted in the manner described below:

- H0: The distribution of residual data is appropriate.
Ha: Remaining data aren't spread out at random.
Normality testing is done by looking at Asymp. Sig (2-tailed). If the significance level is larger than 0.05, H0 is considered to be valid and the residual data is said to be regularly distributed.

A multicollinearity test determines if the independent or dependent variables are correlated using the multicollinearity test. According to Sugiyono (2018), a functional or causal link between one independent variable and one dependent variable is the foundation of simple regression. Below is the formula for simple linear regression:

$$Y' = a + b X$$

Y' = Predicted value
 a = Constant or if the price
 X=0
 b = Regression coefficient
 X = Independent variable value

3.7 Hypothesis Testing (t test)

- The t test, according to Ghozali (2018, 152) is used to determine the impact of each independent variable on the dependent variable. It may be inferred that the independent factors each significantly affect the dependent variable if $t_{count} > t_{table}$ or the t-test significance value is less than 0.05. The t test is performed as follows:
- Select the hypothesis that will be examined. The following claim is being tested: $H_0: I = 0$, indicating that there is no partly significant relationship between the independent and dependent variables. $H_1: I \neq 0$, then the independent variable's impact on the dependent variable is just marginally significant.
- Determine the significance level = α of 0.05

4 Discussion

According to [8], the normality test is used to verify whether or not the independent and dependent variables in a regression model have a regular distribution. The data distribution in a good regression model is normal or nearly normal, meaning it does not deviate to the left or right. (normal curve).

Table 1:

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		101
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	2.24086623
Most Extreme Differences	Absolute	.098
	Positive	.055
	Negative	-.098
Test Statistic		.098
Asymp. Sig. (2-tailed)		.019 ^c

a. Test distribution is Normal.
 b. Calculated from data.
 c. Lilliefors Significance Correction.

Based on the table above, it is known that the significance value is above 0.05, which is equal to 0.19, this means that it can be concluded that the value of the respondent's data is normally distributed.

Table 2: Multicollinearity Test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	6.963	1.674		4.159	.000		
	Kualitas Pelayanan	.759	.057	.801	13.338	.000	1.000	1.000

a. Dependent Variable: Kepuasan pelanggan

Based on the table of multicollinearity test, it is known that the tolerance value is greater than 0.01 and the VIF value is less than 10, which is 1.00, so from this data it can be concluded that there is no multicollinearity problem or that multicollinearity does not occur.

Simple Regression Test

Based on the table below it can be obtained the equation value of the significant simple linear regression as follows:

$$Y' = 6.963 + 0.759 X$$

The interpretation of the regression model above is the value of the service quality coefficient (X) of 0.759 indicating that the service quality variable has an influence on customer satisfaction variable.

Table 3: Regression Test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	6.963	1.674		4.159	.000		
	Kualitas Pelayanan	.759	.057	.801	13.338	.000	1.000	1.000

a. Dependent Variable: Kepuasan pelanggan

Based on the results in the figure below, it shows that the service quality variable has a significant influence on customer satisfaction, because its significance value is smaller than 0,05.

4 Conclusion

The t test's significant value, which is less than 0.05, allows one to evaluate how the variable relating to service quality influences the variable relating to Tokopedia customer happiness. Therefore, it can be claimed that the customer satisfaction variable is influenced by the service quality variable. The significance value of the t test for this study's null hypothesis (H0), that service quality affects customer satisfaction, is 0.000, which is less than 0.05.

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References:

- [1] Silalahi, A. N. H., Silvianita, A., Pradana, M., & Nurnida, I. (2021). The Influence of Self-Efficacy on Employee Motivation in OSDS Division at PT. Astra Graphia Information Technology. Proceedings of the International Conference on Industrial Engineering and Operations Management, 2021, pp. 425–430.
- [2] Ullah, S., Hussain, S., Rustandi Kartawinata, B., Muhammad, Z., & Fitriana, R. (2022). Empirical nexus between Chinese investment under China–Pakistan Economic Corridor and economic growth: An ARDL approach. *Cogent Business & Management*, 9(1), 2032911.
- [3] Zaman, U., Florez-Perez, L., Fariás, P., Abbasi, S., Khwaja, M. G., & Wijaksana, T. I. (2021). Shadow of your former self: exploring project leaders' post-failure behaviors (resilience, self-esteem and self-efficacy) in high-tech startup projects. *Sustainability*, 13(22), 12868. <https://doi.org/10.3390/su132212868>
- [4] Solomon, Asep. 2018. Analysis of the Influence of Service and Product Quality on Customer Satisfaction at Pt. Citramega Horizon. *KREATIVE Journal : Marketing, Human Resources and Finance*, Vol. 6, No. 1
- [5] Amier, A. M. R. A. P., & Pradana, M. (2022). Analisis Bibliometrik tentang Green Marketing: Perkembangan Studi dalam Periode 1999-2022. *SEIKO: Journal of Management & Business*, 4(3), 121-131.
- [6] Novanto, A., & Pradana, M. (2022). Studi Bauran Pemasaran di Industri Coffee Shop: Sebuah Analisis Bibliometrik pada Database Scopus. *SEIKO: Journal of Management & Business*, 4(3), 489-495.
- [7] Willayat, F., Saud, N., Ijaz, M., Silvianita, A., & El-Morshedy, M. (2022). Marshall–Olkin Extended Gumbel Type-II Distribution: Properties and Applications. *Complexity*, 2022.
- [8] Sugiyono. (2018). Quantitative, qualitative, and R&D research methods. Bandung: Alfabeta
- [9] Gusfei, A.D., Pradana, M. (2022). The Effect of E-Service Quality and E-Trust on Mobile Payment Application E-Customer Loyalty Through E-Customer Satisfaction as Intervening Variable. *Res Militaris*, 12(2), pp. 166–180.
- [10] Alfajar et al. 2021. The Effect of Service Quality on Customer Satisfaction at Makassar Jeans House, Palu City. *Cendrawasih: Journal of Administration and Management Public Literacy (JAMIL)*.

Contribution of Individual Authors to the Creation of a Scientific Article (Ghostwriting Policy)

Ahmad Abdoel Harits Alfatih carried out the survey and data analysis.

Mahir Pradana wrote the initial and final article, supervised and finalized the article.

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