



THE INFLUENCE OF ELECTRONIC SERVICE QUALITY ON SATISFACTION MEDIATED BY TRUST

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ABSTRACT

This study aims to analyze the effect of electronic service quality on satisfaction mediated by trust. This research uses causal quantitative research. The sampling technique in this study used non-probability sampling using the purposive sampling method. The population in this study includes consumers who have made purchases on online shopping sites in the Surakarta residency area. In this study, there were 96 respondents. The data collection method is by distributing questionnaires and processing using Smart PLS version 4.0. The data analysis used is the outer model, namely convergent validity, discriminant validity, composite reliability, cronbach's alpha, multicollinearity test, and the inner model, namely the coefficient of determination, compatibility, and hypothesis testing. The results of this study indicate that the quality of electronic services has a positive and significant effect on satisfaction mediated by trust.

Keywords: *Electronic service quality, Satisfaction, Trust*

A. INTRODUCTION

In this modern era, technology is experiencing rapid development. The use of technology from various fields makes it easier for everyone to carry out activities. Through cell phones, laptops, computers, or the like we can access the internet network. With the Internet, we can easily find information according to what we need. Just like we can use social media, communicate remotely, and shop online. The use of internet is often used for doing business. In the business world, technology has a role to be utilized as electronic commerce or E-commerce. Management's ability to adopt new technologies greatly determines the level of success in the development of service innovation (Gan et al., 2006).

Electronic commerce or e-commerce is the trading (buying and selling) of products and services using computer networks, such as the Internet (Sharma, 2020). The development of e-commerce is growing rapidly from time to time. E-commerce is currently popular among traders to buyers. Because it is easy and practical to use, consumers tend to choose e-commerce over offline stores.

Online shopping is currently in great demand by people in Indonesia. Online shopping is part of e-commerce which refers to business activities by utilizing communication technologies such as the Internet as the medium (Grant and Meadows, 2008). Online shopping also has many advantages such as goods that are not in the area where the person lives, so they can be found on online shopping sites. A variety of product choices can entice many people to buy products. An attraction for someone choosing to shop online is the many promos offered. Not only that, but online shopping sites also implement free shipping for every purchase so that consumers are not burdened by expensive shipping costs. The payment system on online shopping sites is also easier, with many options such as transfers via bank accounts, balance payments via Indomaret, etc.

Currently, there are many online shopping sites such as Shopee, Tokopedia, Lazada, and many more. In Indonesia, the development of online shopping sites is fairly rapid. This is of course an advantage as well as a great opportunity for every entrepreneur because these various advances can be relied upon to maintain a website that supports the smooth running of the business they run. Many shopping site companies compete for a bigger market. In various ways,

the company promotes it so that it can be better known by many people. Online shopping site companies also attract consumers with different categories. A company can differentiate itself from its competitors by providing high service quality (Anggraeni and Yasa, 2012).

Satisfaction reflects a person's assessment of the perceived product performance (results) in relation to expectations, the customer is dissatisfied and disappointed. If product performance matches expectations, the customer is satisfied. If product performance exceeds expectations, the customer is happy (Kotler and Keller, 2008). Satisfaction with a product or service greatly influences whether consumers will continue to repeat purchases or not.

Zehir and Narcikara (2016) say that in every company's business strategy, quality is one of the most important and complex factors. Quality is an important element of business strategy and academic research. Every type of business competes on the basis of quality, customers seek quality, and various types of markets shift on the basis of quality.

Soegoto (2013) stated that trust is related to emotional bonding, namely the ability of a person to entrust a company or a brand to carry out or carry out a function. If the quality of electronic services contained in online shopping sites gains consumer trust, a feeling of satisfaction can arise. After excellent service, it will lead to satisfaction, according to Supranto (2016) which is a conclusion or description used by customers to define their experience in using a service. Companies are wise when measuring the quality of their customer satisfaction regularly because the key to retaining customers is to provide satisfaction to consumers as one of the most important factors in customer satisfaction for business continuity. Companies must also be able to provide customer satisfaction to be able to influence the formation of trust.

Based on the descriptions above, the researcher is interested in conducting research entitled "The Effect of Electronic Service Quality on Satisfaction Mediated by Trust".

Based on the background above, the formulation of the problem to be posed in this study is as follows:

1. Does the quality of electronic services affect satisfaction?
2. Does the quality of electronic services affect trust?
3. Does trust affect satisfaction?
4. Does trust mediate the effect of electronic service quality on satisfaction?

Based on the formulation of the problem above, the objectives to be achieved from this research are:

1. Analyze the effect of electronic service quality on satisfaction.
2. Analyze the effect of service quality on trust.
3. Analyze the effect of trust on satisfaction.
4. Analyze the effect of electronic service quality on satisfaction mediated by trust

Electronic Service Quality

Electronic service Quality is a level of a website that effectively and efficiently facilitates shopping, making purchases, and the delivery process of products and services. Website quality assessment is not only the experience during interaction with the website but also the interaction after getting the service (Parasuman et al., 2005)

Collier and Bienstock (2006) define the quality of electronic services as consumers' perceptions of solving problems that occur and the results will be the basis for an assessment of the services that have been provided. Electronic service quality is a broader subset of service quality that uses the internet to better handle transactions to achieve customer satisfaction.

Erdiana (2022) defines the quality of an e-service as when a website can facilitate the process of buying, purchasing, and getting to the delivery and service stages efficiently and effectively, and concludes that consumers must rely entirely on information technology in their e-commerce activities.

Satisfaction

Satisfaction reflects a person's assessment of the perceived product performance (results) in relation to expectations, the customer is dissatisfied and disappointed. If product performance matches expectations, the customer is satisfied. If product performance exceeds expectations, the customer is happy (Kotler 2008). Satisfaction is a person's attitude describing pleasure or disappointment with something. Satisfaction is very important for producers because if consumers are satisfied with the product or service, it can be ascertained that the desired sales will be in accordance with the expectations of the producer. Satisfied consumers tend to ignore the price, they also tend to buy other products from the same brand.

According to Rahmah (2020), Consumer satisfaction is an effective response to consumer experiences or judgments about the perceived suitability or discrepancy between previous expectations and the product's actual performance after use. Therefore, the concept of satisfaction is the result of an evaluation process between pre-purchase expectations and experiences during and after purchase. Expectations and actual performance affect customer satisfaction with the quality of the service experience. Perceived service quality reflects an assessment of the service they experience at a particular moment.

Tjiptono (2011) defines satisfaction as feedback or customer feedback on demand satisfaction. Needs are judgments about the features or characteristics of a product or service, or the product itself, that provide a level of customer satisfaction in relation to the satisfaction of consumer needs. The more companies respond to consumer needs, the higher the level of customer satisfaction.

Trust

Consumer trust is consumer confidence as all knowledge possessed by consumers and all conclusions made by consumers about objects, attributes, and benefits (Sahatma and Suprpto, 2012).

Building trust is important because trust is the key to the long-term survival of a brand. Morgan and Hunt (1994) suggest that trust is an important variable in developing a long-term desire to continue to maintain long-term relationships. Trust builds consumer perceptions, whether a brand has integrity, competence and benevolence, and other factors that influence attitudes and behavior.

Confidence is defined as a psychological state that includes an intention to accept vulnerability, based on favorable expectations about the intentions or behavior of online commercial actors (Sanchez et al., 2009). Gounaris (2010) also observed that the relationship between trust and satisfaction is positive and significant. As individuals, everyone has limits because no one has them perfect. As a result, it creates dependency among them to achieve their respective goals in daily life which also applies in a professional context.

Trust plays an important role in online transactions through e-commerce considered as being able to help overcome the perception of risk and uncertainty that consumers feel online (Zhang et al., 2011). Therefore, customer trust is considered one of the most important prerequisites for e-commerce success (Sanchez et al., 2009). When customers believe in e-commerce, they believe that e-commerce will meet customer expectations. They want to maintain the relationship and buy back e-commerce.

Hypothesis

H1: Electronic service quality has an effect on satisfaction

H2: Electronic service quality has an effect on trust

H3: Trust has an effect on satisfaction

H4: Electronic service quality has an effect on satisfaction mediated by trust

B. RESEARCH METHOD

This type of research was used in this study using quantitative methods. Quantitative research methods can be interpreted as research methods based on the philosophy of positivism, used to examine certain populations or samples, data collection using research instruments, and data analysis are quantitative/statistical in nature, with the aim of testing established hypotheses (Sugiyono, 2017). Quantitative research in looking at the relationship of variables to the object under study is more causal in nature so in this study there are independent variables and dependent variables. From these variables, it is then sought how much influence the independent variables and dependent variables have.

Population and Sample

The population in this study includes consumers in the Surakarta residency who have purchased online shopping sites. The sampling technique used is non-probability sampling, namely, sampling is not random. By using a purposive sampling method, the sample selection method is based on certain criteria. Respondent criteria from this study were consumers in the Surakarta residency who had shopped on online shopping sites.

Because the population is unknown, the determination of the number of samples in this study uses the theory according to Malhotra (2006) suggesting that the number of sample members is determined by a minimum of 5 to 10 times the number of indicators studied, to make it easier to determine the sample, the number of indicators in this study multiplied by 6 so that the number of samples in this study (6 x 16) is 96 respondents. By criteria:

1. Age over 17 years
2. Never buy on online shopping sites
3. The community lives in the Surakarta residency area

Method of collecting data

In this study, the data collection method is by questionnaire. According to Sugiyono (2017), a questionnaire is a data collection tool through a set of questions or written statements which will later be answered by respondents. In this study, the answers obtained were questionnaire answers from 96 users of online shopping sites distributed by researchers about the effect of electronic service quality on satisfaction mediated by trust. Questions in the questionnaire were made using a Likert scale (1-5) which has a preference level for each answer having a score of 1-5 with the following details:

1. Strongly Agree (SS) answers are given a score of 5
2. Answer Agree (S) is given a score of 4
3. Neutral answers (N) are given a score of 3
4. Disagree Answers (TS) are given a weight of 2
5. Strongly Disagree (STS) answers are given a weight of 1

C. RESEARCH RESULTS AND DISCUSSION

This study uses the Structural Equation Modeling (SEM) approach. The SEM analysis used is Smart Partial Least Square (Smart PLS) in the SmartPLS 4.0 program.

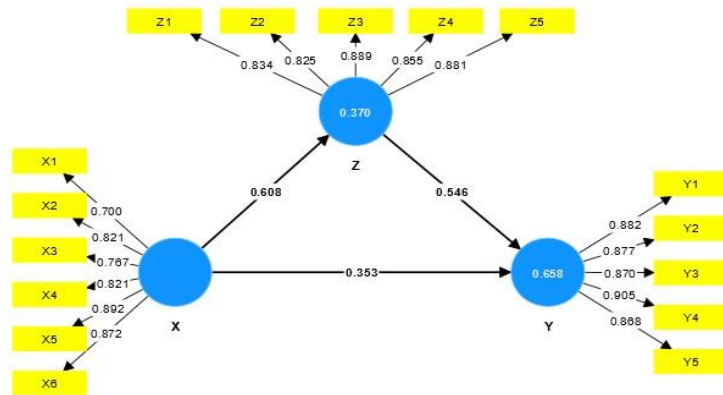


Figure 1. Outer model

Convergent Validity

Based on the data from the table above, the value of each loading factor for all indicators of each variable is obtained. The data shows that the loading factor value is > 0.7 , meaning that the validity in this study is fulfilled.

Discriminant Validity

Discriminant validity can be said to be good if the value of the Average Variance Extracted (AVE) in the construct is higher than the construct's correlation with other latent variables. Average Variance Extracted (AVE) is used to determine whether the discriminant validity requirement is met. The minimum value to indicate that an AVE value is achieved is > 0.5 . The discriminant value is intended to examine the extent to which the latent structure is actually different from other structures.

Table 1

	Average Variance Extrated (AVE)
X	0,664
Y	0,775
Z	0,735

Based on the data from the table above, the cross loading value and the AVE value, it can be concluded that the discriminant validity for the variables X, Y, and Z is stated to be good.

Reliability Test

Table 2

	Composite reliability	Cronbach's Alpha
X	0,905	0,897
Y	0,928	0,928
Z	0,911	0,910

The reliability test is carried out by testing the composite reliability to measure the actual value of the reliability of a construct. The minimum value to measure the achievement of a composite reliability is > 0.7 although a value of 0.6 is still acceptable. Composite reliability measures the actual reliability value of a variable while Cronbach alpha measures the lowest value of the reliability of a variable so that the composite reliability value is > 0.6 and the Cronbach Alpha value is > 0.6 .

Multicollinearity Test

Table 3

	Variance Inflated Factor (VIF)
X1	1,537
X2	2,265
X3	1,819
X4	2,572
X5	3,667
X6	3,041
Y1	3,161
Y2	2,987
Y3	3,078
Y4	3,956
Y5	2,825
Z1	2,515
Z2	2,304
Z3	3,195
Z4	2,513
Z5	2,856

This multicollinearity test is to test whether there is a high or perfect correlation between the independent variables in the regression model. Measured by Variance Inflated Factor (VIF), VIF value < 10 indicates there is a problem with multicollinearity.

Coefficient Determination Test (R²)

Table 4

	R-Square	Adjusted R-Square
Y	0,658	0,650
Z	0,370	0,363

Y: Satisfaction

Z: Trust

The R2 value is used to show how much the independent variable affects the dependent variable. Based on the data from the table above, it can be concluded that the magnitude of the influence of the electronic service quality variable (X) on satisfaction (Y) is 65.8%, while for the magnitude of the influence of the electronic service quality variable (X) on trust (Z) is 37.0% .

Goodness of Fit test

The goal is to determine how exactly the observed frequency matches the expected frequency. Using the Q-square test. The value of $Q^2 > 0$ shows evidence that the observed values have been well reconstructed, thus the model has predictive relevance.

$$\begin{aligned}
 Q^2 &= 1 - (1-R^2_Y) \times (1-R^2_Z) \\
 &= 1 - (1-0.650) \times (1-0.363) \\
 &= 1 - (0.35) \times (0.637) \\
 &= 1 - 0.22 \\
 &= 0.78
 \end{aligned}$$

Based on these calculations, the Q2 value in this study was obtained, namely 0.78 (78%), which indicated the amount of variation in the data to become the research model, namely 78%, while the remaining 22% was due to other factors. This value already meets $Q^2 > 0$, meaning that the research model is said to be good.

Hypothesis testing

Table 5. The Direct Effect Hypothesis

	Original sample (O)	Sample Average (M)	Standard deviation (STDEV)	T statistik (O/STDEV)	(P-Values)
X -> Y	0,685	0,685	0,077	8,958	0,000
X -> Z	0,608	0,611	0,070	8,689	0,000
Z -> Y	0,546	0,553	0,110	4,957	0,000

X: Elektronik service quality

Y: Satisfaction

Z: Trust

Table 6. Indirect Effect Hypothesis

	Original Sample (O)	Sample Average (M)	Standard Deviation (STDEV)	T-statistik (O/STDEV)	(P-Values)
X -> Z-> Y	0,332	0,339	0,081	4,086	0,000

X: Elektronik service quality

Y: Satisfaction

Z: Trust

Based on the data in the table it can be concluded that :

- H1: Based on the table above, it is obtained that the coefficient value is 0.685 meaning that it is a constant variable, so the electronic service quality variable (x) has an effect of 0.685 on the satisfaction variable (y). Then, at a t-statistic value of 8.958 and a p-value of 0.000 with a t-table value of 1.984 and a confidence level of 0.05, then $8.958 > 1.984$ or $0.000 < 0.05$ means that the electronic service quality variable has a positive and significant effect on the variable satisfaction. Thus, the first hypothesis states that the quality of electronic services has a positive and significant effect on the satisfaction received.
- H2: Based on the table above, it is obtained that the coefficient value is 0.608 meaning that it is a constant variable, so the electronic service quality variable (x) has an effect of 0.608 on the trust variable (z). Then, at a t-statistic value of 8.689 and a p-value of 0.000 with a t-table value of 1.984 and a confidence level of 0.05, then $8.689 > 1.984$ or $0.000 < 0.05$ means that the electronic service quality variable has a positive and significant effect on the variable trust. So, the second hypothesis states that the quality of electronic services has a positive and significant effect on the trust received.
- H3: Based on the table above, it is obtained that the coefficient value is 0.546 meaning that it is a constant variable, so the trust variable (z) has an effect of 0.546 on the satisfaction variable (y). Then, at a t-statistic value of 4.957 and a p-value of 0.000 with a t-table value of 1.984 and a confidence level of 0.05, then $4.957 > 1.984$ or $0.000 < 0.05$ means that the trust variable has a positive and significant effect on the satisfaction variable. So, the third hypothesis states that trust has a positive and significant effect on satisfaction received.
- H4: Indirectly, the quality of electronic services affects satisfaction through trust. Based on the data from the table above, it shows that the t-statistic value of the effect of electronic service quality (x) on satisfaction (y) is mediated by trust (z) 4.086, and the magnitude of the effect is 0.332 and the P-value $0.000 < 0.05$. This means that the effect of electronic service quality on satisfaction mediated by a trust is significant.

Thus, the fourth hypothesis states that electronic service quality has a positive and significant effect on satisfaction mediated by accepted trust.

D. CONCLUSION

Based on the results of the above data analysis that has been done, the conclusions of this study are as follows:

1. Electronic service quality has a positive and significant effect on satisfaction, so the first hypothesis is accepted.
2. Electronic service quality has a positive and significant effect on trust, so the second hypothesis is accepted.
3. Trust has a positive and significant effect on satisfaction, so the third hypothesis is accepted.
4. Electronic service quality has a positive and significant effect on satisfaction mediated by trust, so the fourth hypothesis is accepted.

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