

## Measurement of Information Quality and E-Service Quality on Customer Satisfaction at Shopee Indonesia

**Maria Wirani<sup>1</sup>, Anggalia Wibasuri<sup>2</sup>**

*Faculty Economy and Business Institute Informatika and Business Darmajaya*

*Jl. Z.A. PagarAlam No. 93, Bandar Lampung - Indonesia*

*35142 Telp.(0721) 787214 Fax. (0721) 700261*

*mariaawirani@gmail.com<sup>1</sup>, anggalia.wibasuri@darmajaya.ac.id<sup>2</sup>*

**Abstract:** E-Commerce changes consumer behavior in shopping from buying in physical places to buying through online media. During the Covid 19 pandemic in Indonesia. Online shopping activities is increased by 400 percent. The high percentage growth in the number of Shopee Marketplace visits compared to other Marketplaces during the Covid 19 pandemic period Q1 - Q3 2020 indicates consumer satisfaction shopping online at the Shopee marketplace. The purpose of this study was to determine the effect of information quality and e-service quality on customer satisfaction in Shopee Indonesia. The sampling method in this study used non-probability sampling using the purposive sampling technique with a sample size of 150 respondents. Data analysis in this study using Multiple Linear Regression.

**Keywords:** Information Quality, E-Service Quality, Customer Satisfaction.

### 1. INTRODUCTION

Technological advances have an impact on business processes. E-Commerce is a form of technological advancement that changes consumer behavior in shopping from buying in physical places to online media. Increase in repeated purchases which is an indication of consumer satisfaction. Satisfaction is the result of a comparison between expectations and performance of a product, both goods and services. Consumer satisfaction from online business or E-Commerce has an impact on loyalty in using the E-Commerce service. Indonesia has the highest level of E-Commerce usage, with 90 percent of internet users in Indonesia between the ages of 16 and 64 reporting that they have purchased products and services online. There was an increase in online purchases that continued to increase in the era of the Covid19 pandemic in early 2020. During the Covid 19 pandemic that hit Indonesia, online shopping activities increased by up to 400percent.

There are three E-Commerce companies that are competing to grab consumer market share, including Shopee, Tokopedia and Bukalapak.

Table 1: E-Commerce Competition Map in the Covid 19 Pandemic Period in 2020

Marketplace	Q1of2020	Q2of2020	% ( Growth )	Q3of2020	% ( Growth )
Shopee	71,533,300	93,440,300	30.6%	96,532,300	3.3%
Tokopedia	69,800,000	86,103,300	23.4%	84,997,100	-1.3%
Bukalapak	37,633,300	35,288,100	-6.2%	31,409,200	-11%

Based on this data, there is a significant growth in the Shopee marketplace. In Q2 of 2020 Shopee grew by 30.6% compared to Q1 of 2020, then in Q3 of 2020 it increased by 3.3% compared to the Tokopedia and Bukalapak marketplaces which experienced a decline in Q3 of 2020. This is a phenomenon that is quite interesting to research.

Service quality and customer satisfaction are related and have an impact on increasing the E-Commerce business (Mindy Joen et al, 2003). The strategy to satisfy and retain customers is the key to success in a competition. Based on the description above, this research aims to examine the effect of Information Quality and E-Service Quality on Customer Satisfaction at Shopee Indonesia

## 2. LITERATURE REVIEW

### 2.1. *Information Quality*

Negash et al (2003) stated that the quality of information is a function that concerns the value of the information output produced by system. When shopping online, consumers must rely on descriptions and photos provided by the website to understand the product, they will emphasize more system properties such as ease of use of the website, ease of navigation, response time, and download time (Dickinger et al 2013). The quality of online information from e-commerce sites can be seen from several perspectives, such as product quality, system as product, service provider quality, product quality software, system design, quality of human computer interaction, and more (Sharma, 2015). With information and a complete feel of fun visiting a website will create visitors feel satisfaction in the information and create a sense of purchase obtained after visiting (Jauhari, Kusumawati, and Nuralam, 2019). There are three elements used as an indicator of Information Quality : Accurate, Timeliness and Relevance.

### 2.2. *E-Service Quality*

E-Service Quality is the extent to which a website facilitates its spending effective and efficient, purchasing, and delivery of products or services. These measurements of e-service quality are carried out with measure how services are perceived by customers and compare it to services what customers expect based on certain dimensions of a quality services (Fandy Tjiptono and Greorius Chandra, 2016). According to Hanitahaiza Hairuddin et al, (2019) there are three indicator elements of EService Quality: Product Promotion, Efficient And Rewarding Shopping Experience, Reliable Product Or Service Delivery

### 2.3. *Customer Satisfaction*

According to Kotler and Keller (2006) state that "Customer Satisfaction is a person's feeling of pleasure or disappointment resulting from comparing a product's perceived performance (or outcome) in relation to his or her expectations ". From this description, it can be concluded that customer satisfaction is a response from customer good feelings happy or disappointed shown by the customer for the goods or services obtained and use. The level of customer satisfaction reflects how successful and effective the company implements its business activities. E-customer satisfaction, in tone the same, refers to "customer satisfaction with previous purchasing experience" with a website. According to M. Tantowi Jauhari et al, (2019) which are indicators of Customer Satisfaction, namely: Quality of product, Service quality, Product Price, Emotional Factor, Cost and convenience.

### Theoretical Framework

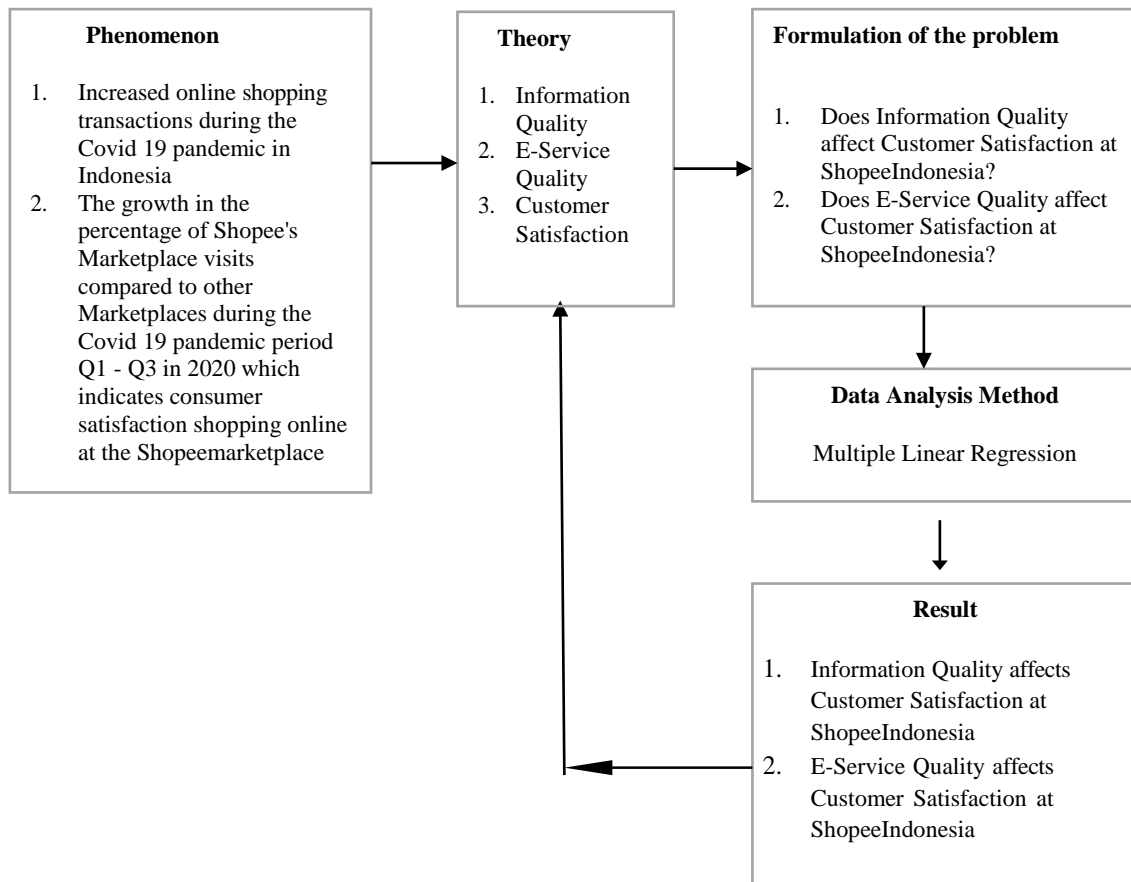


Figure 2. Theoretical Framework

### 3. METHOD

#### ResearchType

This research type used quantitative research. Quantitative research was conducted to obtain data or facts which can be used in order to obtain certainty and accuracy of answer to research question that are done (Timotius, 2017).

#### Sample

Hair et al (2010) revealed that if a study uses regression analysis methods and SEM, it must have a minimum sample size of five times the number of questions on the questionnaire. Thus, the total questionnaire in this study is 10 times the number of questions, in which the number of Indicators is 15, resulting in as many as 150 respondents (minimum). The sampling in this study used a non-probability sample.

Researchers used purposive sampling technique with the following respondent criteria:

1. Had a shopping experience on the Shopee E-Commerce application
2. Consumers with a minimum age of 17 years - 40 years

#### Data AnalysisMethod

The data analysis method was a process of grouping data based on variables and all respondents, tabulating data based on variables and all respondents, presenting data for each variable studied, performing calculations to test the proposed hypothesis (Sugiyono, 2017).

### Multiple Linear Regression Test

So multiple linear regression analysis is carried out if there are at least 2 independent variables. The multiple linear regression formula is as follows:

$$Y = a + \beta_1 X_1 + \beta_2 X_2$$

Information:

- Y = Dependent Variable (Customer Satisfaction)
- X1 = Independent Variable (Information Quality)
- X2 = Independent Variable (Service Quality)
- A = Constants (Y value if X = 0)
- $\beta$  = Regression coefficient (value of increase or decrease)

### Hypothesis Test

The effect of Information Quality on Customer Satisfaction at Shopee Indonesia

Ho = Information Quality (X1) had no significant effect on Customer Satisfaction (Y) in Shopee Indonesia. Ha = Information Quality (X1) had significant effect on Customer Satisfaction (Y) in Shopee Indonesia.

The criteria for decision making are:

- a. If the value of t count was  $> t$  table, then Ho was rejected If the value of t count was  $< t$  table then Ho was accepted
- b. If the sign value was  $< 0.05$  then Ho was rejected If the sign value was  $> 0.05$  then Ho was accepted

The effect of E-Service Quality on Customer Satisfaction in Shopee Indonesia

Ho = E-Service Quality (X2) had no significant effect on Customer Satisfaction (Y) in Shopee Indonesia. Ha = E-Service Quality (X2) had significant effect on Customer Satisfaction (Y) in Shopee Indonesia.

The criteria for decision making are:

- a. If the value of t count was  $> t$  table, then Ho was rejected If the value of t count was  $< t$  table then Ho was accepted
- b. If the sign value was  $< 0.05$  then Ho was rejected If the sign value was  $> 0.05$  then Ho was accepted

## 4. RESULTS AND DISCUSSION

The following was a measurement of the independent variable and the dependent variable to be measured in this study as follows.

Information:

- STS = For answers strongly disagree
- TS = For answers disagree
- N = For neutral answers
- S = For answers agree
- SS = For answers strongly agree

Table 2: Questionnaire of Information Quality (X1)

No.	Question	STS	TS	N	S	SS
		1	2	3	4	5
1	Written product price information correctly (there are details on the total product price and the price that must be paid by the user)					
2	Information about the stages of payment that the user must go through is conveyed clearly (accompanied by an image that makes it easy for the user to digest each stage properly)					
3	The purchase code is clearly written					
4	The writing submitted on the website is easy to read					
5	There is a page that explains the stages of online payment					
	There is information on product delivery time					

Table 3: Questionnaire of E-Service Quality (X2)

No.	Question	Answer				
		STS	TS	N	S	SS
		1	2	3	4	5
1.	I feel that the menu on the Shopee website helps me in finding information					
2.	I find it easy to explore the Shopee website					
3.	I got my order quickly					
4.	I feel the Shopee website is responsive to delayed delivery					
5.	I find Shopee's website interesting					

Table 4: Questionnaire of Customer Satisfaction (Y)

NO	Question	Answer				
		STS	TS	N	S	SS
1.	I feel satisfied with my decision to shop at Shopee	1	2	3	4	5
2.	I feel more comfortable making repeat purchases at Shopee					
3	I think it was a wise decision for me to shop at Shopee					
4	I feel like I made the right decision to shop at Shopee					

## 5. CONCLUSION

In results, there was a measurement to be distributed in determining the effect of Information Quality and E-Service Quality on Customer Satisfaction in Shopee Indonesia. This process was done by processing the data obtained through questionnaires from respondents to find out the results of testing their hypotheses.

## REFERENCES

- [1] Eid, M. I. 2011. Determinants of E-Commerce Customer Satisfaction, Trust, and Loyalty In Saudi Arabia, 78–93.
- [2] Hair, Jr., J. F., William C, Babin, Barry J, Anderson, Rolph E., 2010. Multivariate data analysis: a Global Perspective, Seventh Edition, Global Edition, Pearson Education, Inc, New Jersey, USA.
- [3] Kotler, Philip dan Kevin Lane Keller. 2006 .Manajemen Pemasaran Jilid 2. Jakarta: Indeks
- [4] Kuo-Chien Chang, et al. 2011. The Impact of Website Quality and Perceived Trust on Customer Purchase Intention in the Hotel Sector: Website Brand and Perceived Value as Moderators. International Journal of Innovation, Management and Technology.
- [5] Malhotra, N. 2010, *Marketing Research-An Applied Orientation*, International Edition, 6th ed., Pearson, Prentice-Hall, Upper Saddle River, NJ.
- [6] McKinney and K. Yoon. 2002. Mariam Zahedi, the Measurement of Web-Customer Satisfaction: An Expectation and Disconfirmation Approach. Information Systems Research, vol. 13, pp. 296-315
- [7] Mindy Jeon, Myunghee dan Jeong, M. 2003. Customers' perceived website service equality and its effects on e-loyalty, International Journal of Contemporary Hospitality Management, 29(1), 438–457
- [8] Park and Kim. 2003. Logistics Service Quality and Customer Satisfaction in E-commerce. Asia Pac. J. Inf. Syst. 12, 237– 253.
- [9] Sugyono, 2017. Metodologi Penelitian Kuantitatif Kualitatif dan R&D. Alfabeta. Bandung. [10] Timotius Prof. Dr. Kris H. 2017. Pengantar Metodologi Penelitian. ANDI. Yogyakarta