

# ANALYSIS OF E-SERVICE QUALITY TO CUSTOMER SATISFACTION WITH PERCEIVED VALUE AS INTERVENING VARIABLE

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**Abstract:** The purpose of this research is to test the influence of e-service quality to customer satisfaction with perceived value as a intervening variable. The research object of this online consumer shop Tokopedia in Medan with a sample of 160 customers. Types of quantitative research by spreading questionnaires. The method of research path analysis with the analysis tool is SEM with the help of Amos version 20.0. It was discovered that ES-QUAL and E-RecS-QUAL have positive and significant effect on perceived value and customer satisfaction of Tokopedia customer online shop in Medan City. Perceived value positively and significantly affect the satisfaction of Tokopedia customer online shop in Medan City. Perceived value of a partial to be mediation the impact of ES-QUAL and E-RecS-QUAL to the satisfaction of Tokopedia customer online shop in Medan City.

**Key Words:** E-Service Quality, Perceived Value, Satisfaction.

## 1. INTRODUCTION:

Indonesia's Global Web Index has the highest level of e-commerce users in the world. This We Are Social released report mentions 96% of internet users have ever searched for products or services to buy online (Databoks.katadata.co.id, 2020). The UK Research Institute, Merchant Machine, releases a list of ten countries with the world's fastest e-commerce growth. Indonesia led the ranks of the countries with a growth of 78% in 2018. The number of Internet users in Indonesia of more than 100 million users is one of the strengths that drive e-commerce growth. The average money spent by Indonesians on online shopping sites reaches US \$228 per person or around Rp 3.19 million per person. About 17.7% of respondents spent the money buying airline tickets and booking hotels online. A total of 11.9% of respondents spent their money on clothing and footwear products. The third most popular category is health and beauty products chosen by 10% of respondents. Mexico became the second fastest-ranked country in e-commerce growth with growth of 59% in 2018. Meanwhile, the Philippines was third with e-commerce growth of 51% (Databoks.katadata.co.id, 2020). For more details, see the following figure 1:

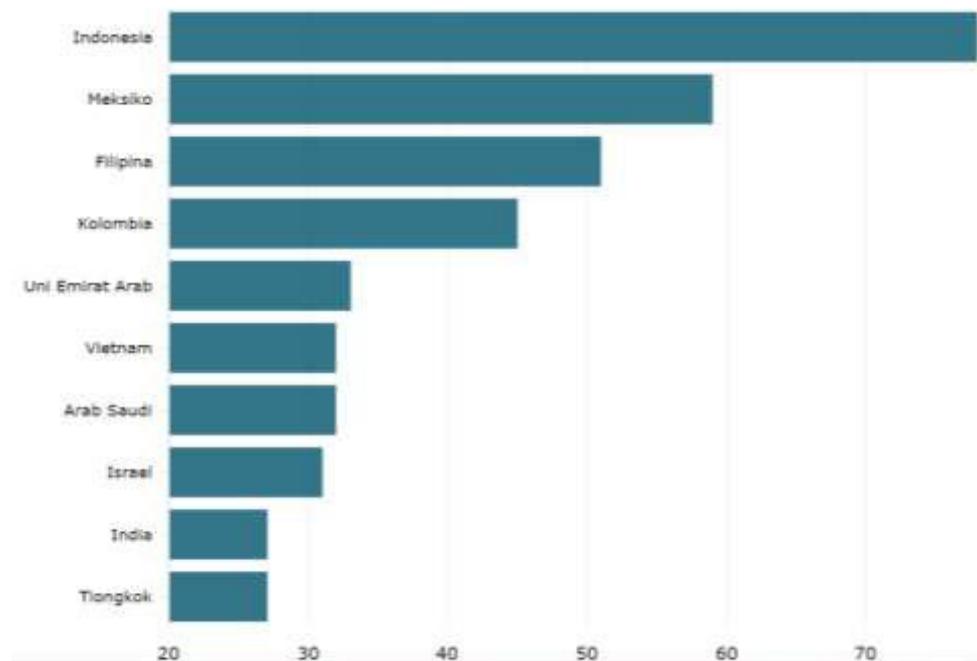


Figure 1. Ten countries with fastest E-commerce growth

Source: Databoks.katadata.co.id, 2020

Undeniable, the development of e-commerce is increasingly encouraging business people to compete to win the competition among online stores. Such keen competition requires a qualified business strategy in order for customers to be satisfied when they make a purchase transaction in their online shop. It is inevitable that e-service quality becomes a strategy and solution in forming positive perceived value for the customer and also to create satisfaction for the customer.

E-Service Quality is an electronic-based service that is used to facilitate the shopping, purchase and delivery of products and services effectively and efficiently (Zeithaml et al., 2002:363). E-Service Quality is one of the models of Service Quality. E-Service Quality can be interpreted as the quality of the electronic media Services (Lasyakka, 2015:2). Service providers must provide quality services because they are a source of competitive advantage. Good service will obtain the value desired by the customer, as well as presenting a good E-Service then a site will obtain the value desired by the customer (Kotler, 2000 in Tjiptono, 2014:282).

Service quality in online environments is a significant determinant of the productivity of e-commerce and the perceived value (Chen, Tsai, Hsu & Lee, 2013; Yang, 2001; Lee & Lin, 2005). Usually online customers expect a better or the same level of service compared to traditional channels (Lee & Lin, 2005). Studies carried out in many areas have tested the affiliation of consumer loyalty and the perceived value and service quality dimensions of online shoppers (Chinomona, Masinge & Sandada, 2014; Roman, Gonzales & Idoeta, 2013; Wood & Heerden, 2007; Lee & Lin, 2005; Parasuraman, Zeithaml, & Malhotra, 2005; Zeithaml, Parasuraman & Malhotra, 2002; Chang & Hsu, 2013; Sam & Tahir, 2009).

Service Quality of electronic services that customers have felt will be an evaluation of the services used. The expectation of service that is expected with the service reality gained from the ordering process until the customer felt service is gained making customers feel satisfaction, dissatisfaction, disappointment, or excitement. Customer satisfaction is the level of a person's feelings after comparing performance or perceived results compared to their expectations (Kotler and Keller, 2012 in Tjiptono 2014:354). On the condition of using electronic media, customer satisfaction can no longer be measured only by the quality of service, because on the purchase via electronic or customer's online site interact with the electronic system. When experience is different between offline and online then customer satisfaction on online booking experience is different from offline experience. E-Customer Satisfaction is described as customer satisfaction derived from previous experience of real purchase with company which also with experience through electronic. The enjoyment of shoppers through online will determine customer satisfaction or E-Customer Satisfaction (Anderson and Srinivasan, 2003:125). Cheung and Lee (2005:13) argues that in a business using online electronic media in their means of sales, the E-Service Quality component is a factor that a site must provide to create customer satisfaction.

As a leading online shop in Indonesia, Tokopedia realizes that it is surrounded by many other online shops, where its competitors also continue to catch up and try to be online number one shop in Indonesia. iPrice Group crowned Tokopedia as an e-commerce with the largest number of monthly web visitors in the THIRD quarter of 2019. Tokopedia Total Monthly web visitors as much as 66 million visitors. The next rank was filled by Shopee as many as 56 million visitors and Bukalapak as many as 43 million monthly web visitors. However, if based on the ranks of the Appstore and Playstore, Shopee leads at the first stage of defeating Tokopedia. The second stage on the Appstore is filled by Tokopedia, while the Playstore is filled by Lazada (Databoks.katadata.co.id, 2020). This shows that Tokopedia still has to improve the optimal service, positive value and customer satisfaction in order to remain the best online in the various aspects of the assessment.

## 2. THEORETICAL BASIS:

### E-Service Quality

E-Service Quality is an electronic-based service that is used to facilitate the shopping, purchase and delivery of products and services effectively and efficiently (Zeithaml et al., 2002:363). E-Service Quality is one of the models of Service Quality. E-Service Quality can be interpreted as the quality of the electronic media Services (Lasyakka, 2015:2). Service providers must provide quality services because they are a source of competitive advantage. According to Parasuraman et al. (2005:7) has revealed a conceptual model to understand and improve the quality of services or electronic services (e-SQ or E-SERVQUAL) as well as identifying seven dimensions (efficiency, Fulfillment, System Availability, Privacy, responsiveness, compensation, and contacts) that make up the "core online service" scale and the "Recovery online service" scale. The four main dimensions (efficiency, Fulfillment, System Availability, and privacy) are the core scale of ES-QUAL which is used to measure customer perception of the quality of services provided by online retailers. Meanwhile, the other three dimensions (responsiveness, compensation, and contact) are the scale of E-RescS-QUAL recovery. Parasuraman et al. (2005:8) Formulating ES-QUAL scale (Electronic Core service quality) and E-RescS-QUAL (Electronic Recovery service quality) .

**Perceived Value**

Perceived Value is intended to assess the customer's perception of value (Tjiptono, 2014:310). Good service will obtain the value desired by the customer, as well as presenting a good E-Service then a site will obtain the value desired by the customer (Kotler, 2000 in Tjiptono, 2014:282). It corresponds to the four main aspects of the perceived value expressed by Sweeney and Soutar, (2001:208) in Officers (2016:48) and consists of:

- 1) Emotional Value: a condition in which emotions arise due to positive value when using the product or service.
- 2) Social Value: a situation where consumers feel social level increases when using products or services.
- 3) Performance: a situation where consumers feel the expectation that is expected according to what is obtained.
- 4) Price/Value of Money: a condition in which consumers assess cost efficiency levels can be fulfilled.

**Satisfaction**

Customer satisfaction is the level of a person's feelings after comparing performance or perceived results compared to their expectations (Kotler and Keller, 2012 in Tjiptono 2014:354). Service Quality of electronic services that customers have felt will be an evaluation of the services used. The expectation of service that is expected with the service reality gained from the ordering process until the customer felt service is gained making customers feel satisfaction, dissatisfaction, disappointment, or excitement. The indicators are: Quality Conformity with Expectations, Price Compliance with Expectations, Customer Satisfaction with the Benefits of Products, Ease of Getting Products and Safety (Sidik, 2015:84).

**3. MATERIALS:**

The Value generated from the transaction process in the online service is more complex than the offline transactions, because online transactions involve the process of service from the electronic itself in this case the mobile application as a factor That affects the Perceived Value (Keeney, 2009; in Chinomona et al. (2014:332). According to Tjiptono (2014:308), the concept of customer satisfaction, service quality, and customer value is intertwined.

**Conceptual framework**

Based on the explanation, the conceptual framework in this study can be described as follows:

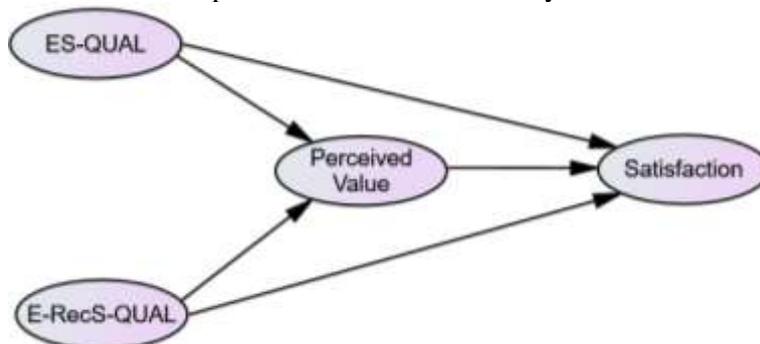


Figure 2. Conceptual framework

**4. RESEARCH METHODOLOGY:**

The object in this study is all online consumer shope Tokopedia in Medan City. Samples were obtained from 5-10 from the number of indicators (22 x 7 = 156). Plus 4 samples in case of outlier data. So the samples became 160 customers. Sample withdrawal technique with non probability sampling technique with purposive sampling, with the criteria only Tokopedia consumer can be used as a sample. Data collection techniques use questionnaires with a Likert scale (5-1). The data analysis technique used is Path analysis. To See the mediating effect with Sobel's Repeat test decision researchers test with the preacher's Tool.

**5. RESEARCH RESULTS AND DISCUSSION:**

**Research result**

Model conformance tests are done through flowcharts in full model equations. Full model test is done in two stages namely full model before modification and full model after modification. A full model before the modified test was performed to find out how far the initial model was formed in meeting the Goodness Of Fit (GOF) criteria before the model was modified. The following will be presented full model images before modified:

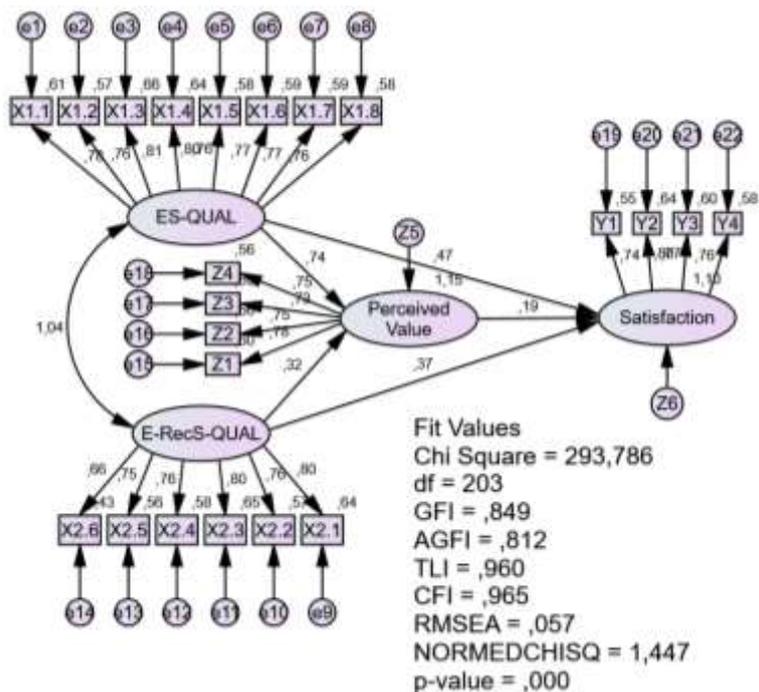


Figure 3. Full Research models Before Modified

Based on Figure 3, the value of Goodness of Fit (GOF) has not been met, such as the GFI value ( $0.849 < 0.90$ ), the AGFI value ( $0.812 < 0.90$ ) and the insignificant p-value value of 0.000. Because Figure 2 has not yet been able to explain the research model appropriately and well, so it needs modification. The following will be presented full model image after modified:

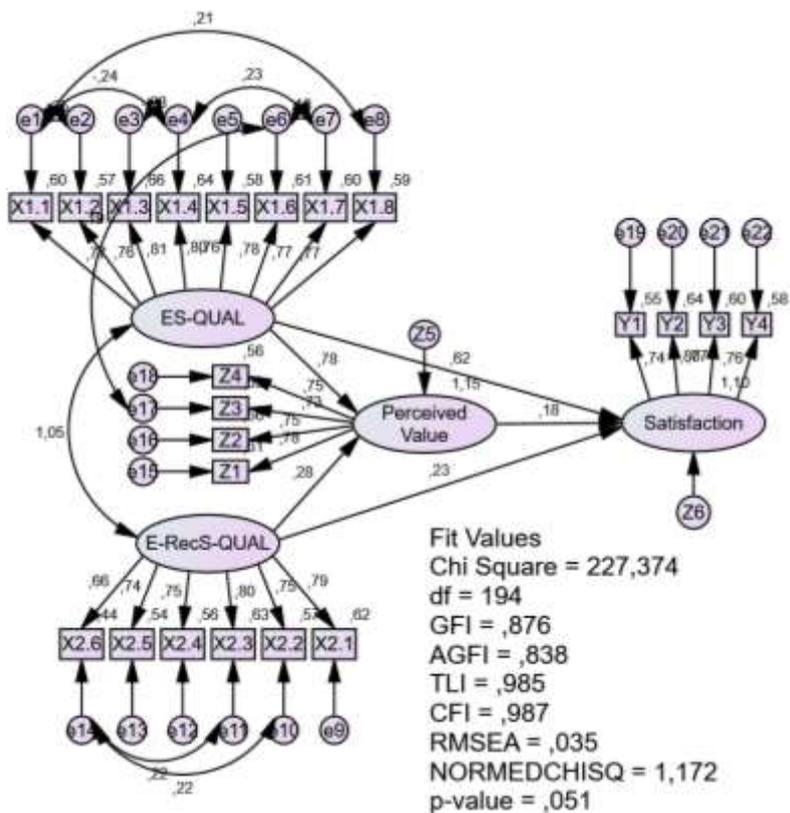


Figure 4. Full Model Research After Modification

Based on Figure 4 the entire construct has fulfilled the criteria of GOF. Like the Chi-square, TLI, CFI, RMSEA, CMIN/DF values that have fulfilled the required criteria and a P-value value of 0.051 which indicates that the model formed has been very significant. Except the values of GFI and AGFI are still marginal but are approaching well.

**Discussion**

The receipt of the hypothesis is seen from the value of C.R. greater than 2 and a value of P smaller than 0.05. To see how large the effect of independent variables against dependent variables will be shown in the following table 2:

**Table 1. Effects of independent variables on dependent variables**

Effect between variables		Std. Estimate	Estimate	S.E.	C.R.	P	
Perceived Value	<---	E-RecSQUAL	,277	,274	,105	2,621	,009
Perceived Value	<---	ES-QUAL	,782	,858	,135	6,340	***
Satisfaction	<---	ES-QUAL	,616	,567	,126	4,501	***
Satisfaction	<---	E-RecS-QUAL	,233	,193	,079	2,454	,014
Satisfaction	<---	PerceivedValue	,180	,151	,060	2,513	,012

According to table 1 will be elaborated in detail to be able to clearly answer the hypothesis of this research as follows:

**Effect of ES-QUAL on Perceived Value**

ES-QUAL has a positive and significant impact on Perceived Value with a standardized regression weight estimate value of 0.782 (78.2%), a critical ratio of 6.340 and a probability value of 0.0001. This proves that ES-QUAL has a positive and significant effect on the Perceived Value consumers of Tokopedia online shop in Medan.

**Effect of E-RecS-QUAL on Perceived Value**

E-RecS-QUAL has a positive and significant effect on Perceived Value with a standardized regression weight estimate value of 0.277 (27.7%), a critical ratio of 2.621 and a probability value of 0.009. This proves that E-RecS-QUAL effect is positive and significant towards the Perceived Value consumer online shop Tokopedia in Medan.

**Effect of ES-QUAL on Satisfaction**

ES-QUAL has a positive and significant impact on consumer satisfaction with a standardized regression weight estimate value of 0.616 (61.6%), a critical ratio of 4.501 and a probability value of 0.0001. This proves that ES-QUAL has a positive and significant effect on the customer satisfaction of Tokopedia online shop in Medan.

**Effect of E-RecS-QUAL on Satisfaction**

E-RecS-QUAL has a positive and significant impact on consumer satisfaction with the value of standardized regression weight estimate of 0.233 (23.3%), a critical ratio of 2.454 and a probability value of 0.014. This proves that E-RecS-QUAL effect positive and significant towards customer satisfaction online shop Tokopedia in Medan.

**Effect of Perceived Value on Satisfaction**

Perceived Value positively and significantly affects customer satisfaction with a standardized regression weight estimate value of 0.180 (18%), a critical ratio of 2.513 and a probability value of 0.012. This proves that Perceived Value positively and significantly affect the customer satisfaction of Tokopedia online shop in Medan.

**Perceived Value mediate effect of ES-QUAL on satisfaction**

To determine whether or not Perceived Value to the effect of ES-QUAL on satisfaction, can be seen in the following images of Sobel test results:

Input:	Test statistic:	Std. Error:	p-value:
a 0.782	Sobel test: 2.66393355	0.05283916	0.00772328
b 0.180	Aroian test: 2.63317409	0.0534564	0.0084591
s <sub>a</sub> 0.135	Goodman test: 2.69579676	0.05221462	0.00702205
s <sub>b</sub> 0.060	Reset all	Calculate	

**Figure 4. Uji Sobel Test I**

Based on the results of the calculations found line-a (0.0001), line -b (0.012), line-c (0.0001), and Line-c' (0.0077). Then it can be concluded that the Perceived Value is a partial mediation of the effect of ES-QUAL on the customer satisfaction online shop Tokopedia in Medan City. This means that Perceived Value can affect directly or indirectly to increase customer satisfaction online shop Tokopedia in Medan City.

**Perceived Value mediate effect of E-RecS-QUAL on Satisfaction**

To determine whether or not Perceived Value to the influence of E-RecS-QUAL on satisfaction, can be seen in the following image test results Sobel:

Input:		Test statistic:	Std. Error:	p-value:
a	0.277	Sobel test: 1.98107744	0.02516812	0.04758259
b	0.180	Aroian test: 1.92178415	0.02594464	0.05463292
s <sub>a</sub>	0.105	Goodman test: 2.04622087	0.02436687	0.04073464
s <sub>b</sub>	0.060	Reset all	Calculate	

Figure 5. Uji Sobel Test II

Based on the results of the calculations found line-a (0.009), line-b (0.012), line-c (0.014), and Line-c' (0.0476). Then it can be concluded that the Perceived Value is a partial mediation the influence of E-RecS-QUAL to the satisfaction of online shop consumer Tokopedia in Medan City. This means that Perceived Value can affect directly or indirectly to increase customer satisfaction online shop Tokopedia in Medan City.

**6. CONCLUSION:**

Conclusions gained from the results of the study: 1) ES-QUAL has positive and significant impact on the Perceived Value consumers of Tokopedia online shop in Medan. 2) E-RecS-QUAL influential positive and significant towards the Perceived Value of online shop consumer Tokopedia in Medan. 3) ES-QUAL has a positive and significant impact on the customer satisfaction online shop Tokopedia in Medan. 4) E-RecS-QUAL positively and significantly affect the customer satisfaction of Tokopedia online shop in Medan. 5) Perceived Value positively and significantly affect the customer satisfaction of Tokopedia online shop in Medan. 6) Perceived Value to be partial mediation ES-QUAL influence on the customer satisfaction online shop Tokopedia in Medan City. 7) Perceived Value is a partial mediation of the influence of E-RecS-QUAL on the customer satisfaction online shop Tokopedia in Medan City.

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