

An empirical look at the effect of service quality on online shopping customer satisfaction in Indonesia

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Abstract

The main purpose of this study is to examine the relationship between service quality and online shopping customer satisfaction in Indonesia. This study is a quantitative and cross-sectional study with a survey method. This study's online shopping customers consist of undergraduate and postgraduate students in the Accounting Department of Universitas Sumatera Utara. The study used Likert scale questionnaires distributed to 400 respondents, and 295 questionnaires were obtained for data analysis. The study found that service quality has a positive and significant relationship with customer satisfaction. The study reveals that the elevation of excellent service quality on online shopping is the best solution for online shopping vendors to obtain customer satisfaction.

Keywords: *Customer satisfaction, Online shopping, Service quality*

JEL Classification: M1, M2

INTRODUCTION

Nowadays, a company can't just rely on advertising to promote its business or run its operations conventionally, and it makes many companies use information technology to promote their business. The internet has become the right information and communication technology choice to help many companies worldwide. Thus, the company should follow these developments and continue to innovate in delivering the customer needs and improving the company (Ehsani & Ehsani, 2015; Risanty, Kesuma, Muda & Maulida, 2020).

Online shopping is one of the innovations made by utilizing the internet and at the same time becoming a lifestyle. Online shopping is electronic commerce between companies and their customers directly, without meeting in one place, and only through the internet. Various advantages that can be obtained from online shopping include fast transactions, product availability, free shipping, and affordable products (Pham & Ahammad, 2017; Risanty et al., 2020). Reedy, Schullo, and Zimmerman (2000) stated that online shopping could meet customer needs with online shopping activities.

In the context of Indonesia, online shopping has become a popular choice for acquiring goods and services. Online shopping in Indonesia is also growing very fast from year to year. According to the British research institute merchant machine, during 2018, Indonesia ranks among other countries with a growth of 78% in the list of top ten countries with the fastest-growing e-commerce in the world (Figure 1).

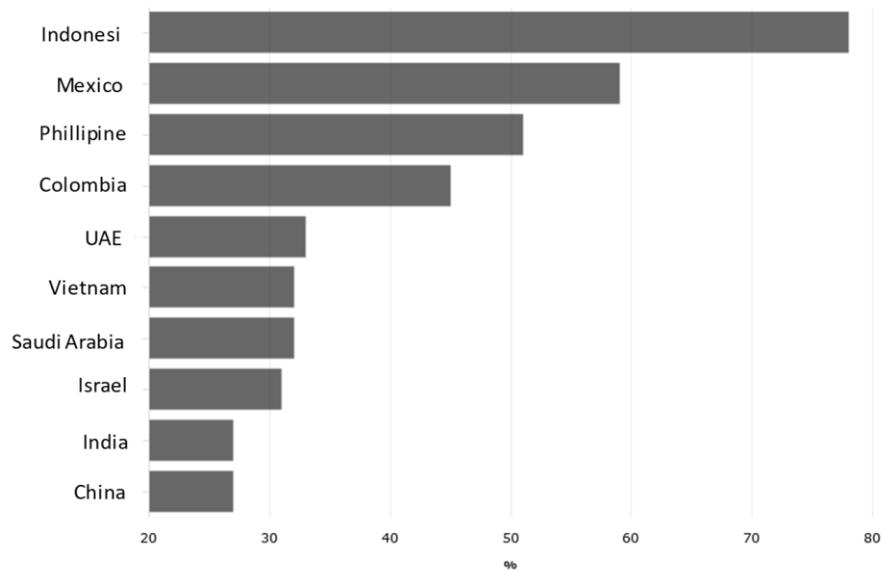


Figure 1. Top ten fastest growing e-commerce in the world

The trend indicates that online shopping in Indonesia is increasing and encouraging people to be more involved in online shopping. Moreover, it also shows a tendency to use online shopping continuously, which ultimately shows that customers are satisfied with online shopping services.

Customer satisfaction is the customer's response to products and services that meet their expectations (Griffin, 2005). Several factors can influence customer satisfaction, such as product quality, service quality, and price (Ngadino, Suharto & Farida, 2017; Razak, Nirwanto & Triatmanto, 2016; Jusoff & Hadijah, 2013; Gumussoy & Koseoglu, 2016).

The quality of service has a close relationship with customer satisfaction. Service quality provides customers with an opportunity to develop a strong relationship with the business (Afthanorhan, Awang, Rashid, Foziah & Ghazali, 2019). Griffin (2005) mentioned that many businesses assume that if the customer is satisfied with the service, the customer will become loyal and have a positive response to the business.

However, the toughest challenge in online shopping is ensuring and sustaining customer satisfaction (Zhou, Wang, & Shi, 2019). A strategy that focuses on services is critical in this dynamic environment (Al-dweeri, Ruiz Moreno, Montes, Obeidat, & Al-dwairi, 2019; Ehsani & Ehsani, 2015). A business should provide its customers with excellent service experiences to achieve their satisfaction, repurchase, and be loyal to the business (Gounaris, Dimitriadis & Stathakopoulos, 2010; Kitapci, Akdogan & Dortyol, 2014). Excellent service quality is required to achieve high levels of customer satisfaction, contributing to favorable behavioral intentions (Brady & Robertson, 2001; Senthilkumar, 2012).

The main purpose of this paper is to examine the relationship between the quality of service and the satisfaction of online shopping customers in Indonesia and examine the level of service quality and online shopping customer satisfaction. As follows, this paper is organized. The concept of service quality and customer satisfaction is presented in the next section. Next, the research methodology used in this study is outlined in section 3 and the result and discussions in section 4. Conclusions and recommendations are discussed in the last section 5 and section 6.

THE SERVICE QUALITY AND CUSTOMER SATISFACTION

Kotler and Armstrong (2012) argue that people's needs tend to be limited but not limited to people's desires. The people's desire is a form taken from the needs of people after being influenced by the environment, culture, and individual personality. People tend to find and create objects that can fulfill their satisfaction. Hence, customer needs and desires are about meeting their satisfaction (Kotler & Armstrong, 2012).

A production system and product offering must satisfy customers (Ahn, Ryu & Han, 2004). When a customer is interested, satisfied, and repurchases the product and more other customers are also interested in the product, it will improve sales and profits of a business (Malik, Ghafoor & Iqbal, 2012).

There is a dynamic set of related technologies, applications, and business processes in online shopping. The method connects businesses and customers or certain communities through electronic transactions and electronically provides goods, services, and information (Ahn et al., 2004).

Service quality refers to the degree to which the disparity between the customers' expectations and reality for the services delivered (Zeithaml, Parasuraman & Malhotra, 2002). The dimension of the quality of online shopping services is the level of quality that effectively and efficiently facilitates customers in buying and selling products and services (Afthanorhan et al., 2019). Meanwhile, customer satisfaction is a total product performance compared to a series of customer requirements (Hill, Brierley & MacDougall, 1999). In addition, customer satisfaction is not an absolute concept but rather relative or dependent on what customers expect (Gounaris et al., 2010).

Service quality is directly connected to customer satisfaction since service quality is an indicator of customer satisfaction. Quality is a product and service characteristic that relies on meeting anticipated needs (Kotler & Armstrong, 2012). Moreover, customer satisfaction occurs when customer expectations for products and services follow their needs (Bobâlcă & Țugulea, 2016).

Meanwhile, Kotler & Armstrong (2012) suggest that customer satisfaction is essential for future purchasing behavior. Pham & Ahammad (2017) added that customer satisfaction is also a crucial factor in the growth of customer behavior. Intention to repurchase indicates the willingness of a person, based on their previous shopping experiences, to make another purchase from the same business (Filieri & Lin, 2017; Hellier, Geursen, Carr & Rickard, 2003). Satisfied customers will increase utilization and potential use of the service (Henkel, Houchaime, Locatelli, Singh, Zeithaml & Bitterner, 2006). Therefore, customer satisfaction and purchase behavior can be improved by providing excellent service quality (Cronin, Brady & Hult, 2000).

Several previous studies indicate a significant relationship between service quality and customer satisfaction (Blut, Chowdhry, Mittal & Brock, 2015; Hammoud, Bizri, & El Baba, 2018; Kitapci, Akdogan & Dortyol, 2014; Pham & Ahammad, 2017; Wolfenbarger & Gilly, 2003). Customers must be provided with high-quality service to be satisfied and have the intention to repurchase (Gao, 2011). In addition, by providing customers with the best service and a good shopping experience, they will be satisfied and loyal to the vendor (Gallarza, Arteaga, Chiappa & Saura-Gil, 2015; Gumussoy & Koseoglu, 2016).

Lee & Turban (2001) noted that online shopping requires trust between the online retailer and the customer and between the customer and the overall system where the transaction takes place. Therefore, service quality must cover significant parts of the online shopping system to support and elevate customer satisfaction and trust. Chek & Ho (2016) also find empirical evidence of a positive relationship between customer

service, trust, and purchase intention. Moreover, Alrubaiee & Alkaa'ida (2011) and Kim, Wang, & Roh (2020) state that the quality of service has a significant and positive impact on customer confidence and has an indirect positive impact on trust mediated by customer satisfaction.

METHODS

This study uses a quantitative and cross-sectional design by distributing a validated survey questionnaire. This study's online shopping customers consist of undergraduate and postgraduate students in the Accounting Department of Universitas Sumatera Utara who used online shopping applications. We used a questionnaire due to its advantages, such as ease of use, reaching certain respondents, and effectiveness for investigating online shopping behavior. We submit the questionnaire directly to accounting students. Out of 400 distributed, 295 questionnaires were obtained for data analysis. Several questionnaires were excluded because the questionnaire did not return incomplete and careless answers that would impact the estimation. We present the variables used in this study in Table 1—also, each variable's operational definition and the indicators and scales.

Table 1. Operational definition of variables

Variables	Operational Definition	Indicators	Scale
Service Quality	Customer perceptions of the quality of service provided by online shopping vendors	1. Reliability 2. Responsiveness 3. Assurance 4. Empathy 5. Competence	5-point Likert
Online Shopping Customer Satisfaction	Perception of customer satisfaction with online shopping.	1. Vendor's responsibility 2. Product availability. 3. features and transaction security system	5-point Likert

The data is processed by regression analysis. Before testing the hypothesis, the validity and reliability of the existing research instruments are first tested. Testing the validity of the construction is done by consulting the instrument with experts (expert judgment). Reliability test is the extent to which the measurement results using the same object will produce the same data. Classical assumption testing is also carried out to state the fit of the research model and can be continued with linear regression

RESULT AND DISCUSSION

Table 2 shows the demographic profile in this study, which is based on gender, 36% were male respondents, and a majority of respondents in this study were female, who is 64% of total respondents. Based on the education level, most respondents (56%) in this study were undergraduate, and 44% of respondents were postgraduate level. Based on the age, the majority of respondents (45%) in this study were between 18-21 years old, 41% of respondents were between 21-25 years old, and followed by 14% of respondents were between 26-30 years old. Thus, in this study, female students were the most active in online shopping transactions, and most undergraduate students do online shopping. Students between 18-21 years old are the most active in online shopping.

Tabel 2. Demographic profiles

Demographic Profiles	F	%
Gender:		
Male	105	36
Female	190	64
Education Level:		
Undergraduate	166	56
Postgraduate	129	44
Age:		
18-21	133	45
21-25	121	41
26-30	41	14

In table 3, based on the validity test, it can be concluded that all constructs are valid and acceptable.

Table 3. Validity test

Variables	Validity	Specification
Reliability	.602	Acceptable
Responsiveness	.607	Acceptable
Assurance	.515	Acceptable
Empathy	.622	Acceptable
Competence	.521	Acceptable
Responsibility	.643	Acceptable
Product availability	.615	Acceptable
Security system	.535	Acceptable

Table 4 shows that service quality constructs are .700 and online shopping customer satisfaction constructs are .562. It can be concluded that all instrument items are reliable.

Tabel 4. Reliability Test

Variables	Cronbach's Alpha	N
Service Quality	.700	5
Online Shopping Customer Satisfaction	.602	3

Based on Table 5, it can be explained that: 1) most respondents select good on the services provided are reliable and error-free during access; 2) most respondents good at the services provided are responsive and fast; 3) most respondents answered good that the services provided are safe and secure; 4) most respondents answered good on the service quality can be adjusted according to user needs; 5) most respondents answered good on the service quality with competence and professional excellence

Students as online shopping customers expect the best service from online shopping providers—especially services related to reliable and error-free in accessing services. Fast response and transaction security is the most important service feature. According to respondents, a good customer service system will help the provider respond and serve each customer quickly and accurately (Afthanorhan et al., 2019). A good level of professionalism is also an important part of providing the best service to customers, and this is also an expectation for online shopping customers. Finally, adjustable services based on the customer needs are important in service quality because each customer's needs may differ. The provider may bridge these differences to satisfy customers (Malik et al., 2012). These results align with Disastra & Wulandari (2017)

and Hanny & Azis (2018), where reliability, responsiveness, assurance, empathy, and competence are some of the main focuses of online shopping customers.

Table 5. The Level of Service Quality

Items	E		G		N		P		VP		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
The services provided are reliable and error-free during access	55	18.6	131	44.4	77	26.1	26	8.8	6	2	295	100
The services provided are responsive and fast.	68	23.1	154	52.2	50	16.9	19	6.4	4	1.4	295	100
The services provided are safe and secure	68	23.1	154	52.2	50	16.9	19	6.4	5	1.4	295	100
Service quality can be adjusted according to user needs	52	17.6	117	39.7	86	29.2	34	11.5	6	2	295	100
Service quality has competence and professional excellence.	64	21.7	137	46.4	48	16.3	31	10.5	15	5.1	295	100

* E (Excellent), G (Good), F (Fair), P (Poor), VP (Very Poor)

According to Table 6, it can be concluded that: 1) most respondents are very satisfied with the vendor's responsibility; 2) most respondents are very satisfied with the assurance of product availability; 3) most respondents are very satisfied with the features and transaction security system.

Table 6. The level of online shopping customer satisfaction

Items	CS		VS		MS		SS		NAS		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
Satisfied with the vendor's responsibility	66	22.4	152	51.5	53	18	20	6.8	4	1.4	295	100
Satisfied with the assurance of product availability.	64	21.7	96	32.5	92	31.2	32	10.8	11	3.7	295	100
Satisfied with the features and transaction security system	52	17.6	151	51.2	55	18.6	26	8.8	11	3.7	295	100

*CS (Completely Satisfied), VS (Very Satisfied), MS (Moderately Satisfied), SS (Slightly Satisfied), NAS (Not at All Satisfied)

In general, online shopping customers are very satisfied with their transactions. Particularly, online shopping customers are very satisfied with the vendor's responsibilities by providing a product warranty system, delivery guarantee, and the vendor's ability to respond to any customer complaints. Customer satisfaction is very high in terms of the availability of products, and this is part of the vendor commitment by providing the latest product details and availability information. Online shopping customers are also very satisfied with the payment system in online shopping, where they give flexibility in payment methods and payment facilities, both cash, and credit. The vendors provide flexible payment systems and cooperate with leading banks and e-wallet vendors to provide security and convenience in payment transactions. These

results align with Hanny & Azis (2018), Ngadino et al. (2017), and Razak et al. (2016), where most consumers are satisfied with the vendor's responsiveness, product availability, features, and transaction security system.

According to Table 7, the t-count value of this variable is 3.863, with a significant level of 0.00. This means that service quality has a positive and significant effect on customer satisfaction.

Table 7. Coefficients analysis

Model	Unstandardized		Standardized	t	Sig.
	B	Std. Error	Beta		
(Constant)	.233	.481		.484	.629
Service Quality	.149	.038	.231	3.863	.000

The result indicates that excellent service quality to online shopping customers will elevate customer satisfaction. Moreover, service quality which consists of reliability, responsiveness, assurance, empathy, and competence, plays an important role in delivering excellent online shopping services. In addition, excellent service quality and proper service features will improve online shopping customer satisfaction. Thus, service quality can be an essential factor to increase online shopping customer satisfaction.

The results of this study are consistent with Al-dweeri et al. (2019), Baker & Crompton (2000), Gallarza et al. (2015), Gumussoy & Koseoglu (2016), Hammoud et al. (2018), Kim et al. (2020), and Zhou et al. (2019). These studies found a positive and significant relationship between online service quality and customer satisfaction. Hence, online shopping vendors' excellent quality of service will improve customer satisfaction (Baker & Crompton, 2000).

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Indonesia has become one of the fastest-growing countries in electronic commerce, and this encourages online shopping vendors to compete in service and provide the best services and products. The student is an active online shopping customer and has become a significant part of online shopping development in Indonesia. The study investigates the relationship between service quality and online shopping customer satisfaction based on accounting students' perceptions at the Universitas Sumatera Utara.

The results show that a good level of online shopping service quality. Meanwhile, online shopping customer satisfaction is at a very satisfactory level. These results indicate that a good level of service quality is an advantage for online shopping vendors. Online shopping vendors will get positive feedback on customer satisfaction and become loyal customers. In the end, a high level of customer satisfaction can increase the volume of online shopping sales.

This study shows that online service quality has a positive and significant relationship with online shopping customer satisfaction based on accounting students' perceptions at the Universitas Sumatera Utara. Findings reveal that the excellent quality of online shopping services will elevate online shopping customer satisfaction. The study indicates that excellent service quality is an important indicator in achieving high customer satisfaction in online shopping.

The study support and confirm the concept of customer satisfaction and its relationship to service quality in online shopping. This study also supports previous

studies that state a positive and significant relationship between service quality and online shopping customer satisfaction. Thus, to elevate customer satisfaction, the quality of service must be improved.

This study implies that the quality of services strongly influences online shopping customer satisfaction. Thus, online shopping vendors may consider the level of responsibility, product availability, and features, and transaction security systems to increase customer satisfaction. Likewise, vendors can use reliability, responsiveness, assurance, empathy, and competence to improve the quality of their services and ultimately achieve customer satisfaction.

Recommendations

Online shopping is related to the rapid development of information and networking technology. Thus, it is necessary to include indicators that can assess the rapid development of the technology. Moreover, it is recommended to examine vendor satisfaction, especially with the quality of services and systems to serve their customers.

Online shopping vendors should continue to develop the best service and transaction security features. Vendors may also provide innovations and promotional programs to attract customers' interest and improve their satisfaction. It is necessary to provide understanding and education to all online shopping customers, especially among students, regarding the proper and safe use of online shopping service facilities.

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