

Investigating the Repurchase Intention of E-Commerce Users from Service Quality and Expectation-Confirmation Theory Perspectives

Bagas Putra Pradana^{1✉}

¹Politeknik Negeri Semarang

bagas.putra.pradana@polines.ac.id

Abstract

E-commerce in Indonesia is experiencing rapid development. This must be maintained for the country's benefit and to increase the prosperity of the people. Most existing research concerning e-commerce is under the context of developed countries that have adopted information technology earlier than developing countries, such as Indonesia. The purpose of this study is to know the critical components of e-commerce service quality that can affect the level of customer satisfaction and loyalty in developing countries such as Indonesia using dimensions that researchers have tested in developed countries. Data collection was carried out using an online survey to all Indonesian citizen over the age of 15 years old. To examine the interrelationships among service quality variables and their dimensions, confirmation, consumer satisfaction, and repurchase intention, partial least squares (PLS) performed for the data analysis. The Smart Partial Least Square (SmartPLS 3.0) revealed a positive relationship among service quality, confirmation, satisfaction, and repurchase intention. A positive and significant correlation was also found between website design, information usefulness, privacy & security towards service quality. On the other hand, fulfillment and ease of ordering produced an insignificant relationship with service quality.

Keywords: E-Service Quality, Repurchase Intention, Expectation-Confirmation Theory, Consumer Satisfaction, E-Commerce.

JIdT is licensed under a Creative Commons 4.0 International License.



1. Introduction

The rapid growth and development of information and communication technology, changing human lifestyles. It also has an impact on changing marketing and commercial activities. Encourage companies and business people to utilize and develop e-commerce to facilitate and support customer relationships. Humans now prefer to shop for goods or services through online purchase transactions compared to conventional markets. The convenience is obtained because they can do it wherever they are, including choosing goods online, placing their order, making payments with online payments that have been widely available, and waiting for goods to be delivered to their homes. One of the countries with growing internet penetration in Indonesia also impacts the rapid growth of e-commerce. In 2018, Statista stated that internet penetration in Indonesia reached more than 50%, with 104.96 million internet users. In 2021 Indonesia was projected to become one of the largest online market countries in the world, with internet users reaching 133.39 million. According to Statista, Indonesia currently has around 28.2 million e-commerce consumers and is projected to grow annually by 3-4% for the following year [1]. The biggest consumers for online purchases are aged between 25-34, with the number of shoppers reaching 12.8 million users. Moreover, Forrester revealed that online consumers increase their purchases in specific product categories

and increase their product purchases in a broader category than before [2].

Indonesia shows the rapid development of digital technology. Indonesia can achieve economic growth of around \$ 150 billion by optimizing digital technology with an annual impact by 2025 [3]. Countries with rapid technological growth will reap long-term economic benefits. From a socio-economic point of view, Indonesia is still in a very early stage of digitization, but it has unique characteristics. Despite the fragile and backward information and communication technology infrastructure, Indonesian Internet users are among the world's most active users. However, Internet users in Indonesia are very excited about the technology.

At present, e-commerce in Indonesia is experiencing rapid development. This must be maintained for the country's benefit and to increase the prosperity of the people. E-commerce generally refers to tools that help facilitate the buying and selling products or services through the Internet and technology. E-commerce activities include selling goods and services, including tickets, entertainment, travel, and others [4]. Indonesia's e-commerce market offers many opportunities and generated around \$ 2.5 billion in investments in 2015. According to Australia Trade and Austrade in 2018, Indonesia's number of online shoppers will increase to 199 million by 2025 [1]. With local e-commerce dominating the market like Tokopedia, Traveloka, Bukalapak, and GoJek. Moreover, many local markets and malls will try online

markets such as Shopee, Blibli, JD, Lazada, and many more, which will animate and become competitors to be reckoned with.

Using e-commerce for shopping generally has unique characteristics compared to offline stores. E-commerce developers must be careful with behavior to provide a reliable platform, and the government must support the development of e-commerce itself [5]. The rapid growth of e-commerce in Indonesia is supported by the increasing penetration of smartphones, the ease of investment for foreign investors, and the advent of user-friendly digital money for consumers [6].

As a result of the discussion that has been explained, the objectives of this study are as follows: (1) knowing the critical components of e-commerce service quality that can affect the level of customer satisfaction in a developing country such as Indonesia, (2) understanding the extent to which customer satisfaction can predict the possibility of customer repurchase intention in e-commerce platform, and (3) to test instruments of service quality that widely used in a developed country, apply it in the new cultural setting such as Indonesia as developing country. This research provides understanding, suggestion, and insight to decision-makers, such as business people or owners, governments, and individuals interested in consumer e-commerce behavior. This paper is organized as follows: Section 1 introduces the problem and the author's interests. The literature review is provided in section 2. Section 3 presents the research model, hypothesis development, and research methodology, including samples, procedures, and measurement items. Section 4 presents the study results containing the results of the validity and reliability tests and the results of hypothesis testing. The last section, section 5, will discuss the study results and the conclusion.

2. Literature Review

Research on consumer post-purchase behavior is a theme that is widely praised in the consumer behavior literature [7]. In this research literature, research frameworks are commonly used in the context of post-consumer purchases to examine customer satisfaction, and repurchase options are expectation-confirmation theory (ECT) [7], [8], [9]. The expectation-confirmation theory (ECT) has been widely adopted and used by researchers to study and test the level of consumer satisfaction and behavioral intentions [10], [11]. The ECT can explain that consumers' intention to repurchase products and further use of services will largely be determined based on the previous purchase or use. By using ECT, customer satisfaction can reflect expectations before purchase and confirmation after receiving the purchase results.

In the past decade, the expectation-confirmation model (ECM) has received much consideration and attention from IS researchers in matters of post-adoption

behavior. ECM is the result of the adoption and development of ECT, which conveys that the expectations and quality of service that is suitable can result in customer satisfaction and will undoubtedly increase their repurchase intentions. The level of customer satisfaction will affect the intention of the customer's sustainability behavior. As a result, satisfied customers will satisfy, and otherwise, customers will leave, and perhaps many will move to competitors [10].

The expectation-confirmation theory (ECT) has been widely adopted and used by researchers to study and test the level of consumer satisfaction and behavioral intentions [10], [11]. The ECT can explain that consumers' intention to repurchase products and the further use of services will largely be determined based on the previous purchase or use of the product or service. In ECT, post-adoption of consumer behavior such as satisfaction is placed as a function of expectations and confirmation. Expectations can be interpreted as references that customers can use to make an initial assessment of a product or service that they want or have purchased [10]. Confirmation refers to the evaluation and assessment of consumers of products, services, or forms of technology, which can be compared with initial expectations. Figure 1 illustrates the primary constructs and relationships in ECT.

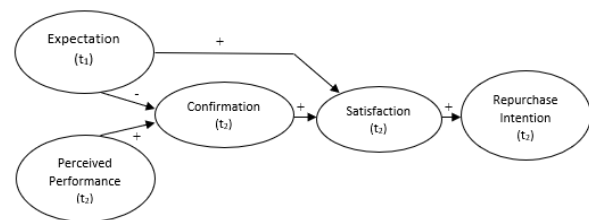


Figure 1. Expectation-Confirmation Model [12]

Oliver [10] explained that there have been 3 levels of confirmation. First, once a product, service, or technology can exceed a person's initial expectations, confirmation is positive, which can increase satisfaction when purchase. The second is that the opposite; if a product, service, and technology don't meet a person's initial expectations, the confirmation are going to be negative and cut back satisfaction. Thirdly, confirmed expectations happen when a product, service, and technology show a similar level as initial expectations. In shock therapy within the IS literature, confirmation is commonly used. Therefore, in the gift study, we are going to use confirmation to clarify the confirmation contained in the ECT.

The ability to predict from this theory has been widely used in a wide range of product and service continuance contexts. The process of how consumers can reach the level of repurchase intentions in the ECT framework is as follows [12]. Consumers form initial expectations of the product or service before buying in the first process. Second, they create a perception of the results or performance. Third, determine the value of the effects

of goods or services received and conclude the attitude of the assessment, whether their expectations are confirmed. Fourth, they determine the level of satisfaction or dissatisfaction from confirmation results in the third process. Finally, satisfied customers will form a repurchase intention, while dissatisfied consumers will stop using them.

In the past decade, the expectation-confirmation model (ECM) has received a lot of thought and a focus from IS researchers in matters of post-adoption behavior. ECM is that the results of the adoption and development of ECT. The ECM model of IS continuance (see Figure 2) proposes that users' intentions to continue mistreatment IS are directly influenced by their perceptions of the expected advantages from using IS and also the level of satisfaction received supported previous user expertise [12].

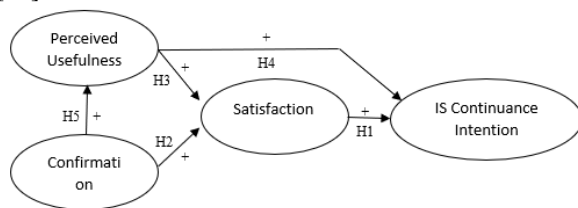


Figure 2. A Post-Acceptance Model of IS Continuance [25]

Conceptually, ECM depends on attributes of the expertise response (confirmation), expectations of profit (perceived usefulness), and emotional responses (satisfaction) to form selections concerning the any use of IS. Confirming expectations before use could be a essential issue that unambiguously distinguishes ECM from different models that specify IT usage behavior, equivalent to TAM, TPB, and others.

Furthermore, many studies use the ECM approach, but most of it is done in developed countries. We want to use that gap as a motivation to apply the ECT model to research one of the developing countries, Indonesia. A full description of the development of e-commerce in Indonesia will be presented in the next section.

2.1 Research Model

We propose a research model (see Figure 3), which explains the relationships of service quality and its five attributes; website design, ease of ordering, fulfillment, information usefulness, privacy & security. The following relationship is between service quality and confirmation, from service quality and confirmation to consumer satisfaction — finally, the connection between satisfaction and service quality toward repurchase intention. The relationships among variables displayed in the research model will be in seven different hypotheses, further explained in the next section.

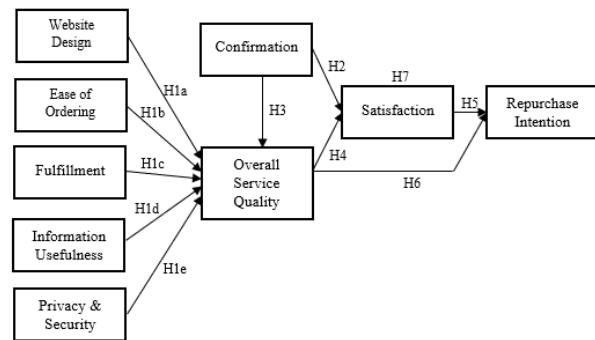


Figure 3. Research Model

2.2 Sample and Procedure

The subject of this research is aimed at specific groups as respondents who will provide the information needed for this study and according to specified criteria. The criteria required for respondents in this study are internet users in Indonesia who have visited, shopped, or used services provided by e-commerce sites, at least in the last six months, to ensure respondents remember their experience in using online service sites. The target population of this study is all Indonesian citizens aged over 15 years of age who understand their buying experience in e-commerce. Data collection was carried out using an online survey provided through Google Docs.

Pretest has been done to get more accurate results and reduce the potential for ambiguity by inviting three doctoral students to test the content and give suggestions for language and the significance of the questions. Furthermore, the pilot study was carried out by examining the administrative instruments and procedures. Data collection for the pilot study was carried out one week and got 49 valid answers to be processed. Statistical analysis shows that the AVE value of all constructs is above the threshold of 0.5 and the value of Cronbach's alpha and composite reliability above the threshold of 0.6 and hence acceptable [13]. Data collection for hypothesis testing was carried out using the same procedure as the pilot study. Within two months, a total of 463 answers were collected. After removing samples with no usage experience and missing data, we obtained 368 responses that could be used.

This study has nine variables construct, every of that has many things measured employing a seven-point Likert-type scale (1 = powerfully disagree and seven = strongly agree). To look at the interrelationships among service quality variables and their dimensions, confirmation, client satisfaction, and repurchase intention, a partial statistical method (PLS) were performed for the info analysis. We tend to use PLS to assess capital measuring and construction. We tend to select PLS to research the data and look at the model because it fits with the idea development research,

which emphasizes its prophetic power during this study [13], [14]. Structural models are analyzed through 3 stages (outer model analysis, inner model analysis, and hypothesis analysis). SmartPLS has received attention and recognition from teachers since then have the ability to research numerous sorts of knowledge (ratios, intervals, Likert scales, etc.), is simple to use by users, exclusive features, and doesn't need alternative assumptions, equivalent to normality and enormous sample sizes [15].

The outer model analysis is applied to verify that the planned construction is valid and reliable. Outer model analysis may be tested victimization validity indicators, discriminant validity, and unidimensionality. Convergent validity here is measured by watching the common Variance Extracted (AVE) value. This research uses cross loading to live discriminant validity. This study checked out the worth of Cronbach alpha and composite reliability to check internal consistency. the internal model testing ensures that the structural model is solid and appropriate.

2.3 Hypotheses Development of E-commerce Service Quality

All components, attributes, and scale emphasize important aspects of e-commerce service quality. Still, they have been developed and adopted in various countries, especially developed countries, before Indonesia, as a developing country. We assume that the customer's initial point of view is a primary essential factor for assessing service quality. The application of service quality will be very different for consumers in developed and developing countries. Therefore, conclude from previous studies, this study will identify website design, ease of ordering, fulfillment, information usefulness, privacy & security as essential factors related to e-commerce service quality. We adopt three comprehensive factors from Wolfinbarger and Gilly [16]: website design, fulfillment, and privacy & security, and use two new factors developed from Tandon et al. [17] research that also uses developing countries to be examined in their research. Consistently, many beneficial factors lead them to do online shopping. From here, we consider using the ease of ordering as one new factor supporting service quality. Finally, to measure and assess each of the contributions of these factors, e-commerce website quality in the consumer's perspective is conceptualized as a unity of five elements (website design, ease of ordering, fulfillment, information usefulness, and privacy & security), and we propose the following hypothesis.

- a) **Hypothesis 1a (H1a).** Website design affects e-commerce service quality.
- b) **Hypothesis 1b (H1b).** Ease of ordering affects e-commerce service quality.

c) **Hypothesis 1c (H1c).** Fulfillment affects e-commerce service quality.

d) **Hypothesis 1d (H1d).** Information usefulness affects e-commerce service quality.

e) **Hypothesis 1e (H1e).** Privacy & security affects e-commerce service quality.

2.4 Hypotheses Development of Expectation-confirmation Model

In the initial construction stated by Bhattacharjee [12], ECM connects the user's initial expectations and confirmation toward the perceived usefulness, which is part of the structure of the TAM (technology acceptance model), also correlates with user satisfaction. ECM, which is widely used in IS continuance research, has experienced much development from researchers. ECM places customer satisfaction determined by expectation confirmation [18]. Previous studies have produced many similar conclusions about the relationship of confirmation and satisfaction, which confirmation has a positive relationship with satisfaction [12], [19], [20], [21]. While the actual use of technology produces satisfaction balanced with initial expectations, the existing confirmation will result in user satisfaction. Otherwise, dissatisfaction will result from unfulfilled expectations [21]. The same can be applied to the e-commerce context. The level of satisfaction can be determined from the initial expectations confirmed. Thus, we propose the following hypothesis:

- a) **Hypothesis 2 (H2).** A confirmation has a positive association with customer satisfaction.

Service quality is a significant predictor of user satisfaction [22]. Previous research conceptualizes service quality as user perceptions of service perfection. It illustrates the difference between expectations and the system's actual performance in the context of quality [23], [24], [25]. Research from Lai [22] revealed that service quality affects confirmation. Confirmation requires the results of using the expectations of the entire system to illustrate the results of the final satisfaction. Therefore,

- b) **Hypothesis 3 (H3).** A confirmation has a positive association with overall e-commerce service quality.

2.5 Hypotheses Development of Consumer Satisfaction

Customer satisfaction is defined as consumer responses from evaluations based on their emotional responses [10]. This illustrates customer confidence in the possibility of service that leads to positive results. Previous research explains a significant relationship between service quality and customer satisfaction and the relationship influencing the actual use of online services [26], [27], [28]. Gounaris et al. [26] revealed a positive influence between service quality and customer satisfaction. Bansal et al. [29] found that the

characteristics of the website, the specific value of the website, its relative value became essential drivers of satisfaction on the site.

It is imperative to find and know which factors of e-commerce service quality have the most positive influence on customer satisfaction. In their research, Shankar et al. [30] explained that customer satisfaction is a specific relationship built from a series of effects that differ from customer experience when using online services or transacting within a certain period. Prior customer experience with platform services dramatically influences their choice of loyalty. Such services will vary and differ among countries. Recent research uses identify website design, ease of ordering, fulfillment, information usefulness, privacy & security as essential factors that affect service quality because customers in Indonesia who are just implementing e-commerce will be the factors that determine subsequent satisfaction. Therefore, the following hypothesis is provided to investigate the relationship between service quality and customer satisfaction in e-commerce.

a) **Hypothesis 4 (H4).** E-commerce service quality has a positive association with customer satisfaction.

2.6 Hypotheses Development of Repurchase Intention

Repurchase intention is consumers' assessment of choosing to buy back at a company [31]. Customer repurchase intention is a customer's assessment of the company after making a transaction and feeling their satisfaction and needs are met. Future repurchase intention is greatly influenced by customer satisfaction [32]. Bhattacharjee [12] states that satisfaction influences the use of IS, system success [33], attitude toward technology [34], and technology acceptance [35]. Satisfaction is also a determinant factor in post-adoption behavior [12]. Several studies have found a positive relationship between customer satisfaction and repurchase intention [16], [27]. Thus, the following hypothesis is proposed:

a) **Hypothesis 5 (H5).** Customer satisfaction has a positive association with repurchase intention.

High service quality can confirm an honest repurchase intention, whereas a coffee service quality will cut back the likelihood of shoppers creating repurchase intention. Shin et al. [36] conclude that platform quality is crucial for increasing repurchase intention from a consumer perspective. Lee and statue maker [37] analysis found overall service quality and customer satisfaction regarding repurchase intention. Chang and Wang [39] examine the link between service quality and customer satisfaction and notice a significant impact on repurchase intention. Chau and Kao [38] over that the factors in commission quality have a significant influence and a positive relationship on customer satisfaction and repurchase intention. Thus, we tend to propose the subsequent hypothesis:

b) **Hypothesis 6 (H6).** E-commerce service quality has a positive association with repurchase intention.

Many previous studies have over that service quality could be a decisive variable for future client behavior. This study can live the link between service quality and repurchase intention with customer satisfaction as a mediating variable. Previous analysis has explained that service quality is one predictor of repurchase intention [28], [36] and a significant indicator of customer satisfaction [36], [37], [40]. Gounaris et al. [26] justify that satisfaction mediates service quality on customer activity intention. Udo et al. [28], within their research in the United States, examined the relationship between service quality and repurchase intention with the mediation of satisfaction and resulted in an exceedingly stronger relationship than the direct relationship between service quality and repurchase intention. Shin et al. [36] ensure that service quality will affect repurchase intention by increasing client satisfaction in online transactions. This study aims for a right away and indirect relationship between service quality and repurchase intention. The last hypothesis we tend to propose is as follows:

c) **Hypothesis 7 (H7).** E-commerce service quality has a positive association with repurchase intention mediates by customer satisfaction.

3. Results and Discussion

The demographics of respondents in this research showed that the number of female respondents was higher (60.6%) than male respondents (39.4%). Respondents aged 24-27 years dominated with the number of respondents up to 48.6%, and respondents who are workers or employees became the most with 57.1% compared with student respondents (32.3%) and entrepreneurs (10.6%). Those with an average salary of 2-4 million rupiahs were the most respondents (41.3%). Most of the respondents used bank transfer / ATM / mobile banking (75%) to make payment transactions in e-commerce compared to other payment methods. Besides, payment through e-money is a new emerging trend and is the second most widely used payment method (10.1%). This trend is felt to continue to increase along with increasing public knowledge about e-money, promos offered, and public facilities that require using e-money. Based on the data in this study, Instagram, YouTube, and WhatsApp have become the favorite social media platforms. Shopee is the most widely used e-commerce platform by shoppers in Indonesia (74.7%), with fashion (75.8%) being the most purchased item through e-commerce platforms.

3.1 Validity and Reliability of Measures

This takes a look at makes use of 3 measurements to evaluate discriminant validity; Fornell-Larcker criterion, cross-loadings, and heterotrait-monotrait (HTMT) ratio of correlations criterion. Discriminant

validity guarantees that constructs measured empirically are precise and constitute a phenomenon of hobby that different measurements withinside the structural equation version aren't captured. Discriminant validity is shaped if the variance

withinside the measured latent variable is more significantly related to the indicator variable than its department with different constructs at the identical version [41].

Table 1. Fornell-Larcker Criterion

	CON	FUL	INF	ORD	PS	REP	SAT	SERV	WD
CON	0.852								
FUL	0.435	0.844							
INF	0.405	0.603	0.864						
ORD	0.152	0.347	0.412	0.864					
PS	0.287	0.437	0.455	0.333	0.754				
REP	0.590	0.446	0.456	0.222	0.301	0.850			
SAT	0.715	0.461	0.439	0.221	0.261	0.700	0.867		
SERV	0.604	0.541	0.561	0.288	0.398	0.543	0.607	0.906	
WD	0.462	0.681	0.627	0.356	0.391	0.448	0.520	0.603	0.834

Table 1 shows the square root of AVEs (in bold) compared to correlations from other constructs. Since the square root of AVEs is higher than the correlation among other constructs, it qualifies as discrimination.

The second approach is the heterotrait-monotrait (HTMT) ratio of correlations. If the HTMT value is lower than 0.90, discriminant validity has been formed between the two reflective constructs [42].

Table 2. Heterotrait-Monotrait (HTMT) Ratio

	CON	FUL	INF	ORD	PS	REP	SAT	SERV	WD
CON									
FUL	0.498								
INF	0.474	0.711							
ORD	0.177	0.410	0.494						
PS	0.328	0.495	0.540	0.432					
REP	0.672	0.509	0.535	0.263	0.353				
SAT	0.811	0.524	0.510	0.255	0.294	0.787			
SERV	0.682	0.614	0.650	0.332	0.451	0.615	0.680		
WD	0.524	0.774	0.730	0.410	0.446	0.506	0.585	0.675	

As shown in Table 2, all constructs have HTMT values below 0.09. Thus, the discriminant validity requirements of the measurements have been met. The third approach to measure discriminant validity is cross-loadings. According to Chin [13], each loading indicator must be greater than all cross-loadings.

3.2 Path Analysis and Hypothesis Testing

After measuring the proposed construct's validity and reliability, the research model's path relationships have been analyzed using smartPLS 3 software. Empirical data support most conceptual models proposed. Path analysis provides support for several hypotheses from this research. This research has ten hypotheses with the proposed direct relationship; 8 of them generate support from the proposed theory. The results of the hypothesis test are summarized in Table 3.

Table 3. Results of Hypothesis Testing

Hypotheses	Independent variable	Dependent variable	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	Results
H1a	WD	SERV	0,233	0,231	0,059	3,971	0,000	Support
H1b	ORD	SERV	0,024	0,022	0,041	0,586	0,558	Reject
H1c	FUL	SERV	0,074	0,075	0,056	1,303	0,193	Reject
H1d	INF	SERV	0,176	0,177	0,055	3,210	0,001	Support
H1e	PS	SERV	0,082	0,085	0,038	2,178	0,032	Support
H2	CON	SERV	0,366	0,366	0,047	7,794	0,000	Support
H3	CON	SAT	0,548	0,574	0,046	11,984	0,000	Support
H4	SERV	SAT	0,276	0,276	0,051	5,465	0,000	Support
H5	SAT	REP	0,586	0,589	0,050	11,623	0,000	Support
H6	SERV	REP	0,187	0,186	0,041	4,582	0,000	Support

In Figure 4, we can see that the conceptual model can explain 53.9% (R²) of the variation in service quality with predictive relevance Q² of 0.363, which indicates that the model has a relevant prediction. The hypothesis of website design (p value= 0.000<0.05), information usefulness (p value= 0.001<0.05), privacy & security (p value= 0.032<0.05), and confirmation (p value= 0.000<0.05) are statistically significant and support the

proposed model. While the hypothesis for ease of ordering (p value=0.558>0.05) and fulfillment (p value=0.193>0.05) shows results that are not statistically significant and does not support the proposed model. Therefore, Hypotheses H1a, H1d, H1e, and H3 are supported. However, H1b and H1c are not supported.

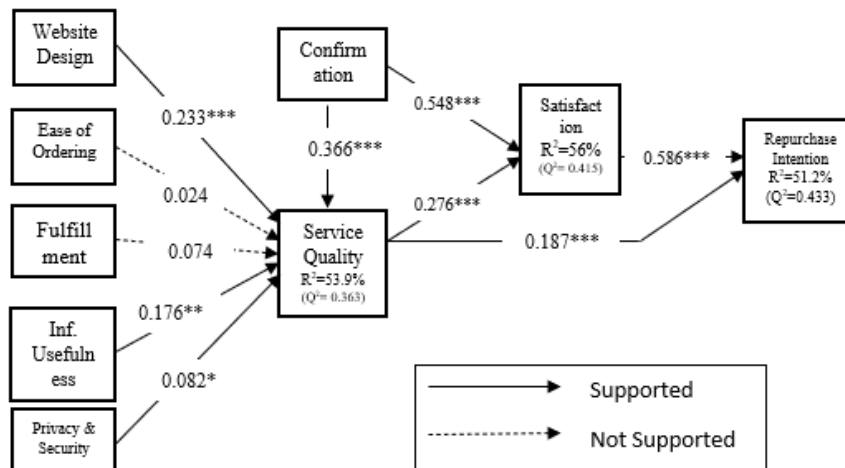


Figure 4. Results of the path analysis. Notes: *:p<0.05, **:p<0.01, ***:p<0.001

The conceptual model explained 56% of the variations in satisfaction with predictive relevance Q² of 0.415. The hypothesis of confirmation (p value= 0.000<0.05), and service quality (p value= 0.000<0.05) is statistically significant and support the proposed model. Therefore, H2 and h4 are supported to explain satisfaction.

The conceptual model explained 51.2% of the variations in repurchase intention with predictive relevance of Q² of 0.433. The hypothesis of satisfaction (p value= 0.000<0.05), and service quality (p value= 0.000<0.05) is statistically significant and support the proposed model. Therefore, H5 and H6 are supported to explain satisfaction.

Table 4. Results of indirect effects

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STD DEV)	T Statistics (O/STD DEV)	P Values	Results
SERV → SAT → REP	0.162	0.165	0.031	5.168	0.000	Support
CON → SERV → SAT	0.101	0.100	0.022	4.545	0.000	

Table 4 shows the mediating effects of service quality, satisfaction, and repurchase intention with satisfaction as the mediating variable. The direct relationship between service quality and repurchase intention shows significant results (p <0.01), and we can see the results if using satisfaction as a mediating variable, showing the same results that are significantly related (p <0.01). In this case, the results indicate that satisfaction has a partial mediation effect on the relationship between service quality and repurchase intention. Service quality and repurchase intention have a significant relationship directly or indirectly with satisfaction as a mediating variable. Thus, for H7, we can conclude that the relationship between service quality and repurchase

intention will remain significant even without using satisfaction as a mediating variable.

4. Conclusion

This research examines and investigates the relationships between variables that make up service quality such as website design, ease of ordering, fulfillment, information usefulness, and privacy & security that has been used by previous researchers and apply them in developing countries, Indonesia because many of the earlier studies were conducted in developed countries. The tests performed in this study are: three of the five dimensions of service quality had a significant relation with overall service quality, website design, information usefulness, and privacy &

security. Each has a positive effect on overall service quality. The other dimensions, namely fulfillment and ease of ordering do not affect service quality. The other relationship is confirmation positively related to each variable overall service quality and satisfaction. Overall service quality was positively correlated with each satisfaction and repurchase intention variable. The last variable, satisfaction, is positively related to repurchase intention.

5. Limitations

The limitations of the present study are time and geographical constraints. Further research can widen from this research. Increasing the sample and conducting research in several developing countries will clarify more complex. Use additional dimensions that already exist or try to use new aspects generated by yourself to find results that can better explain the quality of service, satisfaction, or repurchase intention.

In this study, respondents who can fill out questionnaires do not have purchasing experience on e-commerce sites. In subsequent studies, it is better to use more respondents, and all have purchasing experience in e-commerce to get more precise results about service quality dimensions.

This research only focuses on service quality and consumer behavior in the direction of repurchase intention. In developing countries, e-commerce technology is still very much able to go further, and there are still many aspects that have just been applied. However, there is still minimal research, such as the use of e-money in online buying and selling transactions and daily payments, which will be very interesting to investigate the application and user behavior in life.

References

- [1] Rita, P., Oliveira, T., & Farisa, A. (2019). The impact of e-service quality and customer satisfaction on customer behavior in online shopping. *Heliyon*, 5(10), e02690. doi: 10.1016/j.heliyon.2019.e02690.
- [2] Liao, C., Lin, H.-N., Luo, M. M., & Chea, S. (2017). Factors influencing online shoppers' repurchase intentions: The roles of satisfaction and regret. *Information & Management*, 54(5), 651-668. doi: 10.1016/j.im.2016.12.005.
- [3] Das, K., Gryseels, M., Sudhir, P., & Tan, K. T. (2016). Unlocking Indonesia's digital opportunity. *Journal McKinsey Company Indonesia Office*. doi: 10.31580/apss.v2i3.379.
- [4] Hu, M., & Monahan, S. (2016). US e-Commerce Trends and the Impact on Logistics. *Journal AT Kearney*. doi: 10.3390/jtaer17030045.
- [5] Hwang, Y. (2005). An empirical study of online trust and consumer behavior: Cultural orientation, social norms, and personal innovativeness in information technology. *Journal ICIS Proceedings*, 69. doi: 10.1016/j.chb.2015.08.039.
- [6] Lestari, D. (2019). Measuring e-commerce adoption behaviour among gen-Z in Jakarta, Indonesia. *Economic Analysis and Policy*, 64, 103-115. doi: 10.1016/j.eap.2019.08.004.
- [7] Churchill Jr, G. A., & Surprenant, C. (1982). An investigation into the determinants of customer satisfaction. *Journal of Marketing Research*, 19(4), 491-504. doi: 10.1177/002224378201900410
- [8] Anderson, E. W., & Sullivan, M. W. (1993). The antecedents and consequences of customer satisfaction for firms. *Journal Marketing Science*, 12(2), 125-143. doi: 10.1287/mksc.12.2.125.
- [9] Oliver, R. L. (1993). Cognitive, affective, and attribute bases of the satisfaction response. *Journal of Consumer Research*, 20(3), 418-430. doi: 10.1086/209358.
- [10] Oliver, R. L. (2014). *Satisfaction: A behavioral perspective on the consumer*: Routledge. doi: 10.4324/9781315700892.
- [11] Aurier, P., & Guintcheva, G. (2014). Using Affect-Expectations Theory to Explain the Direction of the Impacts of Experiential Emotions on Satisfaction. *Psychology & Marketing*, 31(10), 900-913. doi: 10.1002/mar.20742.
- [12] Bhattacharjee, A. (2001). Understanding information systems continuance: an expectation-confirmation model. *MIS quarterly*, 351-370. doi: 10.2307/3250921.
- [13] Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern methods for business research*, 295(2), 295-336. doi: 10.1210/endo.139.5.5971.
- [14] Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2011). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the academy of marketing science*, 40(3), 414-433. doi: 10.1007/s11747-011-0261-6.
- [15] Wong, K. K.-K. (2013). Partial least squares structural equation modeling (PLS-SEM) techniques using SmartPLS. *J Marketing Bulletin*, 24(1), 1-32. doi: 10.1177/10547738211062346.
- [16] Wolfinbarger, M., & Gilly, M. C. (2003). eTailQ: dimensionalizing, measuring and predictingetail quality. *Journal of Retailing*, 79(3), 183-198. doi: 10.1016/S0022-4359(03)00034-4.
- [17] Tandon, U., Kiran, R., & Sah, A. N. (2017). Customer Satisfaction as Mediator Between Website Service Quality and Repurchase Intention: An Emerging Economy Case. *Service Science*, 9(2), 106-120. doi: 10.1287/serv.2016.0159.
- [18] Ng, S., Kim, H., & Rao, A. R. (2015). Sins of omission versus commission: Cross-cultural differences in brand-switching due to dissatisfaction induced by individual versus group action and inaction. *Journal of Consumer Psychology*, 25(1), 89-100. doi: 10.1016/j.jcps.2014.07.003.
- [19] Venkatesh, V., Thong, J. Y., Chan, F. K., Hu, P. J. H., & Brown, S. A. (2011). Extending the two-stage information systems continuance model: Incorporating UTAUT predictors and the role of context. *Information Systems Journal*, 21(6), 527-555. doi: 10.1111/j.1365-2575.2011.00373.x.
- [20] Thong, J. Y. L., Hong, S.-J., & Tam, K. Y. (2006). The effects of post-adoption beliefs on the expectation-confirmation model for information technology continuance. *International Journal of Human-Computer Studies*, 64(9), 799-810. doi: 10.1016/j.ijhcs.2006.05.001.
- [21] Oghuma, A. P., Libaque-Saenz, C. F., Wong, S. F., & Chang, Y. (2016). An expectation-confirmation model of continuance intention to use mobile instant messaging. *Telematics and Informatics*, 33(1), 34-47. doi: 10.1016/j.tele.2015.05.006.
- [22] Lai, T. L. (2004). Service quality and perceived value's impact on satisfaction, intention and usage of short message service (SMS). *Information Systems Frontiers*, 6(4), 353-368. doi: 10.1023/B:ISFI.0000046377.32617.3d.
- [23] Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for

- future research. *Journal of Marketing*, 49(4), 41-50. doi: 10.1177/002224298504900403.
- [24] Chou, S.-W., Min, H.-T., Chang, Y.-C., & Lin, C.-T. (2010). Understanding continuance intention of knowledge creation using extended expectation–confirmation theory: an empirical study of Taiwan and China online communities. *Behaviour Information Technology*, 29(6), 557-570. doi: 10.1080/01449290903401986.
- [25] Jiang, J. J., Klein, G., & Carr, C. L. (2002). Measuring information system service quality: SERVQUAL from the other side. *MIS quarterly*, 145-166. doi: 10.2307/4132324.
- [26] Gounaris, S., Dimitriadis, S., & Stathakopoulos, V. (2010). An examination of the effects of service quality and satisfaction on customers' behavioral intentions in e-shopping. *Journal of Services Marketing*, 24(2), 142-156. doi: 10.1108/08876041011031118.
- [27] Blut, M., Chowdhry, N., Mittal, V., & Brock, C. (2015). E-Service Quality: A Meta-Analytic Review. *Journal of Retailing*, 91(4), 679-700. doi: 10.1016/j.jretai.2015.05.004.
- [28] Udo, G. J., Bagchi, K. K., & Kirs, P. J. (2010). An assessment of customers' e-service quality perception, satisfaction and intention. *International Journal of Information Management*, 30(6), 481-492. doi: 10.1016/j.ijinfomgt.2010.03.005.
- [29] Bansal, H. S., McDougall, G. H., Dikolli, S. S., & Sedatole, K. L. (2004). Relating e-satisfaction to behavioral outcomes: an empirical study. *Journal of Services Marketing*, 18(4), 290-302. doi: 10.1108/08876040410542281.
- [30] Shankar, V., Smith, A. K., & Rangaswamy, A. (2003). Customer satisfaction and loyalty in online and offline environments. *International journal of research in marketing*, 20(2), 153-175. doi: 10.1016/S0167-8116(03)00016-8.
- [31] William, A. (2002). Relationship Marketing Delivering Customer Satisfaction. In: Oxford: Butter–Worth–Heinemann. doi: 10.1177/1094670502004003006.
- [32] Durvasula, S., Lysonski, S., Mehta, S. C., & Tang, B. P. (2004). Forging relationships with services: the antecedents that have an impact on behavioural outcomes in the life insurance industry. *Journal of Financial Services Marketing*, 8(4), 314-326. doi: 10.1057/palgrave.fsm.4770129.
- [33] DeLone, W. H., & McLean, E. R. (1992). Information systems success: The quest for the dependent variable. *Information systems research*, 3(1), 60-95. doi: 10.1287/isre.3.1.60.
- [34] Bhattacharjee, A., & Premkumar, G. (2004). Understanding changes in belief and attitude toward information technology usage: A theoretical model and longitudinal test. *MIS quarterly*, 229-254. doi: 10.2307/25148634.
- [35] Wixom, B. H., & Todd, P. A. (2005). A theoretical integration of user satisfaction and technology acceptance. *Information systems research*, 16(1), 85-102. doi: 10.1287/isre.1050.0042.
- [36] Shin, J. I., Chung, K. H., Oh, J. S., & Lee, C. W. (2013). The effect of site quality on repurchase intention in Internet shopping through mediating variables: The case of university students in South Korea. *International Journal of Information Management*, 33(3), 453-463. doi: 10.1016/j.ijinfomgt.2013.02.003.
- [37] Lee, G.-G., & Lin, H.-F. (2005). Customer perceptions of e-service quality in online shopping. *International Journal of Retail Distribution Management*, 33(2), 161-176. doi: 10.1108/09590550510581485.
- [38] Chau, V. S., & Kao, Y.-Y. (2009). Bridge over troubled water or long and winding road?: Gap-5 in airline service quality performance measures. *Managing Service Quality*, 19(1), 106-134. doi: 10.1108/09604520910926836.
- [39] Chang, H. H., & Wang, H.-W. (2011). The moderating effect of customer perceived value on online shopping behaviour. *Journal Online Information Review*, 35(3), 333-359. doi: 10.1108/14684521111151414.
- [40] Zhou, T., Lu, Y., & Wang, B. (2009). The Relative Importance of Website Design Quality and Service Quality in Determining Consumers' Online Repurchase Behavior. *Information Systems Management*, 26(4), 327-337. doi: 10.1080/10580530903245663.
- [41] Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50. doi: 10.1177/002224378101800104.
- [42] Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the academy of marketing science*, 43(1), 115-135. doi: 10.1007/s11747-014-0403-8.