

# Analysis of E-Service Quality Dimensions towards Purchase Intention by Using Smartphone in Tokopedia

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## Abstract

The objective of this research is to identify the correlation between Information Availability/Content, Ease of Use, Privacy/Security, Graphic Style, Reliability/ Fulfillment towards one dependent variable (Purchase Intention). In this research, data were collected through questionnaire to 120 respondents using purposive sampling method for people who live in Jakarta. Data analysis technique used in this study is multiple linear regression. The result indicates that Information Availability/Content (X1) has no significant influence towards Purchase Intention by using smartphone in Tokopedia. The variables Ease of Use/Usability (X2), Privacy/Security (X3), Graphic Style (X4), Reliability/ Fulfillment (X5) have positive significant influence to the Purchase Intention. Then, through the F- test, the five dimensions of E-service Quality have simultaneously significant influence toward Purchase Intention. The predictive ability of these five variables towards Purchase Intention in this study is 63.8% while the remaining is affected by other factors that are not included in this research.

**Keywords:** E-service Quality, E-commerce, Purchase Intention

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Cite this article: Rahmawati, Y., & Liswandi. (2018). Analysis of E-Service Quality Dimensions towards Purchase Intention by Using Smartphone in Tokopedia. *International Journal of Management, Accounting and Economics*, 5(4), 260-271.

## Introduction

The increase of internet users in Indonesia has become the factor that encourages the development of e-commerce/ e-marketplace in Indonesia. According to Indonesian

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Internet Provider Association (*Asosiasi Penyelenggara Jasa Internet Indonesia/APJII*), a survey stated that Indonesia’s total Internet users today have reached 132.7 million users or about 51.8 percent of Indonesia’s population. While compared to 2014, Indonesia still only has 88 million users (*Trendinonesia.news, 2016*). This shows a huge increase of internet users in Indonesia.

Table 1 ASEAN-6 Digital Population 2015

	Indonesia	Thailand	Malaysia	Singapore	Philippines	Vietnam
<b>Population</b>	255.5 M	65.1 M	30.8 M	5.54 M	102.4 M	90.7 M
<b>Internet Users</b>	88.1 M	35.0 M	20.6 M	4.65 M	47.1 M	45.6 M
<b>Social Media Users</b>	79.0 M	38.0 M	18.0 M	3.70 M	48.0 M	36.0 M
<b>Mobile Connection</b>	318.5 M	97.1 M	41.9 M	8.10 M	114.6 M	136.1 M
<b>Mobile Social Users</b>	67.0 M	34.0 M	16.0 M	3.40 M	40.0 M	29.0 M

Source: We Are Social, November (2015)

From the source of We Are Social which compared the digital population of ASEAN-6 countries in 2015 as shown in Table 1.1, Indonesia has become the highest mobile social users when it is compared to other ASEAN countries.

Tokopedia as one of e-commerce providers in Indonesia has a lot of competitors in the e-commerce market and knows that Indonesian’s internet users started to depend on mobile device more, Tokopedia has made a mobile platform so that it could make it easier when users want to access the site using their smartphones. The CEO of Tokopedia said that in 2014, only 56 percent of the users access Tokopedia form mobile devices and the mobile transactions were only at 29 percent of total transactions. Now, 80 percent of the users access Tokopedia using their mobile devices and mobile transactions is 74 percent of Tokopedia’s total transactions. (*techinasia.com, 2016*).

The users response towards the Tokopedia’s mobile site and mobile application should be improved more as the decision of customer’s purchase intention are affected by how much service are given to them. With high service quality the customer’s needs may be fulfilled. That is why in this research, it is intended to find out the impact of e-service quality using Parasuraman, et al. (2005) sets of criteria relevant to E-Service Quality which are Information Availability/Content, Ease of use/Usability, Privacy/Security, Graphic Style, Reliability/Fulfillment on the purchase intention in Tokopedia when it was accessed by using smartphones.

## Literature review

### *E-commerce*

E-commerce is conducting business by using the internet which relates to activities of searching for information, sharing information, exchanging goods and services or purchasing and maintaining customer relationship without face to face meeting unlike transaction done in the traditional way (*Jiradilok et al., 2014*). *Sharma and Lijuan, (2013)*

and Turban et al., (2015) suggested that ecommerce is any business transactions and activities conducted through internet.

### *Purchase Intention*

Purchase intention can be characterized as the inclination of the customers to purchase a specific brand after they assess it before choosing to make a buy in view of what they require, the state of mind and the perception towards the brands (Madahi & Sukati, 2012).

In some other research it is additionally demonstrated that when in real buy, buy expectation is the imperative stage before purchasing and furthermore could prompt re-purchase of the items later on. (Tariq et al. 2013) expressed that purchase intentions have numerous means. Initially, customers will gather data with respect to the brand that they want (the items). At that point, they will begin to assess the item since they have taken a gander at it and know the data about the item. In the event that the item suits them, they will buy it again later on.

### *Information Availability/Content*

Content alludes to the data, highlights, utilize and items offered on the website. Content means giving learning about the administrations offered by the organization likewise the data which are important which the consumers look for with the goal that they can make a purchase. The great outline and style of data given online at first will draw the consideration of consumer to visit the site yet without important and valuable substance, consumers may look somewhere else (Jones & Chiliya, 2014). It is with the goal that the watchers are empowered to get their very own arrangements of procurement destinations. Data is given with the goal that buyer are empower to separate between items or generally settle on a more educated choice. (Hasley & G. Gregg, 2010)

### *Ease of Use (Usability)*

Ease-of-use is defined as “the degree to which a person believes that using an information system would be free of effort.” (Hilmi et al, 2014). It is an angle which measures how simple to utilize the website. Convenience comprises of five things: learnability, efficiency, memorability, errors and satisfaction. Learnability is for the experience of the first run through users, similar to how effectively they can do the essential errand intended for them in the interface. Efficiency is the point at which the clients who are utilize the site utilize it and measures how quick the errand is finished. Memorability measures that it is so natural to utilization of the site after not utilizing it for some time. The estimation of blunders implies how terrible the mistakes of the site is and on the off chance that they can recoup from the errors. Finally, there is satisfaction which measures how the clients feel when utilizing the website. (Lampi, 2015).

Ease of use for a website implies that it must achieve a level of value for it to be significant to talk about ease of use, this implying the site ought to be steady and without mistakes in capacities for the customer to consider the website solid and the site ought to be accessible when the customer needs to utilize it (Lulek, 2014). A usable internet

business stage will give an uplifting mentality toward online stores, increment the return to rate and in the long run fortifies online purchase. (Beyk, 2015)

### *Privacy/Security*

Warren and Brandeis (1890) in Omariba et al. (2012) defined privacy as a legal concept and as the right to be let alone. In the same journal, Westin (1967) in Omariba et al. (2012) described Privacy as “the claim of individuals, groups, or institutions to determine for themselves when, how, and to what extent information about them is communicated to others”. While in e-commerce, Privacy additionally is characterized as the purchaser's consistence in giving their own data over the web that are utilized for exchanges with respect to the purchase made (Bruseke, 2016). Roman expressed that security implies that the customer confides in the web based shopping too and the security of the customer's money related data which ought not be settled or imparted to another gathering in online shopping (Shahzad, 2015).

### *Graphic Style*

Graphic style is one of the e-service quality that could influence purchase intention of customers. When shopping on the website what customers could see from the web is their visual computerization of the web and the realistic style .While planning a web, a great deal of exertion ought to be put into the general graphical look and the presence of the site (Cyr, 2013). Graphic style incorporates shading, format, print size and sort, number of photos, and movement. (Nath & Zheng, 2004). It is an imperative component of web design particularly for the attire retail site since apparel is an item that necessities more exhaustive assessment and different visional introduction systems to pull in online buyers (Kim & Lennon, 2008). These are the vital highlights since it will give certain significance to the consumers (Cyr, 2013). Additionally, it is pivotal that the pictures that are utilized on a web is of high caliber and if the site in a web offering merchandise, it will be more preferred standpoint for the web to have numerous photos of the item from different edge (Cyr, 2013).

By redesigning the outline and appearance of a site it is normal that it will point to an expansion of customers online purchase intentions (Al-Qeisi et al., 2014). Wu et al., (2014) obviously expresses that organizations done online can utilize a brilliant and merry hues in their website with the goal that a cheerful air is made thus could expand customer's online purchase intention.

### *Reliability/Fulfillment*

Execution or technique for doing errands by means of web is another measurement of e-service quality that is clarified as the speedy affirmation of client's coveted activity and online execution of that works including cash exchange and paying bills. (Mohammadi & Taleghani, 2015). In e-service, to advise customers of the correct data about items or administration accessibility is critical when obtaining. Wrong data can bring about negative effect to customer's future repurchasing intention. Furthermore, flexibility in

purchasing can expand customer's certainty to organization. The accompanying are the four properties of satisfaction measurement:

1. Information on products or services available when purchasing.
2. System runs smoothly in the transaction process.
3. Accurate promises about delivery service in purchasing process.
4. Available to modify and/or defer the purchasing process at any time without commitment. (Li & Suomi, 2009).

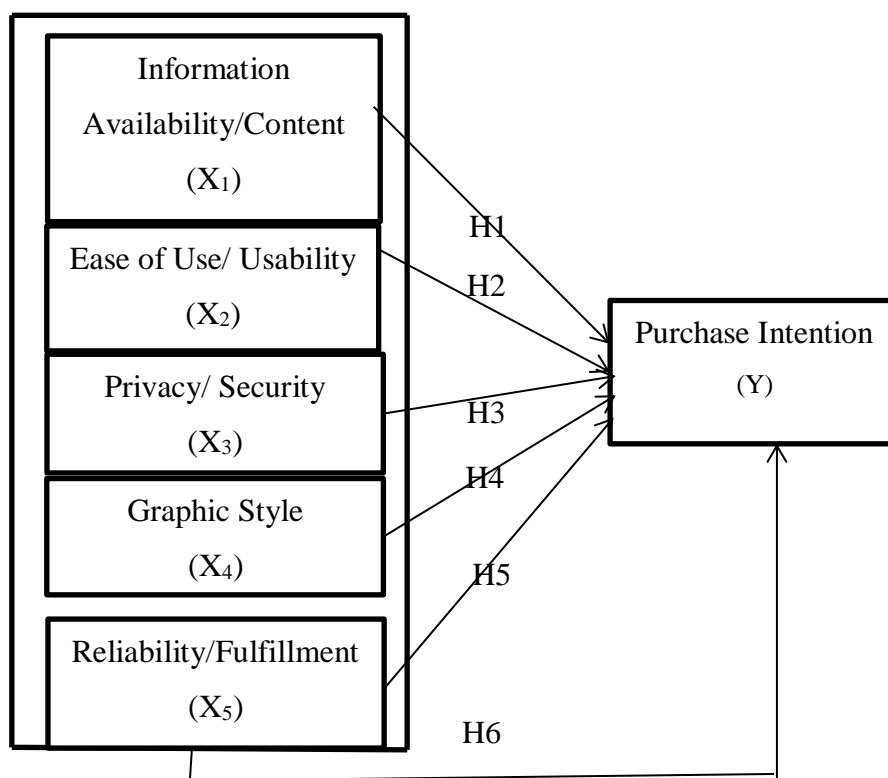


Figure 1 Theoretical Framework

### Hypotheses

**H<sub>1</sub>:** There is significant influence of Information Availability/ Content towards Purchase Intention of Tokopedia when using Smartphone.

**H<sub>2</sub>:** There is partial significant influence of Ease of use towards Purchase Intention of Tokopedia when using Smartphone.

**H<sub>3</sub>:** There is partial significant influence of Privacy/Security towards Purchase Intention of Tokopedia when using Smartphone.

**H<sub>4</sub>:** There is partial significant influence of Graphic Style towards Purchase Intention of Tokopedia when using Smartphone.

**H<sub>5</sub>:** There is significant influence of Reliability/ Fulfillment towards Purchase Intention of Tokopedia when using Smartphone.

**H<sub>6</sub>:** There is simultaneously significant influence of Information Availability/Content, Ease of use, Privacy/Security, Graphic Style, Reliability/ Fulfillment towards Purchase Intention of Tokopedia when using Smartphone.

## **Methodology**

In this research, data were collected through questionnaire to 120 respondents using purposive sampling method for people who live in Jakarta. Hair et al. (2005) that a sample size between 100 and 200 are adequate and sufficient. Data analysis technique used is multiple linear regression. The researcher distributes the questionnaire via online survey questionnaire platform ([www.goo.gl/forms](http://www.goo.gl/forms)) to 120 people as the respondents who live in Jakarta and have ever accessed Tokopedia using their smartphone or downloaded Tokopedia's mobile application.

### *Questionnaire*

In this research, the questionnaire consists of three sections. In the first section, there are three filtering questions about respondent if they have ever bought something from Tokopedia, or ever accessed the website through their smartphone/downloaded the app in their phone and if they live in Jakarta. The second section is the respondent profile. In the last section, there are filling instruction and statement of Information Availability/Content, Ease of Use/Usability, Privacy/Security, Graphic Style, and Reliability/fulfillment and Purchase Intention with each variable having four questions. The questionnaire will be shown in Likert Scale format, so there will be 5 scales in a range of 1-5, starting from number one to five; strongly disagree, disagree, neutral, agree, and strongly agree respectively.

## **Results**

### *Sample Profile*

The respondent profiles of gender in this research, 49 respondents (40.8%) are male respondents and 71 respondent (59.2%) are female respondents. Therefore, the majority respondents are female.

The age of the respondents in this research, 26 respondent (21.7%) are between 15-20 years old, 82 respondent (68.3%) are between 21-25 years old; 11 respondent (9.2%) were between 26-30 years old; 1 respondent (0.8%) are between 31-35 years old; 0 respondent (0%) are between 36-40 years old; and 0 respondent (0%) are between >40 years old. Based on the data above, the group age of 21-25 years old dominates the respondent profile in this research.



The respondent profiles of monthly income, 16 respondents (13.3%) have monthly income less than IDR 1.000.000, 54 respondents (45%) have monthly income around Rp 1.000.001 – Rp 3.000.000, 28 respondents (23.3%) have monthly income around Rp 3.000.001 – Rp 5.000.000, 22 respondents (18.3%) have monthly income over IDR 5.000.000. Therefore, respondents who have income around Rp 1.000.001 – Rp 3.000.000 are the majority in monthly income category of respondent profiles.

*E-Service Quality dimension towards Purchase Intention*

In this study, Regression analysis was conducted to determine how E-Service Quality Dimension relates to the dependent variable, purchase intention

Table 2 Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	0.093	0.277		0.335	0.739
	Information Availability/Content	-0.063	0.084	-0.060	-0.750	0.455
	Ease of Use	0.278	0.089	0.278	3.113	0.002
	Privacy/Security	0.239	0.082	0.241	2.928	0.004
	Graphic Style	0.369	0.078	0.362	4.753	0.000
	Reliability/Fulfillment	0.154	0.068	0.154	2.276	0.025

a. Dependent Variable: Purchase Intention

Table 3 ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	42.658	5	8.532	42.861	0.000 <sup>b</sup>
	Residual	22.692	114	0.199		
	Total	65.349	119			

a. Dependent Variable: PIT  
 b. Predictors: (Constant), RFT, EUT, GST, IAT, PST

Table 2 tells us that there is partially significant influence between Ease of Use/Usability, Privacy/Security, Graphic Style and Reliability/Fulfillment towards Purchase Intention. It explains that Information Availability has no significant influence towards Purchase Intention. As shown in Table 3, it shows that there is simultaneously significant influence between Information Availability, Ease of Use/Usability, Privacy/Security, Graphic Style, Reliability/Fulfillment towards Purchase Intention. Consequently, Hypothesis 2, Hypothesis 3, Hypothesis 4, Hypothesis 5, Hypothesis 6 were supported and Hypothesis 1 is rejected.

Table 4 Coefficient of Determination  
 Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.808 <sup>a</sup>	0.653	0.638	0.44615	1.660

a. Predictors: (Constant), RFT, EUT, GST, IAT, PST

Based on Table 4.14, it shows that the adjusted R square is 0.638 (63.8%) which means there is 63.8% independent variables (Information Availability/Content, Ease of use, Privacy/Security, Graphic Style, Reliability/ Fulfillment) that simultaneously influence dependent variable purchase intention. While 63.8% of purchase intention can be explained by the independent variables, the remaining 36.2% is influenced by other variables that are not examined in this research.

## Discussion

### A. Information Availability/Content

Hypothesis 1 testing result shows that Information Availability/Content do not has significant influence on Purchase Intention by Smartphone of Tokopedia in Jakarta. From the T-test, Information Availability/Content does not have a significant level of 0.455, which is higher than 0.05.

This result is different from the previous research conducted by Lisa Y.Chen (2013) about the quality of mobile shopping system and its impact on purchase intention and performance (Case study in Taiwan) and research by Sujana & Suprapti (2016) about the role of trust in service quality towards purchase intention (case study of Zalora). The result stated that the website quality that offers information which is clear information in form of the way of interaction, the product specification will influence the purchase intention of customer. The previous research stated that the information availability have significant influence on purchase intention. Therefore in this research concluded that the information given for the product's specifications are the general factors that influence purchase intention which is why the result of the test are not significant because the information of the product specification are less detailed in Tokopedia.

### B. Ease of Use/ Usability

Hypothesis 2 testing result shows that Ease of Use/Usability has significant influence on Purchase Intention by Smartphone in Tokopedia in Jakarta. From the T-test, Ease of Use has a significant level of 0.002, which is less than 0.05. This is also supported with the multiple regression analysis that shows Ease of Use will be able to increase purchase intention by 0.278 percent.

This result is in line with the previous research conducted by Astuti and Rusfian (2013) about the influence of Ease of use as the dimension of E-service quality toward purchase



intention (a study of online shop gasoo galore) which stated that Ease of use has significant influence toward purchase intention.

### *C. Privacy/Security*

Hypothesis 3 testing result shows that Privacy/Security has significant influence on Purchase Intention by Smartphone in Tokopedia in Jakarta. From the T-test, Privacy/Security has a significant level of 0.004, which is less than 0.05. This is also supported with the multiple regression analysis that shows Privacy/Security will be able to increase purchase intention by 0.239 percent.

This result is supported with the previous research conducted by Maulana and Kurniawati (2014), about the influence of E-Service quality towards consumer's purchase intention (case study of Korean Denim website) which stated that Privacy/Security has significant influence toward purchase intention.

### *D. Graphic Style*

Hypothesis 4 testing result shows that Privacy/Security has significant influence on Purchase Intention by Smartphone of Tokopedia in Jakarta. From the T-test, Privacy/Security has a significant level of 0.000, which is less than 0.05. This multiple regression analysis shows that Privacy/Security will be able to increase purchase intention by 0.369 percent.

This result is in line with the previous research conducted by Maulana and Kurniawati (2014) about the influence of E-Service quality towards consumer's purchase intention (case study of Korean Denim website) which stated that Privacy/Security has significant influence toward purchase intention.

### *E. Reliability/Fulfillment*

Hypothesis 5 testing result shows that Privacy/Security has significant influence on Purchase Intention by Smartphone in Tokopedia in Jakarta. From the T-test, Privacy/Security has a significant level of 0.025, which is less than 0.05. This is also supported with the multiple regression analysis that shows Privacy/Security will be able to increase purchase intention by 0.154 percent.

This result corresponds to the previous research conducted by Maulana and Kurniawati (2014), about the influence of E-Service quality towards consumer's purchase intention (case study of Korean Denim website) which stated that Privacy/Security has significant influence toward purchase intention.

## **Conclusion**

There are 4 variables of E-service quality which are Ease of Use, Privacy/Security, Graphic Style and Reliability/Fulfillment which have a partial significant influence towards purchase intention. Based on this, Tokopedia have offered the right e-service quality for people who lives in Jakarta. They have made the website easy for people to

access and search for the product they want, Offers enough Privacy and security so that people feel safe when purchasing and want to purchase, Enough graphic style so that the customer can look into more details of the product they want to buy and also Tokopedia have fulfilled their responsibility to customers therefore they should maintain or if they can improve more of it. But one of the independent variable which is Information Availability/Content does not have significant influence on Tokopedia's Purchase Intention. Here, Tokopedia has to increase this service to the customers like making sure for each product has enough information (description).

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