

## The Effects of E-service Quality on Customer Online Repurchase Intention Towards E-commerce Marketplace C2C in Indonesia

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### Abstract

Recent developments in information communication and technology (ICT) have made the Internet change the way companies do the business and customers purchase the products. It enables users to perform online transactions in the E-commerce platform. The Internet is actively participating in the development of E-commerce market in the world including Indonesia's E-commerce market, which is still small and at a very early stage. However, the percentage of share and sales of Indonesia's E-commerce market increase remarkably. Customer online repurchase intention has been examined by many prior studies, but the study towards E-commerce specifically marketplace Customer to Customer (C2C) in Indonesia has not been studied. The purpose of this paper is to study the factors that affect online repurchase intention of customers in using Indonesian E-commerce platform. The proposed hypotheses and research framework underlies in the extended Technology Acceptance Model (TAM). This paper uses descriptive survey by distributing the online questionnaires. The data collected from 476 responses is suggested to be analyzed using regression model to determine the significance of the relationship between the dependent and independent variables. The implication of this study is to provide information for the E-commerce players to deliver the right value to the targeted customers and to retain the customers effectively.

*Keywords:* E-commerce; C2C; E-service quality; online repurchase intention; online customer satisfaction

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### 1. Introduction

The notable impact of the Internet is on marketing channels by reason of the Internet offers potential competitive advantage over the traditional marketing medium (Peterson *et al.*, 1997). The Internet usage in the world has been growing rapidly foremost over the last few years. According to We Are Social's compendium of world digital stats, by the end of 2015, there are 88.1 million active Internet users in Indonesia equalling 34% penetration level from the total population, up 15 per cent over the past 12 months. The number is expected to grow in 2016 (We Are Social, 2016). A study by eMarketer (Statista, 2015) indicates that forecast for the number of users in the Indonesia's electronic commerce market is increasing. The statistic also shows retail E-commerce sales in 2015 accounted for 1.3 per cent share of all retail sales in Indonesia, it is expected to reach 3.9 per cent in 2018 (Statista, 2015).



With the rapid growth of E-commerce, understanding how customers perceive and evaluate electronic service quality becomes essential for companies (Li and Suomi, 2007). Various E-commerce researches reveal that service quality influences customer purchase behaviors and customer satisfaction (Liu, 2012). Khalifa and Liu (2007) further discussed in his study that it is important to examine the effect on the online repurchase intention.

This paper intends to examine the relationship between E-service quality and customer online repurchase intention towards E-commerce especially for the marketplace C2C and also figure out the key factors of customer online repurchase intention. Because of the particular reason, this research will be directed to the analysis of customer online repurchase intention towards one of the leading online marketplaces in Indonesia, which is Bukalapak. Based on the Similarweb.com (2016), the websites traffic and mobile apps analytics, Bukalapak as compared to all other sites in the world is rank 17 in Indonesia, and a global rank of 1,039 in the worldwide. In terms of engagement, Bukalapak has 26.7 million total visits of the website (Similarweb.com, 2016).

## **2. Literature review**

### *2.1. E-service quality*

E-service quality is defined as service quality as a multiple function of a website that facilitates efficient and effective shopping, purchasing, and delivery (Zeithaml *et al.*, 2000). Consumer decision-making can be influenced by E-service quality of an E-commerce. Many different scales to measure E-service quality of an E-commerce have been used (Liu, 2012).

This research employed the extended Technology Acceptance Model (TAM) model by Lee *et al.* (2011) to examine the effects on customer online repurchase intention. The development of extended TAM model is based on TAM that was proposed by Davis (1989). The extended TAM integrates eight variable constructs of E-service quality consisting of perceived value, perceived ease of use, perceived usefulness, firm's reputation, privacy, trust, reliability, and functionality (Lee *et al.*, 2011). Perceived usefulness and perceived ease of use are known for the core constructs of TAM (Davis, 1989).

### *2.2. Online customer satisfaction*

Customer satisfaction is described as positive evaluation of performance based on all prior experiences with a company (Fornell, 1992). Li and Suomi (2007) state that service quality has strong impacts on customer satisfaction of the company performance. Online customer satisfaction is appeared as mediating variable between E-service quality and online repurchase intention in the context of online retailing (Liu, 2012).

### *2.3. Online repurchase intention*

In the context of online, Khalifa and Liu (2007) interpreted that "repurchase as the re-usage of the online channel to buy from a particular retailer" (p.3). Furthermore, they found the effects of satisfaction on repurchase intention. Lin and Lekhawipat (2014) generated result that customer satisfaction has a direct impact to online repurchase intention and indirect impact through adjusted expectations. The study highlights that online repurchase intention is a significant indicator of online shopping performance (Lin and Lekhawipat, 2014).

Based on the literature review, the following hypotheses in this study are formulated as follows.

H1: E-service quality has a significant positive effect on online repurchase intention

H2: E-service quality has a significant positive effect on online customer satisfaction

H3: Online customer satisfaction has a significant positive effect on online repurchase intention

## **3. Methodology**

Since this research has a particular object in one of the E-commerce marketplace C2C, as a result, Bukalapak customers were chosen as the target sample. The data was obtained by conducting a survey through online questionnaires that were distributed to the Bukalapak customers who have made a purchase at least once using

Bukalapak.com. According to Ndubisi in Lee (2011), it was rational to collect data from those who have prior experience in buying products or services online since this research interested in respondents' willingness to repurchase products or services online.

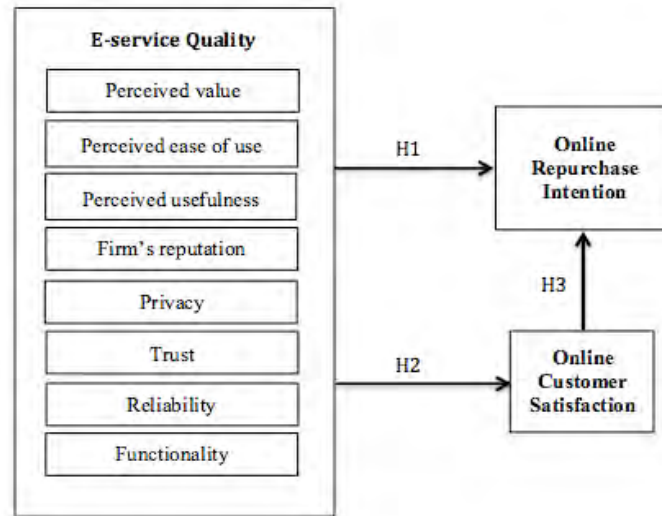


Fig. 1. Research model

The online questionnaire consists of questions on the demographic profile of the respondents and the questions on the construct variables of E-service quality, online customer satisfaction, and online repurchase intention. A 5-point Likert scales was used to measure all the variables with scale anchors from "1" – strongly disagree to "5" – strongly agree. All of the variables were analyzed using linear regression to find out whether is there any correlation and to determine the significance of the relationship between the dependent and independent variables. The reliability analysis was conducted using Cronbach's Alpha before the final questionnaires were sent to the Bukalapak customers.

#### 4. Result and discussion

A result of 476 fully answered responses was submitted through online questionnaire. The demographic profile of the 476 respondents is illustrated in Table 1. It showed that 91.2 per cent of the respondents are male. About 24.4 per cent, which are the majority of the respondents, fall in the age range between 26 to 30 years of age. In addition, the occupation background was mostly employee (44.8 per cent), only a small proportion of occupation was housewife (2.5 per cent).

Table 2 provides the result from reliability analysis of each variable. The mean varies from 12.15 to 17.93. One can conclude that the respondents' perceptions on these variables are mostly favorable. Based on Nunnally (1978), the value for the Cronbach's alpha of 0.7 or higher is considered acceptable. The Cronbach's alpha value for each variable is shown in Table 2. It shows that the Cronbach's alpha value range from 0.883 to 0.903, which means the result indicates that all variables are reliable and consistent with the research standards.

Table 1. Demographic profile

| Categories    | F (n=476) | %    |
|---------------|-----------|------|
| <b>Gender</b> |           |      |
| Male          | 434       | 91.2 |
| Female        | 42        | 8.8  |



| Age (Years)             |     |      |
|-------------------------|-----|------|
| < 21 years              | 25  | 5.2  |
| 21-25                   | 78  | 16.4 |
| 26-30                   | 116 | 24.4 |
| 31-35                   | 96  | 20.2 |
| 36-40                   | 78  | 16.4 |
| 41-45                   | 40  | 8.4  |
| 46-50                   | 23  | 4.8  |
| > 50 years              | 20  | 4.2  |
| Occupation              |     |      |
| Student/College student | 43  | 9.0  |
| Employee                | 213 | 44.8 |
| Civil worker            | 59  | 12.4 |
| Housewife               | 12  | 2.5  |
| Entrepreneur            | 107 | 22.5 |
| Others                  | 42  | 8.8  |

Moving on to Table 3, there are values of R,  $R^2$ , adjusted  $R^2$ , standard error of the estimate, and Dublin-Watson for each hypothesis. From Table 3, hypothesis 1 has the lowest  $R^2$ -value, which is 0.503. This means a change in independent variables could represent 50.3% change of online repurchase intention. While hypothesis 2 has the highest  $R^2$ -value among the hypotheses, which is 0.668. This also means that change in the independent variable could represent 66.8% change of online customer satisfaction. Lastly, hypothesis 3 has  $R^2$ -value = 0.558. Thus, change in independent variable could represent 55.8% change of online repurchase intention.

Table 2. Reliability analysis of variables

| ID  | Variable Name                | Mean (n= 476) | SD    | Items | Cronbach's Alpha |
|-----|------------------------------|---------------|-------|-------|------------------|
| PV  | Perceived value              | 13.20         | 1.738 | 3     | .893             |
| PE  | Perceived ease of use        | 13.00         | 2.198 | 3     | .885             |
| PU  | Perceived usefulness         | 12.70         | 2.038 | 3     | .887             |
| FR  | Firm's reputation            | 12.71         | 2.106 | 3     | .894             |
| PR  | Privacy                      | 13.65         | 1.799 | 3     | .899             |
| TR  | Trust                        | 12.15         | 2.201 | 3     | .903             |
| RE  | Reliability                  | 12.20         | 2.242 | 3     | .896             |
| FU  | Functionality                | 12.38         | 2.173 | 3     | .903             |
| OCS | Online customer satisfaction | 17.93         | 2.564 | 4     | .883             |
| ORI | Online repurchase intention  | 16.41         | 3.228 | 4     | .894             |

Table 3. Multiple regression analysis (R and  $R^2$ )

| Hypothesis | R     | $R^2$ | Adjusted $R^2$ | SE of the Estimate | Dublin-Watson |
|------------|-------|-------|----------------|--------------------|---------------|
| H1         | .709a | .503  | .494           | 2.29607            | 2.004         |
| H2         | .818a | .668  | .663           | 1.48896            | 1.987         |
| H3         | .747a | .558  | .557           | 2.14839            | 2.150         |

**H1 Notes:** Predictors: (constant), RE, PV, PR, PE, TR, FR, PU, FU; dependent variable – ORI; let – online repurchase intention (ORI); X – reliability (RE), perceived value (PV), privacy (PR), perceived ease of use (PE), trust (TR), firm's reputation (FR), perceived usefulness (PU), and functionality (FU).

**H2 Notes:** Predictors: (constant), RE, PV, PR, PE, TR, FR, PU, FU; dependent variable – OCS; let – online customer satisfaction (OCS); X – reliability (RE), perceived value (PV), privacy (PR), perceived ease of use (PE), trust (TR), firm's reputation (FR), perceived usefulness (PU), and functionality (FU).

**H3 Notes:** Predictors: (constant), OCS; dependent variable – ORI; let – online repurchase intention (ORI); X – online customer satisfaction (OCS)

Table 4 summarizes the result of regression and also the details of the estimated coefficients for each hypothesis. For hypothesis 1, there are four variables that are significant at 0.05 significance level ( $<0.05$ ). This indicates that there is a positive linear relationship between the dependent variable (online repurchase intention) and the predictor variables (perceived value, perceived usefulness, firm's reputation, and trust). While in hypothesis 2 where the online customer satisfaction becomes the dependent variable, almost all of the eight variables are significant except reliability ( $p = 0.455$ ). From the result, this reveals that there is also a positive linear relationship between dependent variable (online customer satisfaction) and the predictor variables (perceived value, perceived ease of use, perceived usefulness, firm's reputation, privacy, trust, reliability, and functionality). It is also shown in Table 4 that online customer satisfaction has a significant positive relationship on online repurchase intention.

Table 4. Regression coefficients

| Hypothesis |            | Unstandardized coefficient |      |         | t      | Sig. |
|------------|------------|----------------------------|------|---------|--------|------|
|            |            | B                          | SE   | $\beta$ |        |      |
| 1          | (Constant) | -1.378                     | .931 |         | -1.479 | .140 |
|            | PV         | .207                       | .081 | .112    | 2.563  | .011 |
|            | PU         | .323                       | .078 | .204    | 4.117  | .000 |
|            | FR         | .471                       | .073 | .308    | 6.492  | .000 |
|            | TR         | .170                       | .067 | .116    | 2.550  | .011 |
| 2          | (Constant) | -.846                      | .604 |         | 1.400  | .162 |
|            | PV         | .249                       | .052 | .168    | 4.741  | .000 |
|            | PE         | .113                       | .047 | .097    | 2.404  | .017 |
|            | PU         | .118                       | .051 | .094    | 2.316  | .021 |
|            | FR         | .353                       | .047 | .290    | 7.497  | .000 |
|            | PR         | .264                       | .054 | .185    | 4.852  | .000 |
|            | TR         | .113                       | .043 | .097    | 2.614  | .009 |
|            | FU         | -.146                      | .054 | .124    | 2.680  | .008 |
| 3          | (Constant) | -.448                      | .696 |         | -.644  | .520 |
|            | OCS        | .940                       | .038 | .747    | 24.460 | .000 |

The results from the study thus indicate that there are four significant predictors that positively affect online repurchase intention, which are perceived value, perceived usefulness, and firm's reputation, and trust. The results also support previous study in the literature by Lee *et al.*, (2011). However, the findings did not fully confirm their study. Perceived ease of use, privacy, reliability, and functionality were not significant. Perceived ease of use that includes in one of the most important factor in study by Davis (1989) could not play a significant role.

Furthermore, the study also wants to investigate whether there is any correlation between E-service quality and online customer satisfaction. The findings showed that almost all the factors of E-service quality had a positively significant effect on online customer satisfaction, except reliability. Firm's reputation has the strongest influence both on online repurchase intention and online customer satisfaction towards E-commerce in Indonesia. This study suggests that firm reputation is substantial factor of the E-service quality for E-commerce.

Online repurchase intention can also be predicted by online customer satisfaction. The finding is consistent with the prior study of Liu (2012). In his study, it is revealed that the greater E-service quality, the online customer satisfaction will be higher, and enhance online repurchase intention (Liu, 2012). In order to improve the quality of their services, companies may pay attention to the repeat customers. As customers frequently make purchases, those customers tend to be loyal to purchase from the same company and get better understanding of the E-commerce website. Rather than acquiring new customers, it is also noteworthy to retain the current customer. With a good understanding of the target customers, companies may be able to cultivate effective strategy to meet the customers' needs and expectation, and eventually increase the profit.



## 5. Conclusion

The existing research of repurchase intention is not as many as purchase intention. Currently the Internet allows people goes online easily. In the author's view, online repurchase intention becomes most prominent research topic because of most of the world's population have made an online purchase. This study is not only contributed by integrating the theoretical framework of research in previous literature, but also adapt to various dimensions to measure the quality of the services. An integrated model that has been proposed in this study illustrates the factors of E-service quality that influence online repurchase intention. The dimensions derived from extended TAM model provides a useful framework for E-service quality evaluation to further encourage customers to repurchase.

This study gives some insight for E-commerce players especially in Indonesia, which allow them to improve their strategy to deliver the right value of their services. As awareness increases, companies can embrace the challenge and be a market leader in their field. Future research might consider testing the effect on online repurchase intention in other platform such as social media instead of other business type of the E-commerce.

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