How Customers Continue to Use Digital Innovation on e-Commerce Platforms?

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ABSTRACT
This study describes how the users of e-commerce tend to re-use the platforms in consideration of digital innovation. Several factors that influence the continuity of the user’s intention towards digital innovation in e-commerce platforms are described. Primary data were obtained by distributing questionnaires to respondents who meet the criteria. The population of the study are the active users of e-commerce application. This study found that several factors, such as perceived system quality, perceived radicalness, expectation fulfillment, skepticism, slowness of adaptation, social influence, trust, and satisfaction are considered by users to re-use the e-commerce platforms.

Keywords: continuance intention, digital innovation

1. INTRODUCTION

One of the effects of the industrial revolution 4.0 is the disruption phenomenon. The disruption marked by the emergence of innovations that replace “old systems” in new ways. For example, when activities normally carried out in the real world turn to cyberspace. This disruption phenomenon is changing the way people enjoy their lives. Changes in this era of disruption are as quick as an explosion. So that, a number of old businesses have been replaced by new businesses that carry out digital innovations. Digital innovation has changed how the companies run its businesses and interact with consumers. Despite the many challenges that arise due to this change, the opportunity to win market competition is open widely.

The growth of digital innovation occurs radically. However, according to Marmer et al. in "Startup Genome Extra on Premature Scaling (2011)" 90 percent of digital innovations have been failed. This shows that to be able to survive in a rapidly developing digital business environment, a company have to not only consider digital adoption, but also must understand the continuity of the user’s continuance intention.

Continuance intention is related to the intention of users of e-commerce applications to continue using the application. In line with the interest in repurchasing, continuance intention is related to the interest in continuing to utilize services in e-commerce applications. In Indonesia, there are several platforms that provide e-commerce services, including Tokopedia, Shopee, Bukalapak, Lazada, Blibli, and others. Each of these e-commerce platforms has their respective advantages. Thus, each platforms has a permanent user.

Based on the background of this study, the importance of understanding the factors influencing continuance intention of e-commerce platform users is illustrated. Each platform that always creates innovation needs to map the direction of innovation so that it can truly be utilized by the user. Moreover, digital innovation has not been fully accepted by all levels of society.

Based on the literature from previous studies, many factors can influence continuance intention
of e-commerce platform users. This study will describe how these factors affect the behavior of users of digital innovation on e-commerce platforms. The factors referred to in this study include factors of user perception and social influence. Then, perceived system quality, perceived radicalness, expectarion fulfillment, skepticism, slowness of adaptation (Jahanmir et al., 2019), social influence (Venkatesh et al., 2003), trust (Susanto et al., 2016), and satisfaction (Tran et al., 2019) to be considered.

Perceived system quality referred to in this study is related to perceptions about the quality of a system from an online platform that results from continuous assessment of digital systems (Jahanmir et al., 2019). Radicalism on digital innovation will create solutions and new market values through a more innovative concept. Radical innovation not only results in excellence through technological sophistication, but also offers users better benefits. Expectation-confirmation models provide an explanation of continual intention as a result of satisfaction with user expectations before making a purchase (Nascimento et al., 2018).

The skeptical users referred to in this study are those who are careful in accepting innovations and rejecting changes in old habits or using new technologies (Jahanmir & Lages, 2016). Skeptical users will be more sensitive to uncertainty than radical digital innovation. Slowness of adoption in this study refers to how slowly users adopt an innovation (Jahanmir & Lages, 2016). The addition of slow adopters as users of digital innovation is the key to long-term market dominance (Moore, 2014).

Venkatesh in his study related to behavioral intention of technology acceptance suggested that social influence is about the extent to which an individual view that important people believe that he must use a new system (Venkatesh et al., 2003). According to him, social influence will directly influence user behavior in using technology. Trust is defined as the willingness of one party to be vulnerable to another party’s actions based on the expectation that the other party will take certain actions that are important to them, regardless of the ability to monitor or control the other party (Mayer et al., 1995). Satisfaction refers to the user’s judgment of the overall experience and is determined by the cognitive value of the service provided to the user (Tutuncu, 2017).

2. METHODS

The target population of this study are users of e-commerce platform. E-commerce platforms are technological solutions with software or software that allows you to build storefronts, for example Shopee, Lazada, Tokopedia, Bukalapak, Blibli, and others. They have to keep up-to-date with changes in these core technologies. This study uses a non-probability sampling, that is, a purposive sampling procedure. An online survey provided 212 completed questionnaires.

This study applied scales from the literature. All items were measured using Likert scales anchored by one (strongly disagree) and five (strongly agree). Each considered factors measured with indicators from previous study. Perceived system quality, perceived radicalness, expectation fulfillment, slowness of adoption, and skepticism were measured by items that were adopted from Jahanmir et al., (2019). Indicators of social influence and trust were adopted from Venkatesh (2011). Then, user’s satisfaction were measured by indicators that were adopted from Tseng (2017).

This study used descriptive analysis to describe how several factors considered by users of e-commerce platform.

3. RESULTS AND DISCUSSION

The respondents in our study ranged from 17 to 40 years of age. Most of them are university student that spent their money less than 50 percent to online shopping. The largest e-commerce platform that used by our respondents is Shopee (72,64 percents), followed by Lazada (12,26 percents), about 6,60 percents of our respondents used Tokopedia, then 2,83 percents used Bukalapak, and other 5,66 percents of our respondents used another e-commerce platforms to shop online.

All of respondents were asked to answer the questionnaire items about several factors that influence them doing online shopping. Several
factors that meant in this our study such as: Perceived system quality, perceived radicalness, expectation fulfillment, slowness of adoption, skepticism, social influence, trust, and satisfaction.

Table 1 list the four indicators to measure Perceived System Quality of e-Commerce Platform. Most of respondents (51,89 percents) agree that the quality of the e-commerce platform that used is high. 53,30 percents respondents agree that the e-commerce platform is very functional. Then, most of them are strongly agree that the e-commerce platform that they used have to be high quality. It means the user of e-commerce platform consider the sistem quality of e-commerce platform.

| Indicators                                              | Strongly Agree | Agree | Normal | Dissagree | Strongly Dissagree |
|---------------------------------------------------------|----------------|-------|--------|-----------|--------------------|
| The quality of the platform that I use is high          | 19,34          | 51,89 | 24,53  | 1,89      | 2,36               |
| The platform that I use is very functional              | 24,53          | 53,30 | 21,23  | 0,47      | 0,47               |
| The platform that I use is very reliable                 | 25,47          | 42,45 | 27,36  | 2,83      | 1,89               |
| The platform that I use have to be high quality         | 53,30          | 33,96 | 12,74  | 0,00      | 0,00               |

As expected, we found that perceived radicalness also considered by users of e-commerce platform. It showed on Table 2 below. Most of respondents are agree about four indicator of perceived radicalness indicators. 55,19 percents of respondents are agree that the platform provides higher customer benefit. Radical innovation not only produces excellence through technological sophistication, but also offers benefits that are better for the user. Radical innovations not only produce excellence through technological sophistication, but also offers benefits that are better for the user. 47,64 percents of respondents are agree that the platform is included as part of substantially the latest technology. It means, e-commerce platform users agree that, the e-commerce platform have to do innovation radically.

| Indicators                                              | Strongly Agree | Agree | Normal | Dissagree | Strongly Dissagree |
|---------------------------------------------------------|----------------|-------|--------|-----------|--------------------|
| The platform that I use incorporates core technology that always new | 27,83          | 42,92 | 25,47  | 3,77      | 0,00               |
| The platform that I use provides higher customer benefits | 26,42          | 55,19 | 18,40  | 0,00      | 0,00               |
| The platform that I use has the ability to create new efficiencies in the market | 35,38          | 48,58 | 15,09  | 0,94      | 0,00               |
| The platform that I use is included as part of substantially the latest technology | 33,49          | 47,64 | 18,87  | 0,00      | 0,00               |

For variable expectation fulfillment, we found that most of respondents are agree to consider the platform because of their expectation about the innovation of the e-commerce platform. Table 3 shows that most of respondents (51,89 percents) are agree after making a purchase on e-commerce
platform, they learned that was what they really hoped for. Then, most of them are agree that they have never found a difference between a sales claim and the service provided. So, what was expected is clear defined. User expectations are built on the predictions they make about their experience with technology (Parasuraman et al., 1988).

Intriguingly, we found that respondents not really considering variable slowness of adoption, skepticism, and social influence. Slow users trust tradition more than accepting new progress, they tend to wait until the product is fully matured and have a low price. They tend to be more loyal customers (Moore, 2014). But, most of respondents on this study is millenials. They have fast adoption on new technology and innovation.

| Table 3. Respondents Feedback about Expectation Fulfillment of e-Commerce Platform |
|-----------------------------------------------|----------------|----------------|----------------|----------------|----------------|
| Indicators                                | Strongly Agree | Agree | Normal | Dissagree | Strongly Dissagree |
| The service that I get meets my hunger at the time of purchase | 20,75 | 54,72 | 22,64 | 0,94 | 0,94 |
| After making a purchase on this platform, I learned that what I really hoped for | 18,40 | 51,89 | 28,30 | 0,94 | 0,47 |
| I have never found a difference between a sales claim and the service provided | 15,57 | 40,09 | 37,74 | 5,19 | 1,42 |

Table 4 below shows two indicators of variable slowness of adoption. Respondents disagree that they just learned about this e-commerce platform. Most of them have high technological literacy.

| Table 4. Respondents Feedback about Slowness of Adoption |
|-----------------------------------------------|----------------|----------------|----------------|----------------|----------------|
| Indicators                                | Strongly Agree | Agree | Normal | Dissagree | Strongly Dissagree |
| I just learned about this e-commerce platform | 10,38 | 13,68 | 24,06 | 27,36 | 24,53 |
| I am one of the most recent users to know this platform | 6,13 | 12,74 | 24,06 | 26,42 | 30,66 |

For Table 5, we spelled out three indicators of variable skepticism. The skeptical users refers to those who are cautious in accepting innovations and rejecting changes in old habits or using new technologies (Jahanmir et al., 2019; Jahanmir & Lages, 2016). The majority of respondents are technology literate users. They are very pleased with the new technological innovations. Thus, skepticism was not considered by respondents in this study.

Table 6 lists two indicators of variable social influence. Table 6 shows that most of respondent not really consider social influence when they used digital innovation on e-commerce platforms.

A user’s behavior will be influenced by how important the views of others are in influencing their decisions as a result of using technology.

From the Table 7 we found that respondents intention to use digital innovation on e-commerce platform are moderated by trust. Respondents consider variable trust when they will re-use e-commerce platform. Most of respondents are agree that they trust the platform used will provide the best service (47,64 percents), they trust the platform that they use will provide access to the best service (52,36 percents), and they trust the platform that they use will play its role as a platform that can be trusted (54,25 percents).
Table 5. Respondents Feedback about Skepticism

| Indicators                                           | Strongly Agree | Agree | Normal | Dissagree | Strongly Dissagree |
|------------------------------------------------------|----------------|-------|--------|------------|--------------------|
| I am the type of person who likes to refuse to know new innovation product | 6,13           | 10,85 | 17,92  | 28,77      | 36,32              |
| I approach innovation with caution                   | 29,25          | 37,26 | 25,00  | 6,13       | 2,36               |
| I am often afraid of technological innovation         | 8,02           | 14,62 | 31,13  | 27,36      | 18,87              |

Table 6. Respondents Feedback about Social Influence

| Indicators                                                                 | Strongly Agree | Agree | Normal | Dissagree | Strongly Dissagree |
|---------------------------------------------------------------------------|----------------|-------|--------|------------|--------------------|
| People who influence my behavior think that I have to use this platform    | 8,02           | 28,30 | 39,62  | 14,62      | 9,43               |
| People who are important to me think that I should use this platform       | 9,43           | 25,47 | 48,11  | 12,26      | 4,72               |

Table 7. Respondents Feedback about Trust

| Indicators                                                                 | Strongly Agree | Agree | Normal | Dissagree | Strongly Dissagree |
|---------------------------------------------------------------------------|----------------|-------|--------|------------|--------------------|
| I trust the platform that I use will provide the best service for me       | 22,64          | 47,64 | 28,30  | 1,42       | 0,00               |
| I trust the platform that I use will provide access to the best service   | 22,64          | 52,36 | 24,53  | 0,47       | 0,00               |
| I trust the platform that I use will play its role as a platform that can be trusted | 22,64          | 54,25 | 23,11  | 0,00       | 0,00               |

Table 8 shows three indicators of satisfaction. Most of respondents agree that they considered satisfaction variable when they will continue to use digital innovation on e-commerce platform.

Table 8. Respondents Feedback about Satisfaction

| Indicators                                                                 | Strongly Agree | Agree | Normal | Dissagree | Strongly Dissagree |
|---------------------------------------------------------------------------|----------------|-------|--------|------------|--------------------|
| I am satisfied with my decision to use this platform                      | 23,58          | 55,66 | 20,75  | 0,00       | 0,00               |
| In general, I am satisfied with the service I get                          | 20,75          | 56,60 | 21,70  | 0,94       | 0,00               |
| My choice to use this platform is a wise choice                            | 21,70          | 50,94 | 26,89  | 0,47       | 0,00               |

4. CONCLUSIONS

This study describes several factors that considered by e-commerce platform user when they continue to re-use digital innovation of the platform. Several factors that considered are perceived system quality, perceived radicalness, expectation fulfillment, trust, and satisfaction. Skepticism, slowness of adaptation, and social influence not really considered because of most of respondents is millennials that have high technological literacy.
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