The effect of perceived ease of use on continuance intention through perceived usefulness and trust: A study on Klikindomaret service users in Malang City

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**ABSTRACT**

E-commerce is one of the industries that are able to grow in the middle of the crisis because of the COVID-19 pandemic. This research aims to investigate the factors that influence the continuance intention of online shopping services in the scope of e-commerce. This research uses perceived ease of use as an independent variable that affects the intention with perceived usefulness and trust as mediating variables. This research is categorized as explanatory research. Respondents in this study are Klikindomaret users and the determination of the number of samples in this study using purposive sampling technique with a total sample of 170 respondents. The data collection method used a questionnaire and the data was analyzed using PLS-SEM. The findings of this study indicate that perceived ease of use, perceived usefulness, and trust have a significant effect on continuance intention. Perceived usefulness and trust also play a role in mediating the relationship between perceived ease of use and continuance intention.

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**Introduction**

The covid-19 pandemic caused several business industries to experience a decline in performance, but not the e-commerce industry. E-commerce according to Pusparisa (2020) is a business industry that is experiencing growth during the Covid-19 pandemic, especially the retail and wholesale sectors. E-Commerce or Electronic Commerce is the activity of buying and selling goods or services via the internet (Kalakota and Whinston, 1997). The restrictions on community activities by the Indonesian government due to the current covid-19 pandemic have also encouraged people's shopping habits to shop via the internet (Chaudhary, 2020).

A company in Indonesia that exploit phenomenon of using internet-based technology in the midst of the current Covid-19 pandemic is Indomaret by providing innovative online shopping services through the Klikindomaret application (Yunianto, 2020). Klikindomaret which has the motto easy and safe online shopping is the application with the highest rating on the Google Play Store compared to applications that have similar services such as Alfagift, Transmart Home Delivery, and Happyfresh as of March 2021.

Klikindomaret for now, although it has the highest rating compared to its competitors, but Klikindomaret still has to compete with other competitors who are increasingly popping up. Currently there are nine e-commerce applications in the online wholesale and retail sector in Indonesia that are similar with Klikindomaret, namely the Sayurbox application, Tukangsayur.co, Kecipir, Tanihub, Happyfresh, Honestbee, Brambang, Gomart, and Grabfresh (Chairunnisa, 2020). In addition, e-commerce companies such as Lazada and Blibli also compete by providing services in the wholesale and online retail sector through RedMart (Lazada) and also Bliblimart (Blibli) (Eka, 2020).

The increasing number of companies running their business in the e-commerce industry, especially the wholesale and retail sector, reflects that the wholesale and retail sector is currently one of the business sectors in the e-commerce industry that has considerable
opportunities and potential. Therefore, one of the important things that need to be considered by companies to compete with competitors is to increase consumer interest in using their services in a sustainable manner. Continuance intention of consumers in using applications is something that needs to be considered by Klikindomaret because a technological system according to Bhattacherjee and Lin (2015) can be said to be successful when the use of the system by consumers is carried out continuously. Continuance intention itself is the intention of an individual to continue to use a certain system (Praveena and Thomas, 2014).

Continuance intention can increase through several approaches. One of the variables that can increase continuance intention is the perceived ease of use variable. Based on previous research conducted by Alain (2013) states that perceived ease of use has a significant effect on continuance intention. Research conducted by Kalinic and Marinkovic (2015) also produced findings that perceived ease of use had a significant effect on continuance intention.

Several previous research results have found a significant effect of perceived ease of use on continuance intention, but there are still contradictions in this relationship. Research conducted by Wang et al. (2019) stated that perceived ease of use had no significant effect on continuance intention. From this explanation, it can be concluded that there is a research gap behind the need for research related to the effect of perceived ease of use on continuance intention. Because there are still gaps from the results of previous studies, this study will add perceived usefulness and trust as mediating variables to close the research gap.

One of the considerations using perceived usefulness as a mediating variable in this study refers to the theory proposed by Davis et al. (1989) which states that perceived usefulness can play a role as a variable that mediates the relationship between perceived ease of use and continuance intention. Then, one of the reasons for adding trust as a mediating variable refers to a study conducted by Microsoft Indonesia (2019) which states that consumer confidence in digital services in Indonesia still needs to be studied more deeply, because the level of public trust in digital services in Indonesia is still low.

Malang City in this research, is considered as a research location because Malang City has an important contribution to the economy in East Java. Malang City is the city with the second largest population in East Java (jatim.bps.go.id, 2019) with a population of 866,000 people. Malang City is an educational city that has various public and private universities which make it one of the cities of education destination. In addition, the Klikindomaret service is also available in the city of Malang (Klikindomaret, 2020).

Literature Review

Perceived Ease of Use

Perceived ease of use according to Davis et al. (1989) is defined as the assumption that individuals using a particular program can be done easily. The definition of perceived ease of use in the use of an application technology according to Raza et al. (2017) is a person's perception of using an application that does not require mental pressure and does not require a lot of time or energy while using the application. Kalinic and Marinkovic (2015) state that perceived ease of use has been considered an influential factor in the adoption of new technologies, ranging from electronic services, electronic payments, internet banking, and so on. There are 5 indicators to measure perceived ease of use according to Davis (1989) which include easy to learn, controllable, clear and understandable, easy to become skillful, easy to use.

Perceived Usefulness

Perceived usefulness is still one of the factors that dominate research related to the adoption of technology acceptance in information systems (Sullivan and Kim, 2018). Perceived usefulness according to Davis (1989) is defined as a person's level of confidence when using a particular program will improve his performance. Then perceived usefulness in relation to e-commerce according to Mohamed et al. (2014) is the consumer's perception that using the internet in shopping can improve their shopping experience. Sullivan and Kim (2018) explain that the usefulness of a system depends on the effectiveness of its relevant technological properties and the extent to which the services behind the technology are provided to users, so this suggests that buyers weigh the benefits of using the system based on their interaction with the system. There are 5 indicators to measure perceived usefulness according to Chin and Todd (1995) which include making job easier, useful, increasing productivity, efficiency effectiveness, and improving job performance.

Trust

The definition of trust according to Everard and Galletta (2005) refers to positive feelings about the reliability, dependability, and confidence that individuals feel towards a person, object, or process. Trust in the online context according to Bonsón Ponte et al. (2015) is a consumer's subjective belief that online sellers will fulfill their responsibilities in online transactions. Trust plays a role in driving consumer behavior, such as purchase intention, intention to continue, and adoption (Kang and Namkung, 2019). Trust can be measured through competency, benevolence, communication, privacy and security indicators (Deb and Lomo-David, 2014).

Continuance Intention

Continuance intention according to Praveena and Thomas (2014) is the intention of an individual to continue to use a certain system. Understanding continuance intention according to Ibzan et al. (2016) is something useful because buyers who continue to use/purchase are more likely to continue their relationship with the company in question. The intention of sustainability in this study refers to the
intention of consumers who want to continue using Klikindomaret. The four indicators used to measure sustainable intention according to Alalwan et al (2014) want to use in the future, will use it in daily life, plan to use in the future, anticipate using in the future.

Conceptual Framework and Hypothesis Formation

This research investigates four main constructs consisting of one independent variable (perceived ease of use) and one dependent variable (continuance intention). In addition, this study also adds two mediating variables (perceived usefulness and trust). For more details, see Figure 1 below:

![Figure 1: Research Framework and Hypothesis](image)

The hypotheses of this study are:

H1: Perceived ease of use has a significant effect on continuance intention.
H2: Perceived usefulness has a significant effect on continuance intention.
H3: Trust has a significant effect on continuance intention.
H4: Perceived ease of use has a significant effect on perceived usefulness.
H5: Perceived ease of use has a significant effect on trust.
H6: The effect of perceived ease of use on continuance intention is mediated by perceived usefulness
H7: The effect of perceived ease of use on continuance intention is mediated by trust

Research and Methodology

Participants and Data Collection

Malang City people who use the Klikindomaret application at least once. Because there are certain criteria for selecting the sample, a non-probability approach with purposive sampling technique was used to select the sample in this study and the sample in this study amounted to 170. The technique of data collection in this research used a questionnaire. This research was conducted from April to May 2021.

Data Analysis

The method of data analysis uses SEM (Structural Equation Modeling) based on Partial Least Square (PLS) that using SmartPLS 3.0 software application.

Measurement

All indicators to measure the four variables were adopted from several previous studies. Indicators of perceived ease of use variables were adapted from Davis (1989) study which consisted of 5 indicators. Perceived usefulness variables were measured through 4 indicators from Chin dan Todd (1995). Trust variables were measured through 4 indicators from Deb dan Lomo-David (2014). Continuance intention variables were measured through 4 indicators from Alalwan et al (2016).

Findings and Discussion

Results

Based on the results of the processing of respondent data, it is known that of the 170 respondents, 80 respondents (47.1%) were male, and 90 respondents (52.9%) were female. Based on marital status, respondents with unmarried status were 136 people (80%), while respondents with married status were 34 people (20%). Based on age, there were 20 respondents aged between 17-20 years (11.8%), then 130 respondents aged 21-30 years (76.5%), and respondents aged 31-40 years old were 20 people (11.8%). Based on education, respondents with the last education of SMA/Equivalent were 55 people (32.4%), then respondents with the last education of Diploma were 16 people (9.4%), and respondents with the last education of bachelor were 99 people (58.2%). Based on occupation, respondents with jobs as students were 64 people (37.6%), respondents with jobs as civil servants were 15 people (8.8%), respondents
with jobs as private employees / BUMN were 43 people (25.3%), and respondents with jobs as entrepreneurs are 48 people (28.2%). Based on income, respondents with an income of 1 - 3 million / month amounted to 102 people (60%), respondents with an income > 3-6 million / month were 43 people (25.3%), respondents with an income > 6 - 9 million / month amounted to 17 people (10%), respondents with income > 9 million/month amounted to 8 people (4.7%). Based on the frequency of use, the respondents who used Klikindomaret once were 63 people (37.1%), while the respondents who used Klikindomaret more than once were 107 people (62.9%).

<table>
<thead>
<tr>
<th>Table 1: Cronbach Alpha, Composite Alpha, AVE</th>
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<td>Variables</td>
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<td>Perceived Usefulness</td>
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Source: Primary data processed, 2021

Table 1 indicates that the scale, magnitude and suitability of the statistics have been accepted. The average variance extracted (AVE) value of all latent variables shows a score of 0.624 for the perceived ease of use variable, 0.590 for the perceived usefulness variable, 0.610 for the trust variable, and 0.791 for the continuance intention variable.

The Cronbach alpha value for the reliability criteria is quite high; perceived ease of use has the highest cronbach alpha value. Sequentially, the cronbach alpha coefficient values for the four variables used in this study ranged from 0.768 to 0.912; they are acceptable. The composite reliability (CR) values were 0.938, 0.892, 0.852, 0.862 (above 0.80), respectively. It can be concluded that all constructs are reliable, both according to composite reliability and Cronbach alpha. The R-square value of the continuance intention variable in this research model is 0.574.

Goodness of Fit (GoF) in this study is calculated using the equation $Q^2 = 1 - (1-R12) \times (1 - R22) \times (1 - R32) = 1 - (1-0.574) \times (1-0.467) \times (1 - 0.414) = 0.866$. The score of 0.866 in the Q-Square calculation shows that the model in this study can be said to have a good goodness of fit. The direct influence presented, the effect of perceived ease of use on continuance intention is known to be significant with a path coefficient of 0.254 and a p-value of 0.035 (under the critical value of 0.05). Based on these findings, hypothesis 1 is accepted, which means that perceived ease of use has a significant effect on continuity intention. Thus, hypothesis 1 is accepted. The effect of perceived usefulness on continuance intention is known to be significant with a path coefficient of 0.255 and a p-value of 0.002 (under the critical value of 0.05). Based on these findings, hypothesis 2 is accepted, which means that perceived usefulness has a significant effect on continuance intention. Thus, hypothesis 2 is accepted. The effect of trust on continuance intention is known to be significant with a path coefficient of 0.357 and a p-value of 0.000 (under the critical value of 0.05). Based on these findings, hypothesis 3 is accepted, which means that trust has a significant effect on continuance intention. Thus, hypothesis 3 is accepted. The effect of perceived ease of use on perceived usefulness is known to be significant with a path coefficient of 0.684 and a p-value of 0.000 (under the critical value of 0.05). Based on these findings, hypothesis 4 is accepted, which means that perceived ease of use has a significant effect on perceived usefulness. Thus, hypothesis 4 is accepted. The effect of perceived ease of use on trust is known to be significant with a path coefficient of 0.643 and a p-value of 0.000 (under the critical value of 0.05). Based on these findings, hypothesis 5 is accepted, which means that perceived ease of use has a significant effect on trust. Thus, hypothesis 5 is accepted. The role of perceived usefulness in mediating the relationship between perceived ease of use and continuance intention is known to be significant with a path coefficient value of 0.174 and a p-value of 0.005 (under the critical value of 0.05). These results indicate that perceived usefulness can play a role in mediating the relationship of perceived ease of use to continuance intention.

Thus, hypothesis 6 is accepted. The role of trust in mediating the relationship between perceived ease of use and continuity intention is known to be significant with a path coefficient value of 0.230 and a p-value of 0.000 (under the critical value of 0.05). These results indicate that trust can play a role in mediating the relationship of perceived ease of use to continuance intention. Thus, hypothesis 7 is accepted.

Discussion

The effect of perceived ease of use on continuance intention

This research resulted in the finding that perceived ease of use has a significant effect on continuance intention. It means that the easier it is for consumers to transact using Klikindomaret, the more consumers' intention to use Klikindomaret will increase.

With so many competitors in the e-commerce industry, it demands Klikindomaret to provide an application that is easier to learn and use than the applications of its competitors so that Klikindomaret can continue to survive in this increasingly competitive e-commerce industry. Easy to learn, this is related to Klikindomaret, which procedures for its use do not require higher effort from consumers.
Basically, Klikindomaret is an application that in its use has similarities with other similar applications that have appeared first, therefore consumers feel familiar with the procedures for using Klikindomaret.

The results of this study support the results of research conducted by Alain (2013), which also shows the important role of perceived ease of use in increasing continuance intention in the context of e-commerce, where the higher the consumer feels the ease of making transactions using digital services, the more consumers intend to use it. The service will also increase.

The effect of perceived usefulness on continuance intention

This research resulted in the finding that perceived usefulness has a significant effect on continuance intention. It means that when consumers feel that Klikindomaret provides a use, there will be an intention from consumers to reuse the service.

Indomaret outlets as a place for offline shopping today, although quite a lot are spread in every corner of Malang City, it still does not reduce the usefulness of Klikindomaret as an online shopping service for the community, coupled with the ongoing social restrictions due to the current Covid-19 pandemic, making online shopping applications such as Klikindomaret as an application that provides its own uses for consumers with all the conveniences offered.

The results of this study support the findings of research conducted by Al-Maghrabi et al (2011) which states that perceived usefulness has a significant effect on continuance intention. The results of this study also support the results of research conducted by Foroughi et al (2019) which states that consumers are willing to continue using a digital service when the service provides benefits for consumers in making transactions.

The effect of trust on continuance intention

This research results in the finding that trust has a significant effect on continuance intention. This means that the higher the level of consumer confidence in Klikindomaret, it means that when the higher the level of consumer confidence in Klikindomaret, the higher the consumer's intention to reuse Klikindomaret. This research explains that trust has the greatest influence on continuance intention compared to perceived ease of use and perceived usefulness, this indicates that consumers are very concerned about a company, especially a company that runs its business in e-commerce, whether it can be trusted or not before consumers use it. The services of the company concerned.

The result of this research supports the findings of research conducted by Roca et al (2009) which states that trust has a significant effect on continuance intention. The results of this research also support the results of research conducted by Wang et al (2019) which states that trust has a significant effect on continuance intention, and trust will be created when consumers have the perception that the company is able to reduce the uncertainty and risk of the online transactions they do.

The effect of perceived ease of use on perceived usefulness

This research resulted in the finding that perceived ease of use has a significant effect on perceived usefulness. It means that when the consumer's perceived convenience of the services provided by Klikindomaret is higher, the consumer's perceived usefulness of Klikindomaret is also higher.

Consumers will consider an application service to be useful when the application is easy to use and also provides convenience for consumers in carrying out certain activities. Respondents in this research already considered that Klikindomaret had provided easy access for consumers, as evidenced by the results of descriptive analysis of the easy to learn and indicators easy to use showing the highest scores, and this convenience ultimately created a perception of usefulness in consumers about Klikindomaret itself.

The results of this research support the results of research conducted by Mohamed et al (2014) which states that perceived ease of use has a significant effect on perceived usefulness. This research also supports the findings of research conducted by Khayer and Bao (2019) which states that the level of convenience of digital services will lead to an increase in the perception of convenience in consumers, and conversely the more complex a digital service will lead to a decrease in perceived usefulness felt by consumers.

The effect of perceived ease of use on trust

This research produces findings that perceived ease of use has a significant effect on trust. It means that when the consumer's perception of the convenience of the services provided by Klikindomaret is higher, the consumer's confidence in the responsibilities carried out by Klikindomaret will be higher.

Yudiarti and Puspaningrum (2018) state that consumers will have more confidence in sellers who provide online transactions that are easy to use. The better Klikindomaret is in processing its applications into easy-to-use applications, the more consumers will trust the ability of Klikindomaret in carrying out their responsibilities in doing business online.

The results of this study are in accordance with research conducted by Li and Yeh (2010), as well as research conducted by Yudiarti and Puspaningrum (2018), in which both studies explain that perceived ease of use has a significant influence on trust, so the results of this study support the results of previous studies.
The effect of perceived ease of use on continuance intention is mediated by perceived usefulness

The results showed that perceived ease of use had a significant impact on continuance intention through perceived usefulness. Consumer decisions in using Klikindomaret come from the convenience they feel when using Klikindomaret. If a consumer already considers an application to be easy to use, then consumers will tend to consider the application useful in helping consumers to carry out certain activities, and when consumers already feel that an application provides usefulness to themselves, consumers will be more willing to continue using the application, rather than discontinuing its use.

The mediating characteristic of perceived usefulness in the relationship between perceived ease of use and continuance intention is partially mediating. Mediating partially means that perceived usefulness can bridge the influence of perceived ease of use on continuance intention, however, even without perceived usefulness, the perceived ease of use by consumers is able to increase consumer interest in continuing to use Klikindomaret.

This research supports the results of research conducted by Khayer and Bao (2019), and Mohamed et al (2014) which state that perceived ease of use has a significant effect on perceived usefulness, as well as research conducted by Al-Maghrabi et al (2011) Foroughi et al. al (2019) which states that perceived usefulness has a significant effect on continuance intention.

The effect of perceived ease of use on continuance intention is mediated by trust

The results showed that perceived ease of use has a significant impact on continuance intention through trust. It can be interpreted that the perception of the ease of using Klikindomaret in online transactions leads to the emergence of trust from consumers after using Klikindomaret so as to increase the intention or desire of consumers to continue to transact using Klikindomaret.

According to a report from Microsoft (2019) which states that the level of trust from Indonesian consumers in digital services is still relatively low, therefore companies competing in the digital industry need to pay attention to consumer trust, because consumer trust will provide distinct advantages for companies, one of which is to continue re-use by consumers, and consumer trust itself can be formed or enhanced by providing services to consumers that are easily accessible and easy to run by consumers.

The results of this research support the results of research conducted by Li and Yeh (2010), as well as research from Yudiarti and Puspaningrum (2018) which states that perceived ease of use has a significant effect on trust, then research conducted by Roca et al (2009) Wang et al (2019) which states that trust has a significant effect on continuance intention.

Conclusions

The results of this study can be concluded that perceived ease of use can affect continuance intention either directly or through perceived usefulness and trust. Consumers will consider the convenience aspect of an application service, and then from this convenience whether it can provide benefits for consumers in conducting online transactions, and from that convenience, whether an application service can be trusted in carrying out online transactions with users, which in the end aspects- these aspects can increase the user's intention to continue using the Klikindomaret service. This paper finally recommends

1. Further research can be carried out in areas other than Malang City, which have a larger area, a larger population, and an estimated greater number of Klikindomaret users.
2. This research model should also be tested on other digital services, such as digital e-wallet services, online gaming, or streaming on demand to see the consistency of research results using the same research model as this research model.
3. Further research can also add other variables that have not been used in this study, such as variables of satisfaction, loyalty, value perception, risk perception, and many other variables.
4. This research in the future still needs to be enriched by increasing the number of respondents used as research samples, because the larger number of research samples is expected to provide better research results.

References


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