Analysis of Factors that Influence the Continuous Intention to Use the Financial Technology Peer-to-Peer (P2P) Lending Services During the Covid-19 Pandemic

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ABSTRACT

The purpose of this study is to determine the factors that influence the continuous intention to use Financial Technology Peer to Peer (P2P) lending services during the Covid-19 pandemic. P2P lending is the provision of financial services to bring together loan recipients and lenders in order to enter into lending and borrowing agreements directly through an electronic system using the internet network in the rupiah currency. The existence of financial technology today will encourage the growth of a cashless society. Banknotes or physical cash are created by utilizing resources in the environment and also the impact of creating banknotes is high and is a risk to the environment. The cashless system is expected to help minimize the environmental impacts of banknote printing waste that can cause climate change. This study is quantitative research using an online survey method. We screened the questionnaire that had been filled by 67 respondents and we choose 55 respondents who met the requirements. We analyzed the data with a structural equation model (SEM) to test the hypotheses, including the relationships of all latent variables. In this study, we use 6 variables perceived usefulness, personal innovativeness, perceived ease of use, social influence, perceived security, and continuous intention to use. The results reveal that perceived ease of use and perceived security have significant influence on continuous intention to use P2P lending services. In addition, personal innovativeness, perceived usefulness and social influence have no significant influence on continuous intention to use P2P lending services.

Keywords: P2P Lending, perceived ease of use, perceived security, perceived usefulness, social influence.

I. INTRODUCTION

Current technological developments, through internet-based applications, have provided convenience for the community in various fields. Likewise in the financial sector which is now starting to be integrated with electronic system platforms. Innovations in the financial sector are often referred to as financial technology. The current existence of financial technology will encourage the growth of a cashless society (Adilah, 2020). Physical cash or banknotes are made by utilizing the resources in the environment and also the high and risky environmental impact of making banknotes (PameloPay, 2020). The cashless system is expected to help minimize the environmental impact of paper money printing waste that can cause climate change. In the financial industry, fintech is recognized as one of the most important and rapidly evolving innovations, driven in part by regulation, the sharing economy, and information technology (Lee & Shin, 2018), and is a term used to describe innovations in the financial sector, one form of technological development through the internet in the financial sector is Peer to Peer Lending (P2P Lending). P2P Lending is a forum for investing and lending funds to the community.

The advantage of P2P lending service lies in the process of bringing the borrower to the lender and the process of implementing the agreement which is carried out digitally. So, this service is considered to have the potential to meet funding needs quickly, easily, and efficiently. In line with this, there has been significant growth in P2P Lending, as evidenced by an increasing trend in the number of borrower and lender accounts. The number of accounts borrowers as of January 2020, reached 20,497,167 accounts, an increase of 297.22% compared to the previous year. Likewise, the number of accounts lenders reached 616,000 accounts or an increase of 172.70% compared to the previous year. P2P Lending has also disbursed loan funds of IDR 88.37 trillion as of January 2020, an increase of 239.85% compared to the previous year. The high growth of borrower and lender accounts shows the increasing public interest in the demand for credit (loans) in P2P Lending. On the other hand, the Covid-19 pandemic has increased technology adoption in various sectors, including the financial sector, one of which is P2P Lending fintech, this is evidenced by the continued increase in P2P Lending fintech in Indonesia both in terms of funding and distribution of funds during the pandemic. The distribution of loans provided until June 2021 has reached 25.3 million people with a total distribution of funds...
of Rp. 14,793 trillion, an increase from conditions in January 2021 which only reached 24.7 million people and distributed Rp. 9.38 trillion in loans.

However, the rapid growth of the Fintech P2P Lending industry needs to be anticipated. This is to ensure consumer protection is well maintained. Besides the advantages offered by P2P Lending, there are various risks that may arise for both the borrower and the lender. Based on a report by the Indonesian Consumers Foundation, the number of complaints during 2019 was 1,871 complaints. Of the total cases, problems regarding online loans have a large portion, with a total of 96 complaints. In addition, with the existence of consumer information in the database of Fintech companies, there are potential risks related to the privacy of consumer data and transaction data that can be misused by irresponsible parties (Cermati, 2019).

The focus of this research is on various factors that can influence interest in using fintech lending services. Acceptance of the use of new technology is one of the unique personal characteristics of consumers who seek loans online (Kato et al., 2014; Duane et al., 2014), where personal innovation is a highly involved construct of trust and individual perceptions and directs their actions in technology adoption (Agarwal & Prasad, 1998). Furthermore, the study of Viehland et al. (2010) and Duane et al. (2014) show the positive impact of perceived ease of use on the tendency to use Fintech Lending services. Considering that fintech, especially P2P lending, is a relatively new thing and there are not many studies discussing this topic in Indonesia, it is important to take part by analyzing various factors that can influence interest in using fintech P2P Lending services so that the results of this analysis can be used as information and considerations for people who want to transact in Fintech P2P Lending which is the purpose of this research.

II. LITERATURE REVIEW

A. Technology Acceptance Model (TAM)

TAM is an adaptation of TRA which is specially made for modeling user acceptance of technology or information systems. TAM to explain computer use behavior as shown in Fig. 1.

TAM has been confirmed as a robust model for predicting individual adoption of systems or information technology (Davis, 1989; Davis et al., 1988). Currently, TAM is one of the most widely used theories in researching consumer behavior in relation to technology adoption in various fields, such as e-banking (Alghamdi et al., 2018; Patel and Patel, 2018), e-learning (Al-Rahmi et al., 2019), virtual tourism (Li & Chen, 2019), mobile learning (Wang et al., 2019), health information (Ren et al., 2019). This research itself will be carried out based on a modified Theory Acceptance Model.

B. Personal Innovativeness (PI)

Personal innovativeness is one of the main constructs for understanding the acceptance of new technologies. Individuals who are the first to adopt a new technology generally have high personal innovation. Lu et al. (2005) studied personal innovativeness on perceived usefulness and ease of use. The hypothesis regarding personal innovativeness was validated in a study by Duane et al. (2014). In this case, the borrower’s behavior can be influenced by the acceptance of innovation at the individual level (Bjoern & Juengerkes, 2016). Furthermore, Contreras Pinochet et al. (2019) suggest that personal innovativeness has a significant impact on the tendency to use Fintech Lending services, so from the several studies above, the following hypothesis can be drawn:

H1a: Personal innovativeness is positively related to the continuous intention to use in relation to loan services offered by Fintech lending.

H1b: Personal innovativeness is positively related to perceived ease of use in relation to loan services offered by Fintech lending.

H1c: Personal innovativeness is positively related to perceived usefulness in relation to loan services offered by Fintech lending.

C. Perceived ease of use (PEOU) and perceived usefulness (PU)

The degree to which a person believes that using a particular system should be easy, i.e., freedom from hardship or great effort is the notion of perceived ease of use. Perceived ease of use of using online tools for this purpose may determine the acceptance (or not) of the new modality (Bjoern & Juengerkes, 2016; Kröner, 2017). Viehland et al. (2010) dan Duane et al. (2014) discuss in their study the positive impact of perceived ease of use on intention to use. Based on this study, the following hypotheses were formulated:

H2: Perception of ease of use is positively related to the continuous intention to use in relation to loan services offered by Fintech Lending.

Perceived usefulness can be defined as an individual’s idea of an increase in the performance of an activity or the benefits that a particular system brings to those who use it. Several studies have shown that perceived usefulness has a positive impact on the propensity to use Fintech (Duane et al., 2014; Contreras Pinochet et al., 2019). Thus, the following hypothesis is formulated:

H3: Perceived usefulness is positively related to the continuous intention to use in relation to loan services offered by Fintech Lending.
D. Social Influence (SI)

Social influence can be defined as “a person’s perception that other people who are considered important, such as friends, family, colleagues, peers, and social groups, can influence whether or not someone should use Fintech Lending services”. The importance of social influence on technology adoption behavior is widely recognized (Kesharwani & Tripathy, 2012).

In TRA, Fishbein and Ajzen (1975) first used the term “subjective norm” to describe the term “social influence”. Social influence has a direct impact on behavioral intentions (Fishbein & Ajzen, 1975; Venkatesh & Davis, 2000). In recent years researchers have examined social influences on TAM. Contreras Pinochet et al. (2019) shows a significant relationship between social influence and behavioral intention to use Fintech Lending services. People who are still unsure or insecure about innovation will usually consult their social networks before engaging in new technology (López-Nicolás et al., 2008). Thus, the following hypothesis can be drawn:

**H4**: Social influence is positively related to the continuous intention to use in relation to loan services offered by Fintech lending.

E. Perceived Security (PS)

Perceived security, can be defined as the degree to which people believe that the website is safe for transmitting sensitive information (Salisbury et al., 2001). In this study, the perception of security refers to the perception of the fintech lending system that completes its financial transactions safely. The importance of privacy and security in the adoption of technology-based financial services has been observed in many studies, one of which is internet banking (Sathye, 1999; Polatoglu & Ekin, 2003; Howcroft et al., 2002; Pikkarainen et al., 2004).

Wang et al. (2003) found that privacy and security, had a significant positive impact on behavioral intentions to use online banking. Thus, the following hypothesis can be drawn:

**H5**: Perceived security is positively related to the continuous intention to use in relation to loan services offered by Fintech lending.

F. Continuous Intention to Use (CI)

To evaluate consumers’ continuous intention to use fintech lending, the study uses a theoretical relationship model adapted by Duane et al. (2014).

III. METHODS

A. Research Process

This research is quantitative research that uses surveys to collect data in the field. The survey was conducted from October 7 to October 15, 2021, and was carried out on the desired target respondents. Samples were taken using the purposiveness method, one of the criteria is individuals and entrepreneurs who have transacted or are currently using Fintech Lending and are domiciled on the island of Java. The online questionnaire was created using Google Forms. In total 67 respondents filled out the questionnaire. The data screening process is carried out to obtain respondents who have complete data and meet the criteria. 12 respondents were excluded because they were incomplete or did not meet the criteria so the remaining 55 respondents could be used.

B. Variable Measurement

This study will use 5 points Likert scale starting from Strongly Agree with a weight or score of 5, Agree with a weight or score of 4, Neutral with a weight or score of 3, Disagree with a weight or score of 2, and Strongly Disagree weight or score 1. So, the greater the number of values given by respondents for each indicator/variable, it indicates that the indicator has a positive effect on the tendency of consumers to use Fintech P2P Lending services.

C. Hypothesis test

This study tested the hypothesis through the structural model that was built. The structural model was tested using the SEM-PLS method through SmartPLS. The stages of model testing in SEM-PLS include testing the measurement model and testing the structural model (Hair et al., 2010).

IV. RESULTS

A. Respondent

The online survey was conducted using Google Form. From a total of 67 respondents who participated, 55 respondents filled in completely and met the criteria. The profiles of respondents who filled in completely can be seen in Table I.

<table>
<thead>
<tr>
<th>Description</th>
<th>Information</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Man</td>
<td>47.3 %</td>
</tr>
<tr>
<td></td>
<td>Woman</td>
<td>52.7 %</td>
</tr>
<tr>
<td>Age</td>
<td>21-30 years old</td>
<td>74.5 %</td>
</tr>
<tr>
<td></td>
<td>31-40 years old</td>
<td>23.6 %</td>
</tr>
<tr>
<td></td>
<td>41-50 years old</td>
<td>1.8 %</td>
</tr>
<tr>
<td>Level of education</td>
<td>Senior high school</td>
<td>9.1 %</td>
</tr>
<tr>
<td></td>
<td>Diploma (D3)</td>
<td>18.2 %</td>
</tr>
<tr>
<td></td>
<td>Bachelor degree (S1)</td>
<td>61.8 %</td>
</tr>
<tr>
<td></td>
<td>Magister (S2)</td>
<td>10.9 %</td>
</tr>
<tr>
<td>Income</td>
<td>&lt; IDR 1,000,000</td>
<td>12.7 %</td>
</tr>
<tr>
<td></td>
<td>IDR 1,000,000 - IDR 2,000,000</td>
<td>16.4 %</td>
</tr>
<tr>
<td></td>
<td>IDR 2,100,000 - IDR 4,000,000</td>
<td>32.7 %</td>
</tr>
<tr>
<td></td>
<td>IDR 4,100,000 - IDR 6,000,000</td>
<td>18.2 %</td>
</tr>
<tr>
<td></td>
<td>IDR 6,100,000 - IDR 8,000,000</td>
<td>14.5 %</td>
</tr>
<tr>
<td></td>
<td>IDR 8,100,000 - IDR 10,000,000</td>
<td>3.6 %</td>
</tr>
<tr>
<td></td>
<td>&gt; IDR 10,000,000</td>
<td>1.8 %</td>
</tr>
</tbody>
</table>

Source: Data processed.
B. Test Measurement Model

Data analysis begins with testing the measurement model and continues with testing the structural model. The results of the structural model testing can be seen in Table II.

<table>
<thead>
<tr>
<th>Construct</th>
<th>Item</th>
<th>Factor Loading</th>
<th>Cronbach Alpha</th>
<th>Composite Reliability</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PI</td>
<td>PI1</td>
<td>0.875</td>
<td>0.725</td>
<td>0.879</td>
<td>0.784</td>
</tr>
<tr>
<td></td>
<td>PI2</td>
<td>0.896</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PU</td>
<td>PM1</td>
<td>0.730</td>
<td>0.782</td>
<td>0.863</td>
<td>0.679</td>
</tr>
<tr>
<td></td>
<td>PM2</td>
<td>0.870</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PM3</td>
<td>0.865</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEOU</td>
<td>PKP1</td>
<td>0.709</td>
<td>0.891</td>
<td>0.919</td>
<td>0.696</td>
</tr>
<tr>
<td></td>
<td>PKP2</td>
<td>0.904</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PKP3</td>
<td>0.831</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PKP4</td>
<td>0.872</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PKP5</td>
<td>0.843</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PS</td>
<td>PK1</td>
<td>0.958</td>
<td>0.964</td>
<td>0.974</td>
<td>0.903</td>
</tr>
<tr>
<td></td>
<td>PK2</td>
<td>0.953</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PK3</td>
<td>0.952</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PK4</td>
<td>0.937</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SI</td>
<td>PS1</td>
<td>0.854</td>
<td>0.786</td>
<td>0.873</td>
<td>0.697</td>
</tr>
<tr>
<td></td>
<td>PS2</td>
<td>0.867</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PS3</td>
<td>0.782</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CI</td>
<td>MPB1</td>
<td>0.755</td>
<td>0.838</td>
<td>0.904</td>
<td>0.760</td>
</tr>
<tr>
<td></td>
<td>MPB2</td>
<td>0.914</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MPB3</td>
<td>0.935</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Data processed.

The test results show the loading factor value for all indicators has a value above 0.7. Cronbach alpha, composite reliability, and AVE tests show values above the standard, all of which indicate the criteria for a good measurement model. Discriminatory validity testing using Fornell-Larcker criteria can be seen in Table III.

Table III shows that each variable studied has the highest value, so it can be said that it passes the Fornell and Larcker criteria.

C. Structural Model Testing

The process of testing the structural model is carried out after the measurement model meets the required criteria. Improvements are made if there are problems in the measurement model. The existing test results show that all of the measurement model testing criteria are met so that the process can proceed to the structural model. The structural model in this study can be seen in Fig. 2.

The testing process is continued by testing the relationship between variables using a standard 95% confidence level with a t-value of 1.96. The results of complete hypothesis testing can be seen in Table IV.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Standard Deviation</th>
<th>T Statistics</th>
<th>P-Values</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1_a</td>
<td>0.132</td>
<td>1.113</td>
<td>0.266</td>
<td>Not significant</td>
</tr>
<tr>
<td>H1_b</td>
<td>0.077</td>
<td>7.611</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>H1_c</td>
<td>0.068</td>
<td>8.068</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>H1</td>
<td>0.136</td>
<td>2.045</td>
<td>0.041</td>
<td>Significant</td>
</tr>
<tr>
<td>H2</td>
<td>0.147</td>
<td>0.944</td>
<td>0.346</td>
<td>Not significant</td>
</tr>
<tr>
<td>H3</td>
<td>0.121</td>
<td>1.134</td>
<td>0.257</td>
<td>Not significant</td>
</tr>
<tr>
<td>H4</td>
<td>0.120</td>
<td>2.004</td>
<td>0.046</td>
<td>Significant</td>
</tr>
</tbody>
</table>

Source: Data processed.
The results of the H1a test that examines the effect of personal innovativeness on continuous intention to use the results obtained by the t-stat value of 1.113 with p-value of 0.266. These results indicate that personal innovativeness has no significant effect on continuous intention to use. H1b test that examines the effect of personal innovativeness on the perception of ease of use shows the results of the t-stat value of 7.611 with p-value of 0.000. Because the t-stat value is greater than the standard t-value, it can be concluded that personal innovativeness has a significant effect on perceived ease of use. H1c test that examines the effect of personal innovativeness on the perception of usefulness, the results show the t-stat value of 8.068 with p-value of 0.000. Because the t-stat value is greater than the standard t-value, it can be concluded that personal innovativeness has a significant effect on perceived usefulness.

H2 which examines the effect of perceived ease of use on continuous intention to use obtained t-stat value 2.045 with p-value of 0.041. Because the t-stat value is higher than the t-table value, it can be concluded that the perception of ease of use has a significant effect on continuous intention to use. The results of the H3 test that examines perceived usefulness on continuous intention to use show the results of the t-stat value of 0.944 with p-value of 0.346. These results indicate that perceived usefulness has no significant effect on continuous intention to use.

H4 test which examines the effect of social influence on continuous intention to use obtained t-stat value of 1.134 with p-value of 0.257. These results indicate that social influence has no significant effect on continuous intention to use. The results of the H5 test that examines the effect of perceived security on continuous intention to use show the t-stat value 2.004 with p-value of 0.046. Because the t-stat value is greater than the standard t-value, it can be concluded that the perceived security has a significant effect on continuous intention to use.

V. DISCUSSION

A. The Effect of Personal Innovativeness on Continuous Intention to Use

The results of the statistical test on H1a show that personal innovativeness has no significant effect on interest in using P2P Lending services. If further analyzed related to the research context on this P2P Lending fintech service, where the majority of users are aged 21-30 years, it can be concluded that individuals in understanding technology acceptance, using or operating a digital service has become commonplace, where the majority of respondents are millennials, so that their daily activities and lifestyle are already accustomed to using everything digitally based. Therefore, an individual’s decision to use a digital financial service does not come from the ability to accept technology but rather comes from his own beliefs which are influenced by certain factors that arise from internal use. These results are consistent with the research of Lu et al. (2005).

B. The Effect of Personal Innovativeness on Perceived Ease of Use

Statistical test results on H1b show that personal innovativeness has a significant effect on perceived ease of use. The characteristic of openness to new technologies makes individuals more interested in their use, which leads to greater engagement with ease of use and technology. Another factor in the study that contributed to the relationship between personal innovativeness and perceived ease of use was that most of the respondents had a bachelor’s education level with 61.8%. These results are consistent with the research of Contreras Pinochet et al. (2019).

C. The Effect of Personal Innovativeness on Perceived Usefulness

The results of statistical tests on H1c show that personal innovativeness has a significant effect on perceived usefulness. This may represent individuals with higher levels of personal innovation for a new technology that can make their activities more efficient. Another factor in this study is that the age of the majority of respondents aged 21-20 years is most likely to positively affect the results because innovation and technology are the desired solution for this age group. These results are consistent with the research of Duane et al. (2014), Contreras Pinochet et al. (2019).

D. The Effect of Perception of Ease of Use on Continuous Intention to Use

The results of the statistical test on H2 show that perceived ease of use has a significant effect on continuous intention to use. In this study, the services offered by fintech P2P Lending make it easier for users to apply for credit/loans quickly and the lending process is also more practical, namely online so that the desire of users to make loans through fintech P2P Lending services is increasing. These results are consistent with the research of Duane et al. (2014), Patel and Patel (2018), Contreras Pinochet et al. (2019).

E. The Effect of Perception of Usefulness on Continuous Intention to Use

Statistical test results of H3 shows that perceived usefulness has no significant effect on interest in using P2P Lending services. These results are consistent with the research of Yuniarti (2019). Someone will use the system if the person believes and understands the benefits or good use of the system. The assumption is that if the user trusts and understands if the system is useful then the user will use it, but otherwise if users don’t trust and don’t understand if the system is useful then users definitely won’t use the system. In this study, there are still many people who do not understand the usefulness and benefits of P2P Lending fintech services, and doubts about P2P Lending fintech services because of the increasing number of illegal P2P Lending fintech in Indonesia with various problems such as misuse of personal data or fraud so that the benefits of these services have not been fully felt by the public.

F. The Effect of Social Influence on Continuous Intention to Use

The results of statistical tests of H4 show that social influence does not significantly affect interest in using P2P Lending services. Individual decisions in using P2P Lending
services do not come from the social environment such as family, friends, or certain figures but rather come from their own beliefs which are influenced by certain factors that arise from internal use. These results are consistent with the research of Shih and Fang (2004), Putro and Hendratmoko (2019), Patel and Patel (2018), Contreras Pinochet et al. (2019).

G. The Effect of Perceived Security on Continuous Intention to Use

Statistical test results of H5 show that security perception significantly influences the interest in using P2P Lending services. It implies that perceived security is an important predictor of a person’s behavioral intention to use a service P2P Lending, which is consistent with previous studies by Patel and Patel (2018), Contreras Pinochet et al. (2019). The results show that without proper security protection, users will not use P2P Lending services. This is rational because transactions in P2P Lending are financial transactions. Therefore, users, especially from developing countries such as Indonesia, will be more careful because they are more accustomed to conducting conventional financial transactions. Therefore, P2P Lending providers must develop appropriate security mechanisms to gain the trust of P2P Lending.

VI. CONCLUSIONS

This study aims to determine the factors that influence the continuous intention to use of Peer to Peer (P2P) lending Financial Technology services during the Covid-19 pandemic. This research was conducted on individuals and entrepreneurs who have transacted or are currently using Fintech Lending and are domiciled in Java. The results of this study indicate that perceived ease of use and perceived security are determinants of interest in using Financial Technology Peer to Peer (P2P) Lending services during the Covid-19 pandemic. Meanwhile, personal innovativeness, perceived usefulness, and social influence did not significantly affect the continuous intention to use Financial Technology Peer to Peer (P2P) Lending during the Covid-19 pandemic. The current existence of fintech lending will encourage the growth of a cashless society, where the cashless system is expected to help minimize the environmental impact of paper money printing waste that can cause climate change.

The limitation of this study is the relatively small number of samples (55 samples) so the generalization is very limited. Future research is expected to extend the research period and increase the number of samples in order to obtain better and more accurate research results.

REFERENCES


Putro, A., & Hendratmoko. (2019). Faktor-Faktor Yang Memengaruhi Individu Dalam Menggunakan Peer To Peer Lending Dan Equity

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