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The Investment Intention Among Indonesian Millennials via Peer-to-Peer Lending Applications

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Abstract

This study analyzes the factors influencing millennial investment intentions via Peer-to-Peer (P2P) lending applications through trust and perceived risk. This research was conducted by respondents who were selected using non-probability sampling, with the criteria that they had never used a P2P lending application and were born in 1982 to 2000. An online questionnaire gathered the data analysis using Structural Equation Modeling (SEM) with LISREL. The study results found that perceived reputation, perceived structural assurance, and trust had a significant effect on perceived risk. In contrast, financial literacy and perceived information quality are not. Next, relative advantage perceived reputation and perceived information quality significantly affect trust. Meanwhile, perceived structural assurance is not. Furthermore, perceived risk and trust have a significant effect on investment intention. However, perceived risk is more vital in mediating investment intention via P2P lending than trust. The organizers have discussed the managerial implications to consider increasing the number of potential investors, especially the millennial generation.

Keywords: Investment intention; Millennials; P2P lending; Perceived risk; Trust
JEL: G20, G41, O33

1. INTRODUCTION

The rapid growth of financial technology in Indonesia illustrates a new trend in modern financial services primarily aimed at financial purposes: peer-to-peer (P2P) lending. P2P lending plays a role as alternative financial media, providing solutions for specific borrowers with limited access to conventional bank loans and allowing communities to diversify an investment portfolio through a funding mechanism with an attractive return. Enthusiasm for this latest financial technology innovation can be seen from the number of P2P lending organizers in Indonesia reaching 149 registered entities, and the number of borrowers grew by 134.59% *yoy*. However, the number of investors only grew by 18.32% *yoy* (OJK, 2020). There are still P2P lending applications that haven't met the borrower's funding needs before the specified time limit.

Nowadays, the millennial generation is turning into the productive age who are predicted to be independent in financial. Millennials have the characteristics of being willing to take risks to make investment decisions and are often characterized by being comfortable with technology (Onasie & Widoatmodjo, 2020). Based on the Jakpat survey in 2018, there is a tendency that millennials are getting interested in investing using financial technology. Millennials prefer and can support and store their wealth efficiently using the most accessible financial services. There are possibilities for P2P lending applications to gain more attention from the millennial generation as an alternative investment.

Uncertainty in investing through P2P lending applications is the same as investing in other instruments. The return on investment will be even greater if it is associated with high-risk transactions. Therefore, understanding knowledge about investment will support confidence to manage personal finances through proper planning. Someone with adequate financial literacy tends to participate in investment activities (Allgood & Walstad, 2016). Furthermore, the investment mechanism in P2P lending tends to be unique because it involves two parties who do not meet directly, including investors and borrowers. Investors assess the risk of loans to be invested only through online information channels. As a result, trust plays an essential role in accommodating transactions.

AFTECH (2020) concluded that consumer protection is an essential issue in the use of P2P lending, especially transparency, reliability, fair treatment, fast dispute resolution, data privacy, and security. The initial introduction to P2P lending applications is related to the credibility of the instrument in meeting investment expectations. In this case, reputation becomes the basis of reference in the community to understand the provider's reliability, especially for investors who do not have an experience that will depend on the reputation of P2P lending applications (Wang et al., 2014; Wei et al., 2017). Furthermore, information transparency is essential in P2P lending applications. The investment process in P2P lending is entirely online and allows for information asymmetry. Information quality is needed to reduce investment uncertainty. Especially in the online environment, the quality of information is essential in influencing consumer choices (Ghasemaghaei & Hassanein, 2016). In the final evaluation, investors will think about various kinds of risks. Digital elements in fintech services may cause concerns in their use. Structural assurance is needed to ensure protection and security in conducting transactions in helping investors to overcome anxiety about potential losses (Wang et al., 2019).

To gain potential investors is to encourage the millennial generation's intention to invest using P2P lending applications. As the latest investment instrument innovation, we employed the perceived characteristic of the innovation model as the theoretical foundation for forming intentions (Moore & Benbasat, 1991). One of these criteria is the relative advantage, where innovation is more beneficial than its predecessor. P2P lending is a technology-based lending and borrowing service other than conventional banks. They offer various benefits, including a better level of investment, ease of processing, real-time, and speed of service (Milne & Parboteeah, 2016). Furthermore, investment intentions in consumer behavior will determine how retail investors decide to invest. Someone who chooses to invest is willing to accept investing risk and has more confidence (Kurniawan, 2021). Maziriri et al. (2019) found that perceived risk and Investor' trust could control investment intentions through the online trading platform. The risk factors can pose a challenge to consider using financial technology. In contrast, building trust in transaction facilities is one form of reducing users' perceived risk. Trust issues become very important to describe the level of risk (Zhou, 2014).

This study is concerned with understanding the millennial generation's behavior towards using the P2P lending application to determine how to increase investment intention with a lending mechanism. So the potential Investor can minimize the gap between the number of investors and borrowers and affect the growth in the lending volume. We explore the factors that encourage millennials to invest in P2P lending applications from the perspective of perceived risk and trust in mediating financial literacy, relative advantage, perceived reputation, perceived structural assurance, and perceived information quality on investment intentions using P2P lending applications. Hopefully, the results of this study can provide organizers with a new perspective on the intention to invest in P2P lending, especially the millennial generation.

2. HYPOTHESES DEVELOPMENT

Investment Intention

The intention is a motivating factor that will affect efforts to carry out a behavior (Ajzen, 1991). Furthermore, the intention as control of the action will be realized in various forms if there is a suitable time and opportunity. The intention will become behavior until the option is appropriate. Behavioral purposes require consistency in target, action, situation, and time. According to Sashikala & Chitramani (2018), deciding to invest is based on motivational factors and an investor's efforts to take specific actions. The reasons for an investor to invest are referred to as investment intentions.

Perceived Risk

Perceived risk is the individual risk that needs to be addressed due to uncertainty and loss of opportunity in pursuing a service's expected gain (Featherman & Pavlou, 2003). Perceived risk can be the basis to apprehend the user's behavior in facing the risk. If the expected loss is significant, a consumer will have to deal with a higher risk (Ariffin et al., 2018). Several studies have identified perceived risk dimensions, each of which will vary according to products or services. These dimensions include performance risk, social risk, financial risk, privacy risk, and time risk (Featherman & Pavlou, 2003). In the P2P lending context, perceived risk is a form of subjective perception of the various risks associated with the application for investment.

Trust

Trust refers to the individual's level of trust that the other party has a beneficial characteristic in pursuing a goal (McKnight & Chervany, 2001). The trust concept covers three consumer beliefs about whether the other party has integrity, benevolence, and the ability to meet consumers' expectations. Integrity means that the organizers follow moral and ethical principles, and benevolence implies that the organizers have good intentions. Ability implies that the organizers have the skills and competencies needed to fulfill their duties (Yang et al., 2015). Uncertainty and risk exist when conducting online transactions. The involvement of user trust in the investment intention via P2P lending application is expected to decrease tension.

Financial Literacy

Financial literacy is related as an individual understands financial concepts and can manage personal finance by considering the living and economic situation (Remund, 2010). Not every recent financial service is easily understandable, specifically for investors with minimal financial experience. Financial literacy loss is related to incorrect financial misconduct in investing, financing debt, and making plans on long-time period pension, which altogether decreases one's well-being (Chu et al., 2016). Thus, financial literacy might also affect investors' perceived investment risk.

Relative Advantage

Relative advantage is one characteristic that innovation appears to have more benefits than the concept it replaces (Moore & Benbasat, 1991). The P2P lending application is one of the newest forms of financial service innovation based on technology elements. The increasing development of the P2P lending application can provide benefits that other financial services cannot obtain. The use of the P2P lending application offers various advantages, including a better level of investment, ease of processing, and speed of service (Milne & Parboteeah, 2016). Therefore, more favorable benefits will contribute to trust in a service (Koufaris & Hampton-Sosa, 2004).

Perceived Reputation

Perceived reputation is how the Investor will trust application characters and subsequently acknowledge its descent competency and integrity. Reputation is determined based on the accumulated assessment driven by observation and experience with the services provider (Sánchez-Alzate & Sánchez-Torres, 2017). The reputation can be judged as essential in credibility assessment and can increase the recognition of P2P lending applications. An individual with no experience to invest via a P2P lending application is presumed to behave in line with the platform's reputation (Wang et al., 2014). In addition, Ong & Chan (2016) stated that a positive reputation could indicate a level of trust and anticipate perceived risk on financial applications.

Perceived Structural Assurance

Perceived structural assurance refers to how much reliability an investor acknowledges on an application with technology and legal protection structure, which helps to assure safe transaction (Zhou, 2014). The structural assurance availability, such as technical encryption policy, insurance, regulation, law structure, and guarantee, plays a vital role in sustaining users' perceived safety in financial transactions using P2P lending applications (Wang et al., 2015). It is necessary for financial services that adopt technology information for its use. Therefore, structural assurance is needed to control the risk and gain investors' trust in technology (Bock et al., 2012).

Perceived Information Quality

Perceived information quality refers to Investor's perception in accessing accurate and complete information (Zhang et al., 2014). P2P lending is known for its potency to arrange a meeting between the Investor and borrower. Information availability plays a vital role in influencing consumers' decisions (Ghasemaghaei & Hassanein, 2016). To minimize the risk, investors will look for the most accurate information about the borrower candidate (Chen et al., 2015). This information will mitigate the risk of asymmetrical information while simultaneously increasing the self-confidence in the investment via the P2P lending application.

The Effect of Financial Literacy on Perceived Risk

According to Aren & Zengin (2016), the relation between perceived risk and financial literacy will affect the investment possibilities of each Investor. An investor with excessive financial literacy gets better investment returns than people with low literacy. Samsuri et al. (2019) additionally said that people with good financial literacy tend to tolerate the risk and are willing to invest. Meanwhile, perceived risk is essential in mediating financial literacy in investment decisions at the stock market (Waheed et al., 2020). Based on these conditions, the proposed hypothesis is:

H_1: Financial literacy has a negative and significant effect on perceived risk.

The Effect of Relative Advantage on Trust

According to Koufaris & Hampton-Sosa (2004), comfort, convenience, and benefits will build trust in a service. Kim et al. (2009) contend that relative advantage can affect the trust of mobile banking use. Similar findings stated by Chen & Wang (2016) point out that relative advantage positively and significantly increases the trust in social commerce use. Furthermore, in P2P lending, comparative advantage can attract individuals to use the application (Syarifah et al., 2020). Based on these conditions, the proposed hypothesis is:

H_2: Relative advantage has a positive and significant effect on trust.

The Effect of Perceived Reputation on Perceived Risk and Trust

Several previous research has proven that perceived reputation can affect perceived risk and trust in using technology. Sipangkar & Wijaya (2020) and Li et al. (2016) found that perceived reputation can negatively and significantly affect perceived risk when using the P2P lending application. Moreover, perceived importance also substantially impacts trust using financial technology, including mobile payment applications (Shao & Zhang, 2018) and P2P lending applications (Li et al., 2016). Based on these conditions, the proposed hypothesis is:

H_3: Perceived reputation has a negative and significant effect on perceived risk.

H_4: Perceived reputation has a positive and significant effect on trust.

The Effect of Perceived Structural Assurance on Perceived Risk and Trust

According to McKnight & Chervany (2001), protection by structural assurance could assure the consumer to use the technology. In addition, there are efforts in the form of protection to reduce investor risk when transacting in P2P lending. The initial research results show that perceived structural assurance significantly positively impacts investors' trust within the P2P lending application (Chen et al., 2014; Wang et al., 2014; Yang & Lee, 2016). Furthermore, perceived structural assurance could negatively and significantly affect investors' perceived risk of the P2P lending application (Li et al., 2016; Wang et al., 2014). Based on these conditions, the proposed hypothesis is:

H_5: Perceived structural assurance has a negative and significant effect on perceived risk.

H_6: Perceived structural assurance has a positive and significant effect on trust.

The Effect of Perceived Information Quality on Perceived Risk and Trust

The availability of information can help potential investors better understand the risk profile of borrowers. Having information on prospective borrowers can help reduce information asymmetry and increase confidence in investing in P2P lending applications. The previous research by Chen et al. (2015) and Puteri et al. (2019) contend that perceived information quality negatively influences perceived risk. At the same time, perceived information quality has positively influenced trust in P2P lending applications. Those findings emphasize that perceived information quality in P2P lending is crucial in affecting the Investor's risk perception and trust in a borrower. Based on these conditions, the proposed hypothesis is:

H_7: Perceived information quality has a negative and significant effect on perceived risk.

H_8: Perceived information quality has a positive and significant effect on trust.

The Effect of Trust on Perceived Risk

The effect of trust on risk has been empirically proven to be a factor that influences individual behavior in an internet environment (Wang et al., 2016). Malaquias & Hwang (2016) confirm that trust will affect perceived risk consumers' use of financial services. Meanwhile, Al-Jabri (2015) reveals that trust significantly influences the risk associated with mobile banking. Yosita & Giri (2016) also prove that individual trust levels significantly and negatively affect perceived risk levels in internet banking. Based on these conditions, the proposed hypothesis is:

H_9: Trust has a negative and significant effect on perceived risk.

The Effect of Perceived Risk and Trust on Investment Intention

Before deciding to invest, investors can consider some risks. If they are willing to take risks, they will choose to invest (Ademola et al., 2019). Yang et al. (2017) explain that perceived risk is negatively related to investors' investment intention via a P2P lending application. Besides that, trust is also a critical factor affecting investors' preference to invest through crowdfunding platforms (Kang et al., 2016). In addition, lack of trust will decrease the decision to invest in the stock exchange (Bottazzi et al., 2016). Furthermore, Investor's trust in the P2P lending application will affect the willingness to invest (Chen et al., 2014). Based on these conditions, the proposed hypothesis is:

H_{10}: Perceived risk has a negative and significant effect on investment intention.

H_{11}: Trust has a positive and significant effect on investment intention.

Following the abovementioned reviews and hypotheses, the present study proposes a conceptual framework presented in Figure 1.

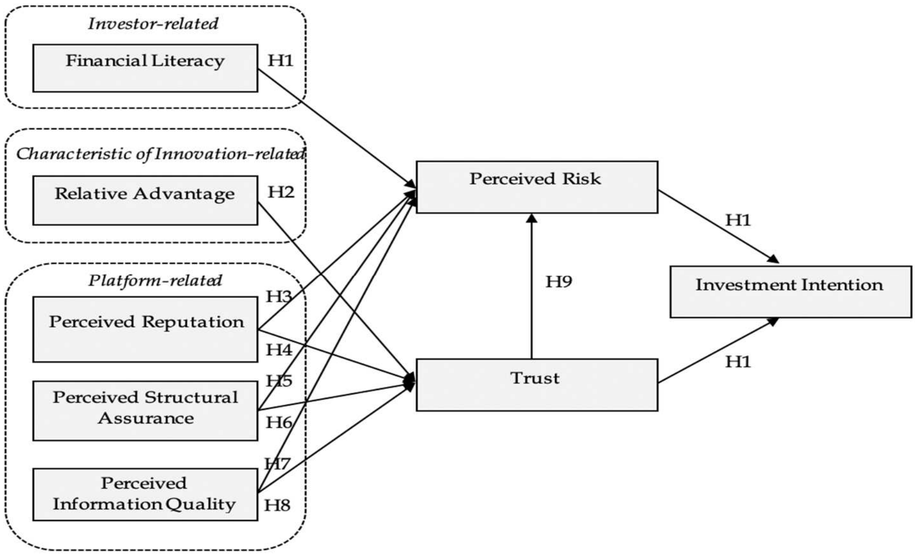

Figure 1. Conceptual Framework

3. METHOD, DATA, AND ANALYSIS

This research activity was from September to December 2020. This research is a quantitative study with a survey method conducted in a cross-sectional survey. The sampling technique in this study is non-probability sampling with voluntary participation within certain limits. The sample involved millennials born between 1982 and 2000 and had never made the investment via P2P lending. Based on Hair et al. (2009) that each latent variable requires five to ten observations. Therefore, the research has 39 indicators where the sample number is between 195 and 390 respondents. A total of 254 respondents have met the criteria and completed the online questionnaire managed via Google Docs.

The instrument used in this research was modifying the tools used in several studies with employed a Likert scale involving five options. These instruments include questions about financial literacy (Lusardi & Mitchell, 2014), relative advantage (Kim et al., 2009), perceived reputation (Sipangkar & Wijaya, 2020), perceived structural assurance (Bock et al., 2012), perceived information quality (Kim et al., 2008), perceived risk (Featherman & Pavlou, 2003), trust (McKnight & Chervany, 2001), and investment intention (Pavlou, 2003). This study uses primary data from online questionnaires distributed through social media. Furthermore, the model based on hypothesis was analyzed by the Structural Equation Model (SEM) using LISREL software.

4. RESULTS

The respondents in this research were female (51.2%), while the rest was male (48.8%). Most respondents were aged between 26 and 31 years old (67.7%), and most were single (59.1%). The majority of the respondents were private workers (54.7%), and many had monthly salaries ranging from Rp 5.000.000 to Rp 10.000.000 (44.9%). Also has ownership of other types of investment (91.6%). Respondents with a bachelor's degree are dominated by 196 subjects (77.2 %). More than half of the respondents are from the West Java province (58.3%), while the rest were from various regions in Indonesia (41.7%).

The Overall Model Fit Test

This study was conducted based on several Goodness-of-Fit criteria. The results obtained after respecification indicate that it can accept the overall fittest of the model with good description (Table 1).

Table 1. The overall model fit test results

	Goodness-of-Fit Criteria	Cut-off Value	Final Results	Description
1.	Standardized Root Mean Square Residual (SRMR)	≤ 0.08	0.07	Good fit
2.	Root Mean Error Approximation (RMSEA)	≤ 0.08	0.08	Good fit
3.	Good Fit Index (GFI)	≥ 0.9	0.76	Marginal fit
4.	Adjusted Good Fit Index (AGFI)	≥ 0.9	0.72	Marginal fit
5.	Normed Fit Index (NFI)	≥ 0.9	0.91	Good fit
6.	Comparative Fit Index (CFI)	≥ 0.9	0.93	Good fit
7.	Relative Fit Index (RFI)	≥ 0.9	0.90	Good fit

Validity and Reliability Test

The measurement model's suitability criteria are reviewed based on the validity and construct reliability of indicators against latent variables. An indicator is valid if it has a standardized loading factor (SLF) value that it can tolerate, i.e.,≥ 0.5, with a t-value >1.96. Several latent variable constituent indicators have not met the validity requirements and consider withdrawn, namely FL3, FL7, FL8, RA1, RE5, PR5, and TR1. Meanwhile, FL1 is doesn't remove because it is an indicator that represents financial knowledge. Furthermore, the measurement indicators have valid and reflected the latent constructs in the model (Table 2).

Table 2. Validity and reliability test results after elimination

Variable	Indicator	Variance Extracted (VE)	Construct Reliability (CR)	Standardize Loading Factor (SLF)	t-value
Financial Literacy	FL1	0.34	0.70	0.16	2.23
	FL2			0.53	8.06
	FL4			0.62	9.68
	FL5			0.58	8.92
	FL6			0.83	13.37
Relative Advantage	RA2	0.57	0.84	0.71	12.30
	RA3			0.74	13.08
	RA4			0.78	13.32
	RA5			0.82	15.26
Perceived Reputation	RE1	0.57	0.84	0.71	12.39
	RE2			0.81	14.96
	RE3			0.82	15.35
	RE4			0.66	11.24
Perceived Structural Assurance	SA1	0.64	0.88	0.78	14.14
	SA2			0.82	15.22
	SA3			0.82	15.32
	SA4			0.78	14.06
Perceived Information Quality	IQ1	0.62	0.89	0.70	12.45
	IQ2			0.80	14.84
	IQ3			0.79	14.78
	IQ4			0.81	15.26
	IQ5			0.84	15.97
Perceived Risk	PR1	0.57	0.84	0.61	-
	PR2			0.70	9.17
	PR3			0.82	10.21
	PR4			0.86	10.53
Trust	TR2	0.51	0.75	0.62	-
	TR3			0.78	8.43
	TR4			0.71	8.28

Variable	Indicator	Variance Extracted (VE)	Construct Reliability (CR)	Standardize Loading Factor (SLF)	t-value
Investment Intention	IN1	0.82	0.93	0.90	-
	IN2			0.93	23.45
	IN3			0.88	20.75

The reliability evaluation is reviewed based on Variance Extracted (VE) and Construct Reliability (CR). The results showed that all variables met the reliable requirements with a value of CR ≥ 0.7 and VE ≥ 0.5 except financial literacy (Table 2). These results indicate that each indicator variable after elimination has a reliable conclusion to measure its latent construct. In contrast, the financial literacy variable shows that the Variance extracted value is less than 0.5 but still has to construct reliability with a value of 0.7. Therefore, the convergent validity of the latent construct is still considered adequate.

Hypotheses Testing Results

The influence of variables is significant if only the path coefficient ≥ 0.05 and t-value > 1.96 (Table 3).

Table 3. Hypotheses testing results

Inter Variables Effect			Path Coefficient	|t-value|	Conclusion
H_1 Financial Literacy	→	Perceived Risk	0.09	1.54	Not significant
H_2 Relative Advantage	→	Trust	0.34	2.13*	Significant
H_3 Perceived Reputation	→	Perceived Risk	-0.34	3.71*	Significant
H_4 Perceived Reputation	→	Trust	0.41	2.26*	Significant
H_5 Perceived Structural Assurance	→	Perceived Risk	0.23	2.90*	Significant
H_6 Perceived Structural Assurance	→	Trust	0.05	0.41	Not significant
H_7 Perceived Information Quality	→	Perceived Risk	0.18	1.83	Not significant
H_8 Perceived Information Quality	→	Trust	0.35	2.45*	Significant
H_9 Trust	→	Perceived Risk	0.22	3.38*	Significant
H_{10} Perceived Risk	→	Investment Intention	0.77	9.34*	Significant
H_{11} Trust	→	Investment Intention	0.20	3.58*	Significant

The following table explains the relationship between financial literacy and perceived risk in P2P lending (H_1) is not significant. This condition is caused by the t-value less than

1.96 even though the path coefficient value reaches 0.09, so this result does not support the hypothesis. The relationship between relative advantage and trust in P2P lending (H_2) is significant and has a direct positive effect (t = 2.13; path = 0.34). It implies that the result supports the hypothesis as expected. Simultaneously, perceived reputation significantly influences perceived risk (H_3) and trust (H_4) in P2P lending. As expected, perceived reputation has a direct negative impact on perceived risk (t = 3.71; path = -0.34) and a direct positive impact on trust (t = 2.26; path = 0.41), so both of hypothesis is supported.

Perceived structural assurance has a significant direct positive effect on the perceived risk in P2P lending (H_5). However, this relationship was not in the expected direction (t = 2.90; path = 0.23). In contrast, the relationship between perceived structural assurance and trust in P2P lending (H_6) is insignificant. The result shows that the t-value is less than 1.96, although the path coefficient value is equal to 0.05. Next, the relationship between perceived information quality and perceived risk in P2P lending (H_7) shows insignificant results. This condition is caused by the t-value less than 1.96 even though the path coefficient value is greater than 0.05. Otherwise, perceived information quality has a significant and positive effect on trust in P2P lending (H_8). The result proves the expected direction (t = 2.45; path = 0.35) so that the hypothesis is supported.

Trust has a significant direct positive effect on the perceived risk in P2P lending (H_9). It implies that the relationship was not in the expected direction (t = 3.38; path = 0.22). The same thing is also experienced in the relationship between perceived risk and investment intention in P2P lending (H_{10}). Although this relationship has a significant effect, it is not in the expected direction (t = 9.34; path = 0.77). Finally, trust has a positive and significant effect on investment intention in P2P lending (H_{11}). The result shows that the t-value is 3.58, and the path coefficient value is 0.20. In addition, the result indicates that perceived risk has a strong effect on investment intention than trust.

5. DISCUSSION

Individual factors related to Indonesian millennial financial literacy have no significant effect on the perceived risk of investing in P2P lending applications. It gives different results from previous research, which found that financial literacy affects investors' perceived risk (Aren & Zengin, 2016; Waheed et al., 2020). Based on the results of our research, millennials tend to have adequate financial knowledge and know the differences in investment risks and the risk-return relationship. In addition, they tend to think about long-term financial goals too. However, each individual has different preferences regarding risk, so the acceptable level of risk is not the same. It is indicated because the respondents in this study are investors with varying risk preferences, including conservative, moderate, and aggressive. Furthermore, van Rooij et al. (2011) revealed that there is a tendency that if the level of financial literacy increases, it will reduce the possibility to invest because they are aware of the risks. Therefore, financial literacy is not proven as a determinant of individual intention to invest because of differences in risk tolerance (Gusni et al., 2020).

The results of our study show that one of the characteristics of innovation, namely relative advantage, is proven to have a significant and positive effect on trust in P2P lending. This condition indicates that the greater the relative advantage provided by the organizers can increase millennial confidence in using the application. We found that one of the essential roles of relative advantage when investing in P2P lending is to have social value to provide alternative loan capital for borrowers with limited access to finance.

Millennials tend to trust to invest using P2P lending applications when the organizers can generate different added values to achieve financial productivity. Furthermore, this study's results are the same as preceding research, where relative advantage can positively and significantly impact individuals' trust in the use of financial services (Chen & Wang, 2016; Kim et al., 2009; Syarifah et al., 2020).

P2P lending is well known as an investment alternative by millennials in this study. The analysis results prove that the millennial has assessed the P2P lending application as having a good reputation as an alternative investment that is increasingly trusted to be used and reduce their perceived risk when investing in this application. We found that the contribution of the application's popularity has an essential role in increasing trust and reducing perceived risk. Therefore, reputation can also be considered a basis for reference or ranking contained in a community (Wei et al., 2017). The millennials who have never invested in P2P lending tend to have behaviors that depend on the application's reputation. This study result is similar to preceding research conducted by Li et al. (2016), Shao & Zhang (2018), and Sipangkar & Wijaya (2020).

Next, the perceived structural assurance in this study can influence the perceived risk positively. We indicate that the millennial believes in a structured technology guarantee such as legal, privacy, and security that can protect online transactions but has not reduced the risk strongly. The analysis results are identical with Li et al. (2016) and Wang et al. (2014). Interestingly, perceived structural assurance cannot affect trust in P2P lending. It gives different results from previous research by Chen et al. (2014), Wang et al. (2014), and Yang & Lee (2016). Still, these results are the same as research by Kang et al. (2016), which found no relationship between structural assurance and trust in investment via crowdfunding. Based on our study, a possible explanation is that the millennials know a guarantee of legal protection and structured technology on the P2P lending application to minimize risks, but this is not entirely reliable. There was still security and privacy aspects contribution in transactions, which was deemed insufficient to protect users.

There is a finding that perceived information quality could only affect trust. This result explains that the better the millennial's perceived information quality provided by the organizers, the more it will affect their confidence in using the application for investing. Our finding is similar to research by Chen et al. (2015) and Puteri et al. (2019). Contrary to our theoretical expectations, the results show that the relationship between perceived information quality and perceived risk is insignificant. It is suspected that millennial tends to trust P2P lending applications to provide information following their function, but this does not reduce the perceived risk. Millennials in this study have no experience using P2P lending applications as investment instruments, so they believe that the information provided can give them the confidence to invest in P2P lending. However, they tend to face the risks inherent in the information because risks cannot be avoided even though the information provided has been appropriately verified to minimize existing risks.

Furthermore, trust is effective in influencing investment intentions using the P2P lending application for millennials. Our finding is the same as the previous research (Al-Jabri, 2015; Malaquias & Hwang, 2016; Yosita & Giri, 2016). P2P lending can provide investment opportunities is one of the strongest indicators in describing millennial confidence in the application's abilities. In this case, millennials already believe P2P lending can provide investment returns that match expectations like other investments. Meanwhile, the risk of using a P2P lending application, especially privacy risk, is still very much considered. In this case, investing using a P2P lending application tends to lead to a loss of privacy control which is a strong indicator in describing the risk of investing in that application. There are still issues regarding the misuse of private data, especially in Indonesia's P2P lending application, which causes this aspect to feel stronger by millennials than financial loss.

Even though the perceived risk is relatively high, millennials may not be instantaneous, decide not to participate in P2P lending. According to Ademola et al. (2019), if investors are increasingly willing to take risks, investors will have the ability to make investment decisions. Millennials would also consider the trust that they have towards the platform and make their investment decision. Eventually, the intention to use P2P lending applications to invest in the future is a dominant indicator based on investment intentions. In addition, there is a willingness to seek more information about P2P lending.

6. CONCLUSION, LIMITATION, AND SUGGESTION

Conclusion

The results show the consumer decision-making model in the investment intention process by combining trust and perceived risk antecedents. Based on individual understanding of finance, the characteristics of product innovation, and the unique features of P2P lending provide a new perspective on the understanding that considers achieving investment goals. Our findings show that millennial perceived risk is an essential determinant of investment intention in P2P lending applications. Interestingly, the effect of perceived risk is in line with the millennial intention to invest. This condition illustrates a significant investment risk that does not discourage millennials from investing using P2P lending applications because there is still an influence of millennial trust in these instruments.

From another perspective, an individual's understanding of finance does not affect the perceived risk for investing. On the other hand, the innovation characteristics related to relative advantages can affect millennial confidence in using different investment instruments. Comprehensively, not all unique features related to P2P lending applications can involve perceived risk and trust. Millennials consider that the perception of P2P lending reputation plays an essential role in influencing their trust and perceived risk to invest. Meanwhile, perceived structural assurance can only affect millennial perceived risk related to transaction protection and privacy. In addition, perceived information quality can affect millennial confidence in investing in P2P lending, neglecting the millennial's perceived risk.

The organizer can consider improving several aspects to increase new investors, especially millennials, based on research results. First, improve the reputation by providing reliable and responsive services so that investors can spread service satisfaction with P2P lending applications to potential investors. Second, the level of security technology and privacy protection in transactions still needs to be improved to reduce privacy infringement issues. Organizers can cooperate with certain authorities to innovate in the latest technology for transaction and privacy protection. Lastly, optimize more varied information about P2P lending by adding periodic reports on the use of loans transparently. Thus potential investors will increasingly believe that the funds to be invested for the right things.

Limitation and suggestions

This study only examines P2P lending applications in general loan investments, while loan investments are divided into two categories: productive and consumptive. Further research must focus on P2P lending applications with the same loan categories and policy to compare potential investors' investment intentions between organizers. Next, we can consider other variables that might affect the perceived risk and trust in P2P lending applications, such as perceived third-party certification, electronic word of mouth, and application complexity. It is hoped that the addition of these variables can provide a broader view of increasing investment intentions in P2P lending.

REFERENCES

Ademola, S. A., Musa, A. S., & Innocent, I. O. (2019). Moderating effect of risk perception on financial knowledge, literacy and investment decision. *American International Journal of Economics and Finance Research*, *1*(1), 34–44. https://doi.org/10.46545/aijefr.v1i1.60

AFTECH. (2020). *Annual Member Survey 2019/2020*. Retrieved from https://fintech.id/dokumen/aftech-annual-member-survey-report-20192020

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*, 179–211.

Al-Jabri, I. M. (2015). The intention to use mobile banking: Further evidence from Saudi Arabia. *South African Journal of Business Management*, *46*(1), 23–34. https://doi.org/10.4102/sajbm.v46i1.80

Albaity, M., & Rahman, M. (2019). The intention to use Islamic banking: an exploratory study to measure Islamic financial literacy. *International Journal of Emerging Markets*, *14*(5), 988–1012. https://doi.org/10.1108/IJOEM-05-2018-0218

Allgood, S., & Walstad, W. B. (2016). The effects of perceived and actual financial literacy on financial behaviors. *Economic Inquiry*, *54*(1), 675–697. https://doi.org/10.1111/ecin.12255

Aren, S., & Zengin, A. N. (2016). Influence of financial literacy and risk Perception on choice of investment. *Social and Behavioral Sciences*, *235*, 656–663. https://doi.org/10.1016/j.sbspro.2016.11.047

Arifah, J. N., & Dalimunthe, Z. (2020). The impact of financial literacy on the investment decision of non-donation-based crowdfunding in Indonesia. *International Journal of Business and Society*, *21*(3), 1045–1057.

Ariffin, S. K., Mohan, T., & Goh, Y. N. (2018). Influence of consumers' perceived risk on consumers' online purchase intention. *Journal of Research in Interactive Marketing*, *12*(3), 309–327. https://doi.org/10.1108/JRIM-11-2017-0100

Bock, G. W., Lee, J., Kuan, H. H., & Kim, J. H. (2012). The progression of online trust in the multi-channel retailer context and the role of product uncertainty. *Decision Support Systems*, *53*(1), 97–107. https://doi.org/10.1016/j.dss.2011.12.007

Bottazzi, L., Da Rin, M., & Hellmann, T. (2016). The importance of trust for investment: Evidence from venture capital. *Review of Financial Studies*, *29*(9), 2283–2318. https://doi.org/10.1093/rfs/hhw023

Chen, D., Lai, F., & Lin, Z. (2014). A trust model for online peer-to-peer lending: a lender's perspective. *Information Technology and Management*, *15*(4), 239–254. https://doi.org/10.1007/s10799-014-0187-z

Chen, D., Lou, H., & Van Slyke, C. (2015). Toward an understanding of online lending intentions: Evidence from a survey in China. *Communications of the Association for Information Systems*, *36*, 317–336. https://doi.org/10.17705/1cais.03617

Chen, L., & Wang, R. (2016). Trust development and transfer from electronic commerce to social commerce: An empirical investigation. *American Journal of Industrial and Business Management*, *6*(5), 568–576. https://doi.org/10.4236/ajibm.2016.65053

Chu, Z., Wang, Z., Xiao, J. J., & Zhang, W. (2016). Financial literacy, portfolio choice and financial well-being. *Social Indicators Research*, *132*(2), 799–820. https://doi.org/10.1007/s11205-016-1309-2

Featherman, M. S., & Pavlou, P. A. (2003). Predicting e-services adoption: A perceived risk facets perspective. *International Journal of Human Computer Studies*, *59*(4), 451–474. https://doi.org/10.1016/S1071-5819(03)00111-3

Ghasemaghaei, M., & Hassanein, K. (2016). A macro model of online information quality perceptions: A review and synthesis of the literature. *Computers in Human Behavior*, *55*, 972–991. https://doi.org/10.1016/j.chb.2015.09.027

Gusni, Tamtama, H. E., Aniza, Adriani, N. K., & Razualdi, M. (2020). Effect of financial literacy, motivation, and perceived risk on students investment interest. *Solid State Technology*, *63*(4), 4229–4238. Retrieved from https://solidstatetechnology.us/index.php/JSST/article/view/3248

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2009). *Multivariate Data Analysis* (7th ed.). United Kingdom: Cengange Learning.

Kang, M., Gao, Y., Wang, T., & Zheng, H. (2016). Understanding the determinants of funders' investment intentions on crowdfunding platforms : a trust-based perspective. *Industrial Management & Data Systems*, *116*(8), 2–34.

Kim, D. J., Ferrin, D. L., & Rao, H. R. (2008). A trust-based consumer decision-making model in electronic commerce: The role of trust, perceived risk, and their antecedents. *Decision Support Systems*, *44*(2), 544–564. https://doi.org/10.1016/j.dss.2007.07.001

Kim, G., Shin, B., & Lee, H. G. (2009). Understanding dynamics between initial trust and usage intentions of mobile banking. *Information Systems Journal*, *19*(3), 283–311. https://doi.org/10.1111/j.1365-2575.2007.00269.x

Koufaris, M., & Hampton-Sosa, W. (2004). The development of initial trust in an online company by new customers. *Information and Management*, *41*(3), 377–397. https://doi.org/10.1016/j.im.2003.08.004

Kurniawan, P. I. (2021). Effect of expected return, self efficacy, and perceived risk on investment intention: An empirical study on accounting master degree in Udayana University, Bali. *Journal of Accounting Finance and Auditing Studies (JAFAS)*, *7*(1), 40–55. https://doi.org/10.32602/jafas.2021.002

Li, J., Zheng, H., Kang, M., Wang, T., & Chen, S. (2016). Understanding investment intention towards P2P lending: An empirical study. *Proceedings of Pacific Asia Conference on Information Systems*, 1–17.

Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, *52*(1), 5–44. https://doi.org/10.1257/jel.52.1.5

Malaquias, R. F., & Hwang, Y. (2016). An empirical study on trust in mobile banking: A developing country perspective. *Computers in Human Behavior*, *54*, 453–461. https://doi.org/10.1016/j.chb.2015.08.039

Maziriri, E. T., Mapuranga, M., & Madinga, N. W. (2019). Navigating selected perceived risk elements on investor trust and intention to invest in online trading platforms. *Journal of Economic and Financial Sciences*, *12*(1), 1–14. https://doi.org/10.4102/jef.v12i1.434

McKnight, D. H., & Chervany, N. L. (2001). What trust means in e-commerce customer relationships: An interdisciplinary conceptual typology. *International Journal of Electronic Commerce*, *6*(2), 35–59. https://doi.org/10.1080/10864415.2001.11044235

Milne, A., & Parboteeah, P. (2016). The Business Models and Economics of Peer-to-Peer Lending. In *European Credit Research Institue*. https://doi.org/10.2139/ssrn.2763682

Moore, G. C., & Benbasat, I. (1991). Development of an instrument to measure the perceptions of adopting an information technology innovation. *Information Systems Research*, *2*(3), 192–222. https://doi.org/10.1287/isre.2.3.192

OJK. (2020). *Ikhtisar Penyelenggaraan Fintech Lending December 2020*. Retrieved from https://www.ojk.go.id

Onasie, V., & Widoatmodjo, S. (2020). Niat investasi generasi milenial di pasar modal. *Jurnal Manajerial Dan Kewirausahaan*, *2*(2), 318–326. Retrieved from https://journal.untar.ac.id/index.php/JMDK/article/view/7924

Ong, C., & Chan, C. (2016). The influence of merchant reputation on consumer decisions to shop online. *Twenty-Second Americas Conference on Information Systems*, 1–10. https://doi.org/10.1590/S0100-69162013000100001

Oruji, M., Hassanzadeh, M., & Feizi, M. (2014). The impact of relationship marketing and new product features on customer's perceptions and the intention of their acceptance in life and investment insurance. *Kuwait Chapter of Arabian Journal of Business and Management Review*, *3*(9), 406–420. https://doi.org/10.12816/0018363

Pavlou, P. A. (2003). Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model. *International Journal of Electronic Commerce*, *7*(3), 101–134. https://doi.org/10.1080/10864415.2003.11044275

Puteri, F. S., Handayani, P. W., Azzahro, F., & Pinem, A. A. (2019). Analysis of investor intention to invest capital in small and medium enterprises through peer-to-peer lending in Indonesia. *Proceedings of International Conference on Computing, Engineering, and Design*, 87–92. https://doi.org/10.1109/ICCED.2018.00026

Remund, D. L. (2010). Financial literacy explicated: The case for a clearer definition in an increasingly complex economy. *Journal of Consumer Affairs*, *44*(2), 276–295. https://doi.org/10.1111/j.1745-6606.2010.01169.x

Samsuri, A., Ismiyanti, F., & Narsa, I. M. (2019). The effects of risk tolerance and financial literacy to investment intentions. *International Journal of Innovation, Creativity and Change*, *10*(9), 40–54. Retrieved from www.ijicc.net

Sánchez-Alzate, J. A., & Sánchez-Torres, J. A. (2017). Analysis of social factors and their relationship with perceived risk for e-commerce purchases. *DYNA (Colombia)*, *84*(200), 335–341. https://doi.org/10.15446/dyna.v84n200.54161

Sashikala, V., & Chitramani, P. (2018). The impact of behavioural factors on investment intention of equity investors. *Asian Journal of Management*, *9*(1), 183. https://doi.org/10.5958/2321-5763.2018.00028.8

Shao, Z., & Zhang, L. (2018). Trust building in the mobile payment platform: The moderating effect of gender. *Proceedings of Pacific Asia Conference on Information Systems*, 1–14. Retrieved from https://aisel.aisnet.org/pacis2018/5

Shehata, S. M., Abdeljawad, A. M., Mazouz, L. A., Aldossary, L. Y. K., Alsaeed, M. Y., & Sayed, M. N. (2021). The moderating role of perceived risks in the relationship between financial knowledge and the intention to invest in the Saudi Arabian stock market. *International Journal of Financial Studies*, *9*(1), 1–16. https://doi.org/10.3390/IJFS9010009

Sipangkar, H., & Wijaya, C. (2020). Factors affecting intention to investing in peer-to-peer lending platform toward Universitas Indonesia students. *International Journal of Management*, *11*(5), 751–763. https://doi.org/10.34218/IJM.11.5.2020.067

Sivaramakrishnan, S., Srivastava, M., & Rastogi, A. (2017). Attitudinal factors, financial literacy, and stock market participation. *International Journal of Bank Marketing*, *35*(5), 818–841. https://doi.org/10.1108/IJBM-01-2016-0012

Syarifah, S., Winarno, W. W., & Putro, H. P. (2020). Analisis karakteristik penggunaan aplikasi peer to peer lending fintech dengan model PCI. *Jurnal Media Informatika Budidarma*, *4*(2), 421. https://doi.org/10.30865/mib.v4i2.2059

Trang, P. T. M., & Tho, N. H. (2017). Perceived risk, investment performance and intentions in emerging stock markets. *International Journal of Economics and Financial Issues*, *7*(1), 269–278.

van Rooij, M., Lusardi, A., & Alessie, R. (2011). Financial literacy and stock market participation. *Journal of Financial Economics*, *101*(2), 449–472. https://doi.org/10.1016/j.jfineco.2011.03.006

Waheed, H., Ahmed, Z., Saleem, Q., Mohy-Ul-Din, S., & Ahmed, B. (2020). The mediating role of risk perception in the relationship between financial literacy and investment decision. *International Journal of Innovation, Creativity and Change*, *14*(4), 112–131. https://doi.org/10.4038/cbj.v11i1.58

Wang, M., Wang, T., Kang, M., & Sun, S. (2014). Understanding perceived platform trust and institutional risk in peer-to-peer lending platforms from cognition-based and affect-based perspectives. *Proceedings of Pacific Asia Conference on Information Systems*, 1–15. Retrieved from http://aisel.aisnet.org/pacis2014/208

Wang, S. W., Ngamsiriudom, W., & Hsieh, C. H. (2015). Trust disposition, trust antecedents, trust, and behavioral intention. *Service Industries Journal*, *35*(10), 555–572. https://doi.org/10.1080/02642069.2015.1047827

Wang, Y., Min, Q., & Han, S. (2016). Understanding the effects of trust and risk on individual behavior toward social media platforms: A meta-analysis of the empirical evidence. *Computers in Human Behavior*, *56*, 34–44. https://doi.org/10.1016/j.chb.2015.11.011

Wang, Z., Guan, Z., Hou, F., Li, B., & Zhou, W. (2019). What determines customers' continuance intention of FinTech? Evidence from YuEbao. *Industrial Management and Data Systems*, *119*(8), 1625–1637. https://doi.org/10.1108/IMDS-01-2019-0011

Wei, C., Yu, Z. J., & Chen, X. N. (2017). Research on social e-commerce reputation formation and state-introduced model. *Kybernetes*, *46*(6), 1021–1038. https://doi.org/10.1108/K-08-2016-0203

Yang, M., Li, H., Shao, Z., & Shang, W. (2017). Influencing lenders' repeat Investment Intention in P2P lending platforms in China through signaling. *Proceedings of Pacific Asia Conference on Information Systems*, 1–16. Retrieved from http://aisel.aisnet.org/pacis2017/72

Yang, Qin, & Lee, Y.-C. (2016). Influencing factors on the lending intention of online peer-to-peer lending: Lessons from Renrendai.com. *The Journal of Information Systems*, *25*(2), 79–110. https://doi.org/10.5859/kais.2016.25.2.79

Yang, Qing, Pang, C., Liu, L., Yen, D. C., & Michael Tarn, J. (2015). Exploring consumer perceived risk and trust for online payments: An empirical study in China's younger generation. *Computers in Human Behavior*, *50*, 9–24. https://doi.org/10.1016/j.chb.2015.03.058

Yosita, M., & Giri, R. R. W. (2016). Analisis pengaruh dimensi kepercayaan (multi dimensional trust) dan tisiko yang dirasakan (perceived risk) dengan model modifikasi UTAUT-Luo terhadap penggunaan layanan internet banking. *Journal Lentera Bisnis*, *5*(1), 64–74.

Zhang, T., Tang, M., Lu, Y., & Dong, D. (2014). Trust building in online peer-to-peer lending. *Journal of Global Information Technology Management*, *17*(4), 250–266. https://doi.org/10.1080/1097198X.2014.978624

Zhou, T. (2014). An empirical examination of initial trust in mobile payment. *Wireless Personal Communications*, *77*(2), 1519–1531. https://doi.org/10.1007/s11277-013-1596-8