

Millennials' Intentions to Invest in Peer-to-Peer Lending Apps in Indonesia: Extending UTAUT2 with Financial Risk and Security Awareness Factors

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Abstract. This study delves into the factors influencing millennials' investment intentions through peer-to-peer (P2P) lending mobile applications in Indonesia. Specifically focusing on millennials in the Greater Jakarta region, we aimed to explore the impact of performance expectancy, effort expectancy, social influence, price value, financial risk, and security awareness on their investment intentions using P2P mobile lending applications. The research employed a modified Unified Theory of Technology Acceptance and Use (UTAUT) model, expanding its dimensions to encompass financial risk, security awareness, and financial literacy as moderators. We conducted an online survey among 136 millennials who had prior experience using P2P lending apps. Through SmartPLS 4 analysis, the results affirmed that performance expectancy, effort expectancy, social influence, price value, financial risk, and security awareness significantly influenced millennials' investment intentions in utilizing P2P mobile lending applications. Additionally, this study found that while financial literacy did not moderate the relationships, it had a direct positive impact on investment intentions. These findings hold valuable implications for fintech companies seeking to attract and engage millennial investors. Enhancing performance, ease of use, risk mitigation strategies, and security features can foster greater adoption of P2P lending apps. Additionally, our study underscores the importance of improving financial literacy among millennials in Indonesia, ultimately empowering them to make informed investment decisions in the evolving landscape of financial technology.

Keywords: UTAUT2, P2P Lending, User Acceptance, Intention to Use, Millennial

1. Introduction

Due to the fusion of financial services and technology, known as fintech, old business models have been replaced with more contemporary ones. Payment transactions may now be rapidly and remotely performed whereas in the past, they could only be carried out in person using cash. Advances in fintech have made applications for financial services widely available (Kim et al., 2015). Peer-to-peer (P2P) lending stands out as a notable development in financial technology (fintech), catching our attention as a crucial innovation that leverages technology to streamline the loan process. This transformation has enabled people to conduct online transactions through specialized platforms, showcasing the integration of money and technology. Fintech innovations such as crowdfunded projects, microlending, market comparisons, and digital payment systems have emerged in Indonesia due to the country's expanding fintech market.

The P2P lending market in Indonesia has gained traction due to its potential to bridge the financing gap for individuals and small businesses. This innovative approach connects borrowers and lenders through online platforms, offering faster and more accessible loan disbursements, often with competitive interest rates. Moreover, the regulatory environment in Indonesia has become increasingly conducive, further fueling the growth of the P2P lending sector. Despite the evident growth and promising prospects of P2P lending, there is a noticeable research gap that warrants attention. Existing studies often focus on the macroeconomic implications of P2P lending or generalize findings from other regions. However, a comprehensive understanding of the factors influencing investment intention using P2P lending mobile applications, especially among the tech-savvy millennial generation in the unique socio-economic context of Indonesia, remains lacking.

With a prevalence rate of 40%, P2P lending has particularly flourished and is now a significant participant in the Indonesian financial ecosystem (OJK, 2017). The paradigm shift in P2P lending is not without its complications, particularly for investors with short-term goals, considering the distinctive risk profile of this investment environment. The risk component is significant due to the possibility of defaults and underperformance, especially considering Indonesia's low level of financial literacy. For efficient involvement in peer-to-peer lending, one must possess financial and digital literacy (Rahma & Sari, 2021). Financial literacy is essential for supporting prudent investing decisions and boosting general well-being; hence, it is crucial to comprehend these complex dynamics (Long & Magerko, 2020). Despite rising annual financial literacy rates in Indonesia, default in P2P lending investments remains problematic. This investment appeals to anyone looking to engage in borrowing and lending activities due to its simple requirements, easy access, and processing. However, the risk of default is very substantial, especially for funders or lenders, primarily because some borrowers cannot meet their loan repayment obligations within the specified timeframe and, in other situations, cannot make any payments. OJK records show that in November 2022, both for individuals and enterprises, there were non-performing loans (>90 days) totaling 1.4 billion rupiahs, despite the continued rise in popularity of P2P lending apps. This factor may impact the investment trend in P2P lending systems. Several factors may affect a user's decision to use P2P lending mobile applications.

Technology acceptability can be determined using the UTAUT paradigm or Unified Theory of Acceptance and Use of Technology. Effort expectancy is the user's estimate of how simple it is to use the application, whereas performance expectancy is the user's opinion of the program's usefulness. Social influence signifies the user's assessment of the degree of social pressure to use the program. Another study examined the factors influencing lenders' propensity to use P2P lending platforms using the UTAUT2 model. The results showed that lenders' confidence in the online P2P lending platform and their loan intentions were significantly impacted by trust, risk, service quality, information quality, structural assurance, awareness, and reputation (Yang & Lee, 2016). Another study indicated that the desire to use a fintech-related P2P lending website was significantly and directly influenced by perceived value, information, and service quality (Sundjaja & Tina, 2019). A study in the Chinese P2P lending market reveals that investors prioritize the security of P2P lending platforms when evaluating

participant behavior in the P2P lending market (Yang et al., 2020). Because there is a substantial information gap between the platform and the investors, the latter rely on various sources, including the news, the Internet, and third-party platforms, to assess the security of platforms when evaluating investment prospects. However, investors may struggle to accurately gauge the extent of risk control and security measures implemented by the platform due to limited information. A different study showed that lenders' trust in P2P lending applications and their readiness to make loans are greatly influenced by their perception of risk (Yang & Lee, 2016). Trust did not directly influence behavioral intention to adopt P2P lending but indirectly influenced this intention through perceived risk as a mediating variable, according to another study (Septiani et al., 2020). By integrating security and risk, the UTAUT2 model can be used to study customers' views and concerns about adopting technology in greater depth. Users' trust, confidence, and sense of safety when using a specific technology are all directly influenced by security and risk, which is vital in influencing users' intentions. According to Niu et al. (2020), users are more inclined to adopt a technology if they feel that their financial and personal information will be protected and that there are few risks involved. Customers are displaying a more critical and picky mindset while making purchases. Due to their flexibility to switch to different service providers and their high expectations, millennials, in particular, have high expectations (Kurniawan et al., 2021).

The role of millennial consumers is a crucial issue in the digital age, in which social media is an important communication route for this generation, making it important to study and consider millennials. Following a poll in 2021, Katadata Insight Center (KIC) found several P2P lending platforms that have developed substantial popularity among Indonesians (See Figure 1).



PLATFORM PEMBELIAN P2P LENDING

4. PEER TO PEER LENDING	Seluruh Responden	Gen X & Boomers	Gen Y	Gen Z
Basis Responden: Investor Peer to Peer Lending				
Koinworks	34.1%	30.4%	33.3%	40.9%
Investree	30.6%	34.8%	31.0%	27.3%
Asetku	19.6%	5.3%	20.6%	33.3%
Akseleran	16.1%	10.5%	17.8%	13.3%
Amartha	12.7%	21.7%	11.9%	9.1%
Modalku	9.2%	4.3%	7.9%	22.7%
Danamas	5.8%	4.3%	5.6%	9.1%
Alami	4.2%	10.5%	3.7%	0.0%
Dana Syariah	4.2%	0.0%	3.7%	13.3%
UangTeman	3.5%	4.3%	1.6%	13.6%
KreditPintar	3.5%	0.0%	2.4%	13.6%
Tanifund	2.8%	10.5%	1.9%	0.0%
igrow	2.1%	5.3%	1.9%	0.0%
Easycash	1.4%	0.0%	0.9%	0.0%
Modal Rakyat	1.4%	0.0%	1.9%	0.0%
Danain	0.7%	0.0%	0.0%	6.7%
Santara	0.7%	0.0%	0.9%	0.0%
Uangme	0.7%	0.0%	0.9%	0.0%

Fig 1. The Most favored P2P lending platforms in Indonesia in 2021
(Source: Katadata Insight Center, 2021)

The fact that this P2P mobile application is made for investors rather than debtors must always be kept in mind. This occurrence is most likely explained by the fact that borrowers apply for loans utilizing P2P platforms, and if their loans are approved, they make their payments straight to the bank. Because of this, P2P lending firms think there is no need to create a mobile application because registration will only require it once. The objectives of this application are to (1) encourage investors to make deposits; (2) take advantage of the available diversification possibilities; and (3) allow businesses to invest their funds based on stated investment criteria rather than personally choosing loans (Tamilmani et al., 2021). Even if the FinTech sector has many chances for future expansion, these must

be weighed against any potential obstacles, particularly concerning P2P lending platforms.

The difference in growth between lenders and borrowers is one of the significant problems. For instance, OJK (Tamilmani et al., 2021) reports that as of December 2020, there were 43,561,362 total borrower accounts in Indonesia, compared to only 716,963 total lender accounts. It is clear from this that there is a large disparity between the number of borrower accounts and lender accounts. According to the Financial Services Authority (OJK), data from May 2022 shows that 64.90% of lenders belong to the Gen Y or millennial generation, followed by 31.59% of Gen Xers and 3.51% of other age groups. This makes Millennials important to research and take into account. The millennial generation's actions in financial technology have been thoroughly studied using the UTAUT model. Millennials now frequently use the Internet, so it is logical to predict that this habitual behavior will ultimately affect how they use it to make purchases (Piarna et al., 2020). Their social surroundings and habits also influence this generation regarding behavioral intentions.

Millennial customers are concerned about the possible financial risks, performance challenges, and privacy concerns associated with online transactions. According to the study's findings, the sheer introduction of financial technology does not ensure an increase in financial literacy (Setyorini et al., 2021). Consequently, an individual's proficiency in financial matters positively influences the extent of loan transactions. The amount of loans made is significantly influenced by financial literacy, which is a gauge of people's knowledge of fundamental economic concepts and ability to manage their finances. This proficiency enables them to make informed decisions concerning various financial aspects. Millennial consumers perceive the Internet as a convenient tool that enhances their satisfaction. As a result, previously essential factors that affected behavioral intents, like performance expectations, effort expectations, and facilitating circumstances, are no less significant (Piarna et al., 2020). Getting users from the millennial generation can be a substantial part of competing with other companies that offer similar services because millennials have characteristics that make them eager to take chances when making financial decisions. They are generally at ease with technology. This sort of technological finance has attracted interest from the millennial age. Millennials would instead assist and efficiently manage their wealth with the help of financial services that are readily available and easy to obtain. As a result, it should come as no surprise that P2P lending programs are gaining a growing amount of interest among members of the millennial age as an alternative form of investment (Tamilmani et al., 2021). Millennials' attitudes about P2P lending in terms of technological elements. Millennials who feel that the features of P2P lending applications are valuable and beneficial will be motivated to invest in those applications. P2P can be a useful instrument for the development of businesses, especially given that members of the millennial age are entering a more productive period of their lives.

On the other hand, they tend to steer clear of dangers and ambiguities that would convince them to invest in P2P lending (Tamilmani et al., 2021). As a result of these various phenomena, the researchers were motivated to investigate the factors influencing investment intention using P2P lending mobile applications, particularly focusing on the Millennial Generation in the Greater Jakarta area, in response to these various phenomena. By drawing on UTAUT2, this study aimed to analyze key factors driving millennials' intention to invest using P2P lending apps in Indonesia. The research's implementation is intended to yield profound insights into the behavioral patterns of P2P lending application users among the millennial generation in Indonesia. Understanding this generation's perceptions can provide valuable insights for fintech firms seeking to attract investors. The study's conclusions should be invaluable for P2P lending companies looking to improve and enhance their applications, and the findings also have implications for regulators in promoting secure and responsible fintech adoption. Overall, this research makes an important contribution by being among the first to empirically assess P2P investment intentions among millennials in Indonesia.

2. Literature Review & Hypothesis Development

2.1. P2P lending

P2P lending, sometimes called crowdlending or debt-based crowdfunding, is a unique kind of financial intermediation in which lenders and borrowers carry out direct lending transactions on their own without the aid of traditional banking institutions. P2P lending falls under the umbrella of non-bank banking, commonly called "shadow banking" (Rosenkranz, 2020). The peer-to-peer lending business model is distinct from traditional banking because it uses a platform to link lenders and borrowers directly. This paradigm is called the "P2P" model since it eliminates the need for intermediaries like banks (Jahangir, 2019). Understanding the business model behind peer-to-peer lending is critical to get a handle on the challenges and possibilities linked with the practice. Platforms for P2P lending operate as intermediaries between investors/lenders and borrowers to allow the supply of unsecured loans. The following is a list of the many processes that occur on the platform in chronological sequence (Bielefeld, 2016):

1. Borrowers contact the lending platform to specify the amount of the loan and the due date they require.
2. The platform is responsible for its credit risk assessment based on the available information. After that, if it has been accepted, the interest rate will be established according to the risk that the borrower poses.
3. If the borrower agrees to the proposed interest rate the platform provides, the platform will extend an offer to the borrower for a predetermined period. Requests for loans from individual borrowers are submitted under a pseudonym, whereas requests for loans from commercial enterprises are typically submitted under the potential borrower's name.
4. Lenders will have the ability to submit bids throughout this time frame, giving them a chance to offer a portion of the total cash that will be necessary. They must sign a service contract with the platform operator and go through a verification process to ensure they comply with the Anti-Money Laundering legislation before utilizing the platform. The lender's identity is concealed, and the only way to contact them on the platform is through their encoded usernames.
5. The loan is considered realized once the amount of the investment bid is equal to the amount of the requested loan. The platform collects funds from the lender's bank account and transfers those payments to the borrower. Investors are given a credit claim in exchange for their capital, a proportional share of the overall loan amount.
6. After that, the platform will manage the loan by accumulating and distributing interest payments and redemptions until the loan is paid off. P2P loans are often structured in the form of a monthly annuity for the most part.

The platform assumes the responsibility of managing the billing process on behalf of the lender in the scenario where the borrower fails to make payments. However, it should be noted that the platform does not bear any liability for any potential losses experienced by the lender or investor. The detail of process shows in figure 2.

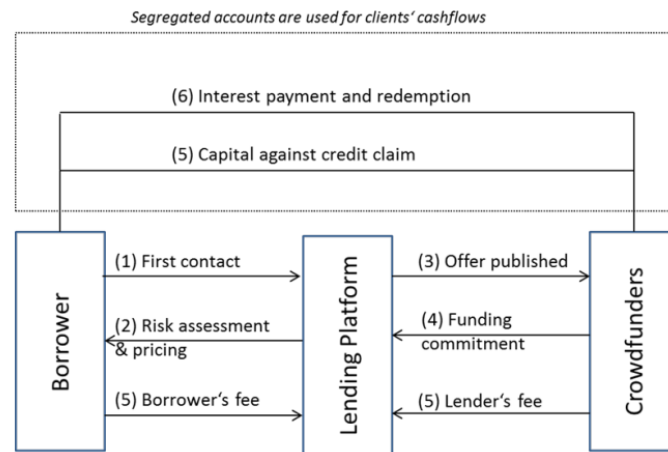


Fig. 2 P2P Loan Mediation Process

Source: Bielefeld, 2016

As P2P lending primarily occurs online, it is often categorized as a form of financial technology services, commonly referred to as fintech. Borrowers utilize various P2P lending platforms to find loans with more advantageous terms than their local or traditional banks. At the same time, investors use these platforms to provide funds with potentially higher returns than those offered by banks (Jahangir, 2019). Fintech is a relatively young industry that focuses on creating cutting-edge software applications, operational procedures, product lines, and business models within the financial services sector. Lending through fintech typically involves the creation of user interfaces that are intuitive and uncomplicated. P2P lending has become a watershed moment in the evolution of new financial solutions for consumers and enterprises.

This was especially true during the global financial crisis, marked by a credit crisis, decreased liquidity, and decreased bank lending to private citizens and small- and medium-sized firms. P2P lending can boost a person's and an organization's access to liquidity and improve resource allocation. This enables people to get money for various needs, such as investing and engaging in consumer spending (Rosenkranz, 2020). Fintech companies prioritize delivering user-friendly, efficient, transparent, automated products and services. The process of opening an account, verifying borrower paperwork, and deciding whether a borrower is eligible for a loan are all handled digitally by fintech lending companies to cut operational costs (Adistyasari, 2020). Because of the rapid advancement of technology, a mobile version of the P2P Lending application has been developed. This makes the program more accessible for pre-users in various locations, unlike desktop users with restricted access.

The first business to create a smartphone app, particularly for peer-to-peer lending, was LendingRobot in April 2016. According to LendingRobot, the app monitors account balances and provides information on P2P loan portfolios. They found that more than 30% of their clients used the application frequently, with some even using it daily. An updated smartphone software created by LendingRobot allows investors in Lending Club, Prosper, and Funding Circle to monitor their investments. Mobile payment, P2P lending, crowdfunding, and microfinance, have all grown due to the rising popularity of smartphones and improvements in mobile payment technologies since 2010. Individual credit data and precise risk management primarily rely on these financial services. According to Liu and Wang (2020), comprehensive consumer data must be gathered, stored, and analyzed to evaluate these aspects appropriately. The rising use of mobile phones, which has considerably aided business expansion, is to blame for the spike in P2P lending uptake. Because of this, fintech P2P lending has become the preferred replacement for conventional banking financing systems on a global level.

2.2. UTAUT2

A framework known as the Unified Theory of Acceptance and Use of Technology (UTAUT) measures how well people embrace new technology. Venkatesh, Morris, and several other scholars developed this paradigm. The UTAUT2 model eventually replaced this one. Initially, UTAUT2 was employed to examine how performance expectations, effort expectations, social influence, and enabling factors affect behavioral intention and technology usage behavior. Three other elements were then included in the model: habit, price value, and hedonic incentive. Additionally, acting moderators for these seven variables include gender, age, and experience (Venkatesh et al., 2012). The UTAUT2 model is proposed as a critical framework to capitalize on technological facets and develop novel theories for how individuals individually accept and use technology (Tamilmani et al., 2021).

By assessing the UTAUT2 model across various locations, age groups, and technology contexts, future studies may build on the findings of Venkatesh et al. (2012). They advise discovering auxiliary components that can make UTAUT more applicable to a more extensive range of consumer technology usage scenarios, such as including security and risk as additional components. By adding these characteristics, the model recognizes their significance in influencing users' intent to embrace technology-based applications, such as P2P lending platforms. Understanding the importance of security and risk issues gives a more thorough understanding of users' decision-making processes and provides insights into their worries about adopting technology. Incorporating security and risk considerations into the UTAUT model enables a more comprehensive examination and promotes increased user acceptability and adoption of P2P lending platforms and other technology-based applications. The UTAUT2 model can more thoroughly analyze consumers' perceptions and worries about adopting technology by including security and risk. Since trust, confidence, and perceived safety are all directly impacted by security and risk, they play a critical role in influencing users' intentions. According to Niu et al. (2020), users are more inclined to use a technology if they are confident that their financial and personal information is secure and think there aren't many general hazards associated.

2.3. Modified UTAUT2

Investment intention is the determination to set aside a specific investment sum (Onasie & Widodoatmodjo, 2020). Thus, in this study, interest in using the application for funding or investment reasons is directly associated with the commitment to set aside a specific sum of money for investment. To develop hypotheses as initial responses to the research problem, which aims to analyze the factors influencing the investment intention of the millennial generation in the Greater Jakarta area to use P2P lending applications for investing, the authors in this study first conducted analyses on other studies related to technology acceptance. The intention of SMEs to utilize P2P financing services is influenced by performance expectations and social influence, according to prior research on technology acceptance by Soegesty et al. (2020) & Hamundu et al. (2023). Furthermore, according to a study by Utomo et al. (2021), effort expectancy influences users' propensity to utilize mobile health applications favorably. Users tend to favor technology that is easy to use and effective. The variable facilitating circumstance strongly influences the inclination to adopt big data apps, according to Queiroz & Farias Pereira's 2019 study. The survey results show that respondents' intentions to use big data applications are strongly influenced by facilitating factors (such as IT infrastructure). The pleasure and happiness experienced while using technology are referred to as hedonic motivation in a different study by Al-Azawei and Alowayr (2020), and the research findings show a significant influence on behavioral intention to utilize mobile learning applications. Additionally, Owusu Kwateng et al.'s research from 2019 shows that pricing value has a beneficial impact on people's intentions to utilize mobile banking. According to Prasetyo & Wardhani (2022), a person's technology usage habits affect their interest in using technology daily. The possibility that someone may embrace provided apps increases with the frequency of technology use. A good relationship between habit and the intention to use e-wallet applications in West Java is shown in the research of Saragih and Rikumahu (2022). Even Prasetyo & Wardhani's report from 2022 states that habit is the main factor determining behavioral intention to use e-wallets in

Indonesia.

However, uncertainty or risk is associated with adopting new technology, such as electronic services, particularly potential errors during transactions (Prasetyo & Wardhani, 2022). Potential dangers may hinder the use and uptake of services (Penney et al., 2021). The study by Chopdar et al. (2018) on the intention to utilize mobile shopping applications in the United States demonstrates the perceived impact of risk. In addition to potential obstacles, security refers to the confidence in technology or systems to transfer sensitive information without breach or leakage (Apau & Singh Lallie, 2022). The study by Merhi et al. (2019) has demonstrated that security concerns impact customers' behavioral intentions to adopt and use mobile banking in Lebanon and England. The study underlines that the main worry associated with implementing online banking is the risk of data leakage or theft, such as that committed by hackers. Aside from external factors, many consumers of financial products and services today may need help understanding how they work, selecting options that meet their needs, or the dangers of using the products or apps (Noor et al., 2020). Financially literate users will be able to understand what information they may and cannot disclose. According to the research of Alomari and Abdullah (2023), financial literacy considerably modifies the relationship between performance expectations, social influence, and security with the inclination to use cryptocurrencies. According to research by Lusardi (2019), financial decision-making habits like saving and investing are influenced by financial literacy. However, adopting P2P lending applications for investment isn't a financial decision per se (but rather a decision to adopt a tool, in this case, the P2P lending mobile application, which can enhance financial decision-making). Therefore, the researcher doesn't hypothesize that financial literacy significantly influences usage or investment intention but considers it a moderator.

Based on these presumptions, the researcher makes the following attempts to formulate the study's hypotheses:

H1: Performance expectancy influences the intention to invest using the P2P lending mobile application among the millennial generation in Greater Jakarta using a modified UTAUT2 model. Perceived usefulness, as supported by technology adoption theory and previous studies, drives millennials' inclination to use the P2P lending mobile application for financial transactions.

H1a: Financial literacy significantly moderates the relationship between performance expectancy and the intention to invest using the P2P lending mobile application among the millennial generation in Greater Jakarta using a modified UTAUT2 model. Financial literacy is expected to enhance the impact of perceived usefulness on investment intention, particularly among millennial users with higher financial literacy levels.

H2: Effort expectancy influences the intention to invest using the P2P lending mobile application among the millennial generation in Greater Jakarta using a modified UTAUT2 model. A simplified and easy-to-use P2P lending mobile application, as indicated by prior research, is likely to positively influence millennials' intention to use it for investment purposes.

H3: Social influence influences the intention to invest using the P2P lending mobile application among the millennial generation in Greater Jakarta using a modified UTAUT2 model. Social influence, a well-established factor, is anticipated to play a significant role in shaping millennials' intentions to adopt the P2P lending mobile application for investment.

H3a: Financial literacy significantly moderates the relationship between social influence and the intention to invest using the P2P lending mobile application among the millennial generation in Greater Jakarta using a modified UTAUT2 model. Financial literacy is expected to strengthen the influence of social networks and peers on investment intention, particularly among millennial users with higher financial literacy levels.

H4: Facilitating condition influences the intention to invest using the P2P lending mobile application among the millennial generation in Greater Jakarta using the modified UTAUT2 model. The perceived

availability of necessary infrastructure, resources, and support is anticipated to positively influence millennials' intention to invest through the P2P lending mobile application.

H5: Hedonic motivation influences the intention to invest using the P2P lending mobile application among the millennial generation in Greater Jakarta using a modified UTAUT2 model. The enjoyment and satisfaction derived from using the P2P lending mobile application are anticipated to drive millennials' intention to use it for investment, based on hedonic motivation.

H6: Price value influences the intention to invest using the P2P lending mobile application among the millennial generation in Greater Jakarta using a modified UTAUT2 model. Millennials' perception of competitive pricing and financial benefits offered by the P2P lending mobile application is anticipated to positively influence their intention to use it for investment.

H7: Habit influences the intention to invest using the P2P lending mobile application among the millennial generation in Greater Jakarta using a modified UTAUT2 model. Habitual use of the P2P lending mobile application, as observed in prior research, is expected to maintain and positively influence millennials' intention to continue using it for financial transactions.

H8: Financial Risk influences the intention to invest using P2P lending mobile application among the millennial generation in Greater Jakarta using a modified UTAUT2 model.

Financial risk considerations are significant for millennials when making investment decisions. If millennials perceive lower financial risk associated with using the P2P lending mobile application, they are more likely to develop the intention to invest through it.

H9: Security awareness influences the intention to invest using the P2P lending mobile application among the millennial generation in Greater Jakarta using a modified UTAUT2 model. Higher awareness of security measures and safeguards within the P2P lending mobile application is expected to positively influence millennials' intention to use it for investment while alleviating security concerns.

H9a: Financial literacy significantly moderates the relationship between security awareness and the intention to invest using the P2P lending mobile application among the millennial generation in Greater Jakarta using a modified UTAUT2 model. Financial literacy is anticipated to strengthen the relationship between security awareness and investment intention, particularly among millennial users with higher financial literacy levels.

The figure 3 below shows the model of research.

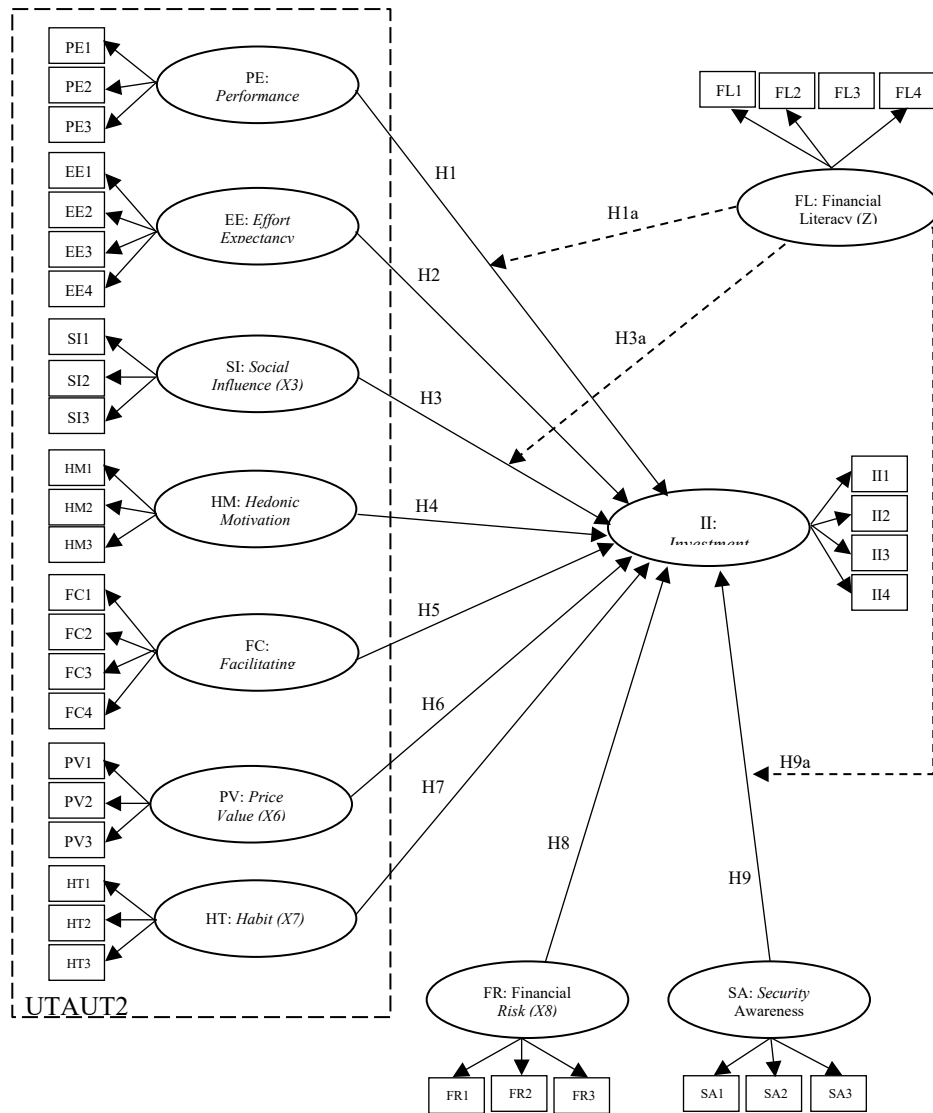


Fig 3. Research Model

3. Methodology

3.1. Data Collection

Based on OJK (Financial Services Authority) data as of May 2022, the millennial generation constitutes the highest population of lenders on P2P lending. Thus, the population in this study consists of the entire millennial generation (aged 24-42 years or born between 1981-1996) who have used P2P lending applications at least more than once in the Greater Jakarta area (representing several cities in Indonesia: Jakarta, Bogor, Depok, Tangerang, and Bekasi). There are over 90 million (approximately) millennials in the Greater Jakarta area. Due to the unknown extensive nature of this population, this research will employ a sample as a representation of the study. According to Roscoe (Sugiyono, 2020), the ideal sample size for the study is between 30 and 500. Furthermore, if the research requires multivariate analysis, such as correlations or regression, the minimum sample size should preferably be 10 times the number of researched variables. This study has 11 variables (9 independent variables, 1 moderating variable, and 1 dependent variable); hence the minimum sample size is 110. The study will rely on primary data from widespread surveys and secondary data from the literature obtained via the Internet. The Snowball sampling technique was utilized, which is a sampling technique in which the sample begins small and gradually grows larger, much like a snowball rolling and increasing larger over time. The questionnaires will use Microsoft Form features and be distributed via social media and messaging

apps such as WhatsApp, LINE, and Instagram. The author will continue to spread the survey until a minimum of 110 responders are obtained representing the population.

3.2. Research Variables

The table 1 below showing the research variables and indicators used in the questionnaire.

Table 1. Variables and indicators

No	Variable	Indicator	Statement	Source
1	Performance Expectancy (PE)	PE1	I believe that using P2P lending applications can provide profitable investment returns.	(Venkatesh et al., 2012)
		PE2	P2P lending applications can help me achieve my investment goals.	
		PE3	Using P2P lending applications can enhance the effectiveness and productivity of my investments.	
2	Effort Expectancy (EE)	EE1	It is easy to use P2P lending applications for investment.	(Venkatesh et al., 2012)
		EE2	It is easy to learn how to use P2P lending applications.	
		EE3	It is easy to access the necessary information when using P2P lending applications.	
		EE4	I can easily become skilled at using P2P lending applications.	
3	Social Influence (SI)	SI1	Important people in my life often recommend using P2P lending applications for investment.	(Venkatesh et al., 2012)
		SI2	I am encouraged to use P2P lending applications due to the influence of close people.	
		SI3	I often receive positive influences from close people who use P2P lending applications.	
4	Facilitating Condition (FC)	FC1	I have adequate internet access to use P2P lending applications.	(Venkatesh et al., 2012)
		FC2	I have sufficient devices to access and use P2P lending applications.	
		FC3	I am comfortable accessing and using P2P lending applications.	
		FC4	I easily get help when facing difficulties using P2P lending applications.	
5	Hedonic Motivation (HM)	HM1	I enjoy the experience of using P2P lending applications for investment.	(Venkatesh et al., 2012)
		HM2	I feel pleased to see the results of my investments through P2P lending applications.	
		HM3	I feel entertained when using P2P lending applications for investment.	
6	Price Value (PV)	PV1	The costs I incur in using P2P lending applications are proportional to the benefits I receive.	(Venkatesh et al., 2012)
		PV2	The costs of using P2P lending applications are lower than other investment products.	
		PV3	Using P2P lending applications adds significant value to my investments.	

7	Habit (HT)	HT1	I use P2P lending applications regularly for investment and intend to continue using them.	(Venkatesh et al., 2012)
		HT2	Using P2P lending applications for investment has become a habit for me.	
		HT3	I need help to switch to other investment products after becoming accustomed to using P2P lending applications.	
8	Financial Risk (FR)	FR1	P2P lending carries higher financial risks compared to traditional investments.	(Yang et al., 2017), (Apau & Singh Lallie, 2022), (Penney et al., 2021)
		FR2	I am very likely to lose money when using P2P lending applications.	
		FR3	P2P lending applications may not function properly and could lead to losses for me.	
9	Security Awareness (SA)	SA1	I have no hesitation in providing personal information to P2P lending applications.	(Kumar et al., 2018), (Apau & Singh Lallie, 2022)
		SA2	I am confident that P2P lending applications have strict security controls.	
		SA3	I feel safe and confident that unauthorized parties will not access my financial information.	
10	Financial Literacy (FL)	FL1	I have basic knowledge of financial concepts.	(Ramos, 2017)
		FL2	I have the necessary knowledge to use Fintech services.	
		FL3	I intend to learn more about personal finance in the future.	
		FL4	I make appropriate decisions about personal finances independently.	
11	Investment Intention (II)	II1	I would consider investing by lending through P2P lending applications in the future.	(Yang et al., 2017), (Samartha et al., 2022)
		II2	I will likely invest using the same P2P lending application soon.	
		II3	I enjoy using P2P lending applications to enhance my investment returns.	
		II4	I will rely on using P2P lending applications for investment.	

3.3. Analyzing Methods

The data collected will be categorized based on variables and respondent types and then tabulated. Nawaz, Chen, and Su (2023) demonstrated that despite a restricted sample size, PLS-SEM can attain significant levels of statistical power. Considering the available sample size, SmartPLS was selected. Data processing will be carried out using SmartPLS 4 (version 4.0.9.5) software. The author selected this software to obtain calculation results quickly and easily and has an intuitive graphical interface and analysis feature that assists in conducting PLS-SEM (Partial Least Square Structural Equation Modeling) analysis.

4. Result

4.1. Respondent Characteristic

This study's total number of respondents is 136 millennial users who have used P2P lending programs at least twice in the Greater Jakarta area. Based on Table 2, the respondents are dominated by Females, with 72 users (52.94%), and the rest are Male users (47.06%). The respondents are millennials, but we have further categorized them into two groups: junior millennials and senior millennials. The results show that the respondents are dominated by junior millennials, with 93 respondents aged 27 – 35 (68.38%), and the rest are 36 – 42 years old (31.62%). Most of the respondents live in Jakarta (38.97%)

and hold a Bachelor's degree as their educational background (58.82%). Most respondents have 2-3 P2P lending applications (59.56%), indicating they do not rely solely on a single application for their investments. Conventional P2P lending dominates the type of applications used (94.12%), and the majority of users (36.76%) engage with it 4-7 times, investing within the range of Rp 1.000.000 – 10.000.000 (44.85%). The top three applications used by respondents are Asetku (13.43%), Investree (10.25%), and Koinworks (9.19%). Respondents primarily use P2P lending applications due to the attractive returns or profits they offer (68.65%) and for investment diversification purposes (34.66%).

Table 2. Demographic Data of Respondents

Category		Data	%
Gender	Female	72	52.94%
	Male	64	47.06%
Total		136	100.00%
Age	27 - 35 years old (Junior Millennial)	93	68.38%
	36 - 42 years old (Senior Millennial)	43	31.62%
Total		136	100.00%
Domicile	Jakarta	53	38.97%
	Bogor	19	13.97%
	Depok	16	11.76%
	Tangerang	36	26.47%
	Bekasi	12	8.82%
Total		136	100.00%
Education	High School and equivalent	11	8.09%
	Diploma (D1/D2/D3/D4)	28	20.59%
	Bachelor's Degree (S1)	80	58.82%
	Master's Degree (S2)	15	11.03%
	Doctorate (S3)	2	1.47%
Total		136	100.00%
Number of Applications	1	43	31.62%
	2-3	81	59.56%
	>3	12	8.82%
Total		136	100.00%
Applications Type	Conventional	128	94.12%
	Syariah	8	5.88%
Total		136	100.00%
Application Usage	2 - 3 times	39	28.68%
	4 - 7 times	50	36.76%
	8 - 10 times	18	13.24%
	> 10 times	29	21.32%
Total		136	100.00%
Investment Nominal (IDR)	< 1,000,000	13	9.56%
	1,000,000 – 10,000,000	61	44.85%
	10,000,001 – 50,000,000	55	40.44%
	50,000,001 – 100,000,000	5	3.68%
	100,000,001 – 500,000,000	2	1.47%
Total		136	100.00%
Application (*one user can have more)	Asetku	38	13.43%
	Investree	29	10.25%
	Koinworks	26	9.19%

than one application in use)	Akseleran	26	9.19%
	Danamas	25	8.83%
	Uangme	21	7.42%
	Amartha	21	7.42%
	Modalku	20	7.07%
	UangTeman	16	5.65%
	KreditPintar	15	5.30%
	Modal Rakyat	13	4.59%
	Easycash	8	2.83%
	Tanifund	6	2.12%
	Dana Syariah	6	2.12%
	Alami	5	1.77%
	Santara	3	1.06%
	Danain	3	1.06%
	igrow	2	0.71%
Total*		283	100.00%
Reason (**One user can have more than one reason)	Attractive returns (profits)	97	38.65%
	Investment diversification	87	34.66%
	Ease of transactions	61	24.30%
	Following trends	6	2.39%
Total**		251	100.00%

4.2. Validity and Reliability Testing Result

4.2.1. Validity

This study measures convergent validity, and the Average Variance Extracted (AVE) is examined. Cross Loading must be greater than 0.70, and AVE must be greater than 0.50 to be considered legitimate (Hair et al., 2017). Table 3 shows that all of the statements have valid and acceptable values. In summary, all of them are accepted.

Table 3. Validity Test Result

Variable	(AVE) Average variance extracted	Code	Loading Factor	Status
Performance Expectancy (X1)	0.805	PE1	0.921	Valid
		PE2	0.938	Valid
		PE3	0.830	Valid
Effort Expectancy (X2)	0.720	EE1	0.889	Valid
		EE2	0.885	Valid
		EE3	0.751	Valid
		EE4	0.862	Valid
Social Influence (X3)	0.675	SI1	0.830	Valid
		SI2	0.760	Valid
		SI3	0.870	Valid
Facilitating Condition (X4)	0.818	FC1	0.928	Valid
		FC2	0.950	Valid
		FC3	0.837	Valid
		FC4	0.899	Valid
Hedonic Motivation (X5)	0.679	HM1	0.796	Valid
		HM2	0.832	Valid

		HM3	0.843	Valid
Price Value (X6)	0.761	PV1	0.861	Valid
		PV2	0.906	Valid
		PV3	0.850	Valid
Habit (X7)	0.773	HT1	0.871	Valid
		HT2	0.904	Valid
		HT3	0.863	Valid
Financial Risk (X8)	0.692	FR1	0.857	Valid
		FR2	0.852	Valid
		FR3	0.786	Valid
Security Awareness (X9)	0.720	SA1	0.831	Valid
		SA2	0.842	Valid
		SA3	0.872	Valid
Financial Literacy (Z)	0.599	FL1	0.770	Valid
		FL2	0.824	Valid
		FL3	0.749	Valid
		FL4	0.750	Valid
Investment Intention (Y)	0.763	II1	0.924	Valid
		II2	0.902	Valid
		II3	0.825	Valid
		II4	0.839	Valid

4.2.1. Reliability

Reliability testing ensures that the instrument can provide accurate, consistent, and dependable results in measuring the intended constructs. For research instruments to be trustworthy, Cronbach's alpha should exceed 0.60 and the composite reliability value greater than 0.70 (Hair et al., 2017). In confirmatory research, the composite reliability value should exceed 0.7, whereas for exploratory studies, values ranging from 0.60 to 0.70 are considered acceptable (Ghozali, 2016). To assess the reliability of the variables, the author employs both Cronbach's alpha and composite reliability.

Table 4. Reliability Test Result

Variable	Cronbach's alpha	Composite reliability (rho a)	Composite reliability (rho c)	Status
PE (X1)	0.878	0.887	0.925	Reliable
EE (X2)	0.865	0.872	0.909	Reliable
SI (X3)	0.762	0.766	0.863	Reliable
FC (X4)	0.926	0.946	0.947	Reliable
HM (X5)	0.762	0.767	0.863	Reliable
PV (X6)	0.835	0.861	0.900	Reliable
HT (X7)	0.850	0.868	0.909	Reliable
FR (X8)	0.781	0.783	0.873	Reliable
SA (X9)	0.810	0.820	0.887	Reliable
FL (Z)	0.769	0.782	0.851	Reliable
II (Y)	0.897	0.898	0.929	Reliable

According to Table 4, all variables have Cronbach's alpha and composite reliability values greater than 0.70, indicating that all variables in this study are reliable.

4.3. Hypothesis Testing Result and Discussion

After verifying the indicators' validity and reliability, the authors assess the hypothesis and employ the bootstrapping process on SmartPLS 4 using 5000 subsamples. The T Statistics and P value is employed for hypothesis testing; if the T statistic is > 1.96 and the P value is < 0.05 , the hypothesis is considered

valid. Conversely, the hypothesis is rejected if the T statistic is < 1.96 and the P value is > 0.05 (Hair, 2017).

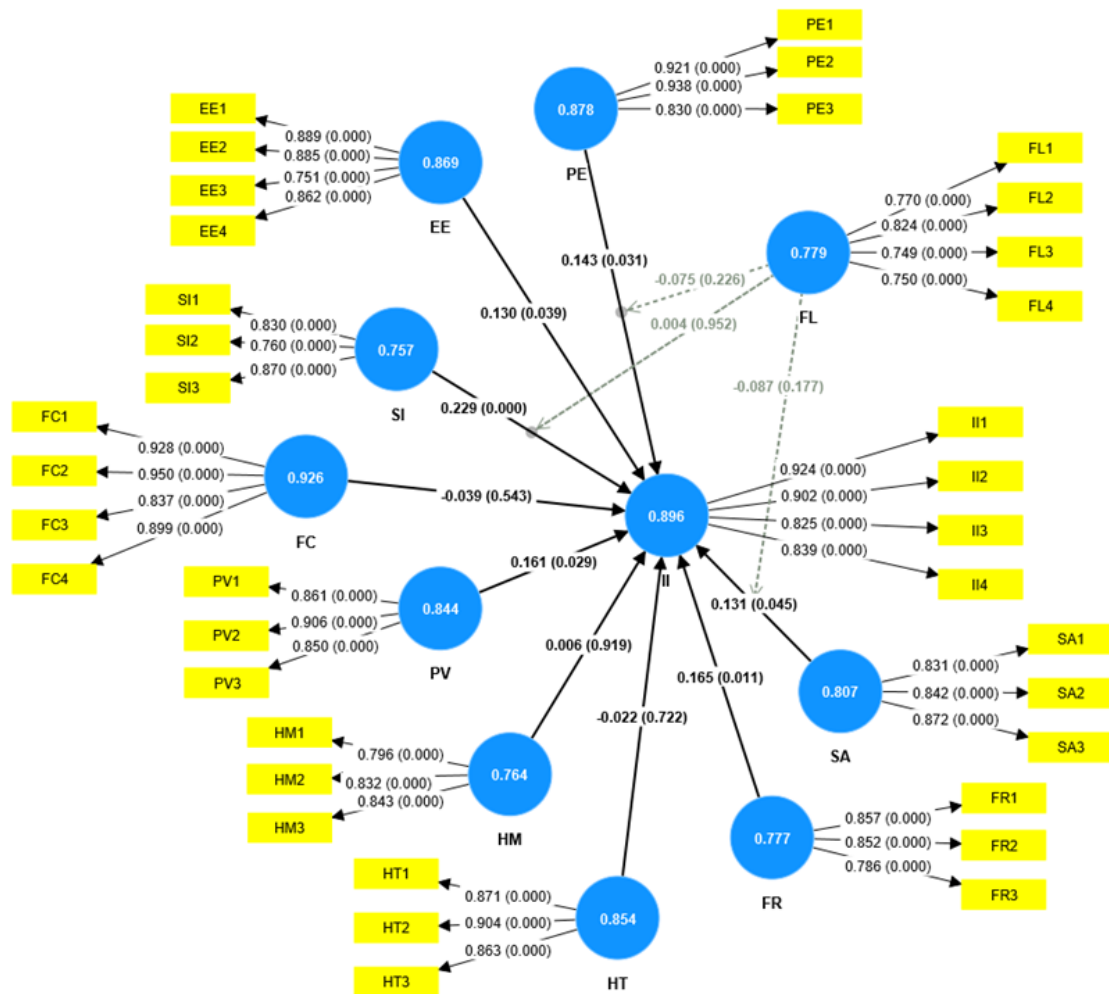


Fig. 4 Bootstrapping Result

R-square - Overview		
	R-square	R-square adjusted
II	0.782	0.758

Fig. 5 R-Square Overview

Based on Figure 5, the R-square value is 0.782, and the adjusted R-square is 0.758. This indicates that the independent variables used in the model collectively account for approximately 78.2% of the variation in the "Investment Intention" variable, while there is still about 21.8% (for R-Square) or approximately 24.2% (for adjusted R-Square) of the variation unexplained and could be influenced by other factors not included in the model. Furthermore, to delve into the relationships between the variables in the model, the analysis will focus on the path coefficient parameters, providing an understanding of the direct influence between one variable and another. This influence is depicted through a path diagram illustrating the causal relationships between the variables. To generate a sample distribution of the appropriate statistical model, a bootstrapping process was conducted using 5,000 subsamples in SmartPLS 4. This testing applied a two-tailed method with a significance level of 0.05, where we observe differences in both directions from the null hypothesis, whether positive or negative.

A significance level of 0.05 indicates that we would decide to reject the null hypothesis when the observed results have a very low probability of occurring by chance, with a significance threshold at 5%.

Table 5. Result of Hypothesis Testing

Relation	(O) Original sample	(M) Sample mean	(STDEV) Standard deviation	(O/STDEV) T statistics	P - values	Result
PE → II	0.143	0.140	0.067	2.153	0.031	Significant
EE → II	0.130	0.128	0.063	2.060	0.039	Significant
SI → II	0.229	0.228	0.058	3.948	0.000	Significant
FC → II	-0.039	-0.042	0.064	0.608	0.543	Not Significant
HM → II	0.006	0.001	0.060	0.102	0.919	Not Significant
PV → II	0.161	0.166	0.073	2.185	0.029	Significant
HT → II	-0.022	-0.020	0.061	0.356	0.722	Not Significant
FR → II	0.165	0.166	0.065	2.534	0.011	Significant
SA → II	0.131	0.129	0.065	2.005	0.045	Significant
FL → II	0.271	0.272	0.048	5.644	0.000	Significant
FL x SI → II	0.004	0.006	0.064	0.061	0.952	Not Significant
FL x SA → II	-0.087	-0.085	0.064	1.351	0.177	Not Significant
FL x PE → II	-0.075	-0.076	0.062	1.212	0.226	Not Significant

Based on Table 5, the results of hypothesis testing reveal relationships between independent and dependent variables are:

H1: Performance expectancy influences the intention to invest using P2P lending mobile applications among the millennial generation in Greater Jakarta.

According to the statistical test result in this study, there is a significant impact of the Performance Expectancy (PE) to Investment Intention (II), where the significant effects with t-test value $2.153 > 1.96$ and p-value $0.031 < 0.05$, so H1 is accepted. This result is similar to Soegesty et al. (2020) in terms of the adoption use of technology, and this implies that when millennial generations hold positive perceptions regarding the anticipated performance of specific investments, they are more likely to express an intention to invest in it. Although the presence of P2P lending applications brings ease to the lending process compared to conventional lending, it is important for P2P lending services to continue innovating by embracing technology and providing a better customer experience. For example, this can be achieved by offering personalized products and services that can adapt to changing market trends and optimize operations.

H2: Effort expectancy influences the intention to invest using P2P lending mobile applications among the millennial generation in Greater Jakarta.

According to the statistical test result in this study, there is a significant impact of the Effort Expectancy (EE) to Investment Intention (II), where the significant effects with t-test value $2.060 > 1.96$ and p-value $0.039 < 0.05$, so H2 is accepted. This result is similar to Utomo et al. (2021), implying that the ease of use of technology leads to comfort and encourages a long-term intention to use that technology. Users tend to prefer technology that is simple and efficient to use, so efforts to minimize complexity and improve efficiency in interacting with P2P lending applications may potentially enhance millennial generation's adoption and participation in investing through the application.

H3: Social influence influences the intention to invest using P2P lending mobile applications among the millennial generation in Greater Jakarta.

According to the statistical test result in this study, there is a significant impact of the Social Influence (SI) on Investment Intention (II), where the significant effects with t-test value $3.948 > 1.96$ and p-value $0.000 < 0.05$ so that H3 is accepted. This result is similar to Soegesty et al. (2020), implying that if the

influence of others is high, an individual's interest in using a system is also high. These results indicate that when an individual perceives a positive influence from the social environment or others in using a new technology, they are more inclined to adopt that technology and have a strong intention to use it in their daily behavior. In other words, the influence and perspectives of others can be crucial factors in shaping an individual's decisions regarding the use of new technology.

H4: Facilitating condition influences the intention to invest using P2P lending mobile application among the millennial generation in Greater Jakarta.

According to the statistical test result in this study, there is no significant impact of the Facilitating Condition (FC) to Investment Intention (II), where the resulting not significant impact with t-test value $0.608 < 1.96$ and p-value $0.0543 > 0.05$ so that H4 is rejected. This is in contrast to the findings in Queiroz & Farias Perieira's (2019) study, where the facilitating condition variable significantly influenced the intention to use big data. Respondents' responses revealed that facilitating conditions (e.g., IT infrastructure) had a high influence on their intention to use big data. Although P2P lending services are an application that naturally requires users to have adequate equipment, the results of this study indicate that facilitating conditions do not have a significant impact on technology usage. But, this result is similar to Utomo et al. (2021), and this implies that the presence of facilitation conditions, which encompass factors designed to simplify users' adoption and utilization of a technology or application, did not positively affect users' intent to utilize mobile applications. This absence of influence could be ascribed to various factors, assuming they come into play. These factors include user preferences, perceived advantages, or external variables that have overridden the impact of facilitation conditions on shaping users' intentions. Although the obtained results did not show significance, it is still important for P2P lending service providers to strive to make their applications function effectively on various types of devices and commonly used software. Ensuring that the application performs optimally and is accessible to a wide range of users, including the millennial generation, is crucial. This is to provide a satisfying user experience and encourage the adoption of P2P lending application usage.

H5: Hedonic motivation influences the intention to invest using P2P lending mobile applications among the millennial generation in Greater Jakarta.

According to the statistical test result in this study, there is no significant impact of the Hedonic Motivation (HM) on Investment Intention (II), where the resulting not significant impact with t-test value $0.102 < 1.96$ and p-value $0.0919 > 0.05$ so that H5 is rejected. This result is similar to Rivaldi et al. (2022), which does not affect the intention to utilize mobile banking services. In the context of technology, especially mobile applications, hedonic motivation focuses on the inherent happiness or satisfaction consumers gain from using a particular technology or application (Al-Azawei & Alowayr, 2020). The lack of a significant impact of hedonic motivation on usage intention shows that users may value practical or valuable components of the program above purely hedonic experiences. They may regard the application as more beneficial in reaching specific goals, which may overwhelm the pleasure-seeking aspect. The provider should focus on enhancing the functional benefits and highlighting the utility of the application in addressing users' needs and objectives. Emphasizing how the application facilitates financial growth, enhances investment opportunities, and provides valuable insights could further encourage adoption and usage among the target audience. Additionally, integrating hedonic features such as avatars or other interactive elements could enhance user engagement and satisfaction without compromising the functional aspects of the application.

H6: Price value influences the intention to invest using P2P lending mobile applications among the millennial generation in Greater Jakarta.

According to the statistical test result in this study, there is a significant impact of the Price Value (PV) on Investment Intention (II), where the significant effects with t-test value $2.185 > 1.96$ and p-value $0.029 < 0.05$, so that H6 is accepted. This relationship can also be observed through descriptive statistical analysis, where users' perceptions of a reasonable, competitive, or advantageous price are

reflected in the data distribution showing a tendency towards high or stable values in the related variables. This demonstrates that price value will have a positive impact when the benefits derived from adopting a system outweigh the financial costs incurred (Venkatesh et al., 2012). This result is similar to Owusu Kwateng et al. (2019), implying that if users perceive the pricing as reasonable, competitive, or advantageous, it may positively influence their decision to use the application for investment purposes. The providers should carefully consider this aspect of price value. It implies that they should assess and adjust the pricing of their P2P lending mobile application in a way that aligns with users' perceptions of being reasonable, competitive, or advantageous. The aim should be to ensure that the benefits users receive from using the application clearly outweigh the financial costs associated with its usage. Additionally, providers may need to communicate the value proposition effectively to users, highlighting the advantages they gain by using the application and how it justifies the pricing. This can contribute to enhancing users' intention to invest through the application. Moreover, incorporating features that enhance the perceived value for the cost, such as promotions, discounts, or additional services, can further support a positive perception of the price value and encourage adoption.

H7: Habit influences the intention to invest using P2P lending mobile applications among the millennial generation in Greater Jakarta.

According to the statistical test result in this study, there is no significant impact of the Habit (HT) to Investment Intention (II), where the resulting not significant impact with t-test value $0.356 < 1.96$ and p-value $0.722 > 0.05$ so that H7 is rejected. In several previous studies, the habit has been found to influence behavioral intention strongly (Chu et al., 2022). However, surprisingly, the habit did not impact the intention to use or invest in this study. This similarity in results with studies conducted by Marpaung et al. (2021) and Singh et al. (2023), which also found no significant influence of habit on adoption intention, highlights the intricate nature of the relationship between habit and intention across different contexts. P2P lending applications are generally used less frequently compared to everyday applications like social media or messaging apps. Users may not use them every day, making it difficult for a strong habit to form. One strategy to address this is by implementing challenges or missions (gamification) with time limits that encourage users to engage with the application every day or every week. This approach can assist in integrating the use of the application into their daily routines.

H8: Financial Risk influences the intention to invest using P2P lending mobile applications among the millennial generation in Greater Jakarta.

According to the statistical test result in this study, there is a significant impact of the Financial Risk (FR) on Investment Intention (II), where the significant effects with t-test value $2.534 > 1.96$ and p-value $0.011 < 0.05$, so that H8 is accepted. This finding is in line with the research conducted by Jim & Lin (2021), where one of the factor analyses revealed that perceived financial risk significantly influences the intention to use. The implications of this finding are that millennials in the Greater Jakarta area tend to consider financial risk as a significant factor in shaping their intention to adopt P2P lending applications. Therefore, P2P lending service providers can take action to carefully educate or manage financial risks and provide transparent information to prospective users. This way, service providers can build customer trust and reduce any fears related to potential risks. These steps have the potential to enhance the interest of prospective users in using fintech services more positively.

H9: Security awareness influences the intention to invest using P2P lending mobile applications among the millennial generation in Greater Jakarta.

According to the statistical test result in this study, there is a significant impact of Security Awareness (SA) on Investment Intention (II), where the significant effects with t-test value $2.005 > 1.96$ and p-value $0.045 < 0.05$ so that H9 is accepted. The findings from the research reveal that security has a substantial impact on users' intention to adopt technology. Madyatmadja et al. (2023) have highlighted the significant level of user concern regarding the capacity of a technological platform to uphold the security of both user data and transactions. Users are more likely to embrace technology services when

the platform ensures minimal occurrences of data leakage. This suggests that the assurance of data protection, prevention of data dissemination, and limited access only to authorized individuals fosters a sense of safety, enhancing users' motivation to adopt and utilize the technology. With the advancement of fintech, appropriate laws and regulations are needed as standard rules for every process and fintech business to support and provide protection for every consumer. In this context, government regulations also play a vital role in supporting the level of security awareness among users of P2P lending applications. Clear and stringent regulations regarding the protection of personal data, financial transactions, and user privacy can help create a safe and trustworthy environment for users. When users perceive that P2P lending services are well-regulated and have high security standards in line with government guidelines, their trust in the security and privacy of using the services will increase. Furthermore, regulations requiring service providers to implement strict data security practices and provide transparent reports regarding security breaches can ensure that users have a better understanding of the risks and protections offered by the application.

In addition, table 5 also discloses relationships involving moderating variables:

H1a: Financial literacy significantly moderates the relationship between performance expectancy and the intention to invest using P2P lending mobile applications among the millennial generation in Greater Jakarta.

According to the statistical test result in this study, there is no significant impact of Financial Literacy (FL) moderates the relationship between Performance Expectancy (PE) to Investment Intention (II), where the resulting not significant impact with a t-test value of $0.061 < 1.96$ and p-value $0.952 > 0.05$ so that H1a is rejected.

H3a: Financial literacy significantly moderates the relationship between social influence and the intention to invest using P2P lending mobile applications among the millennial generation in Greater Jakarta.

According to the statistical test result in this study, there is no significant impact of Financial Literacy (FL) moderates the relationship between Social Influence (SI) to Investment Intention (II), where the resulting not significant impact with t-test value $1.351 < 1.96$ and p-value $0.177 > 0.05$ so that H3a is rejected.

H9a: Financial literacy significantly moderates the relationship between security awareness and the intention to invest using P2P lending mobile applications among the millennial generation in Greater Jakarta.

According to the statistical test result in this study, there is no significant impact of Financial Literacy (FL) moderates the relationship between Security Awareness (SA) to Investment Intention (II), where the resulting not significant impact with t-test value $1.212 < 1.96$ and p-value $0.226 > 0.05$ so that H9a is rejected.

The results presented in Table 5 show that financial literacy plays a different role than that suggested by Alomari and Abdullah's findings (2023), which found that it significantly moderates the relationship between performance expectations, social influence, and security to use cryptocurrencies. In this study, financial literacy is seen as an independent variable that significantly impacts investment intention rather than as a moderating variable. A significant influence supports this finding, as shown by a t-test result of $5.644 > 1.96$ and a p-value of $0.000 < 0.05$. This is consistent with the findings of a study by Hsiao & Tsai (2018) on Long et al. (2023), which shows that having a high level of financial literacy stimulates people to absorb information, take on entrepreneurial endeavors, learn new financial skills, and investigate accessible market possibilities. These attributes create a favorable environment for embracing novel services like fintech. The two main mechanisms through which financial literacy affects the adoption of fintech. First, improved financial literacy lowers the price of learning about new financial products. The existing body of literature emphasizes the crucial role that cost-benefit analysis plays in predicting whether financial products, especially ones with inherent risks, will be adopted.

5. Conclusions

The findings of this study highlight the critical role played by certain key factors in influencing millennials' willingness to invest in P2P mobile lending applications. Structures of performance expectations, effort expectations, social influence, value for money, financial risk, and security awareness were identified as influential determinants, and their impact on investment intentions was confirmed in the Greater Jakarta millennial cohort. Despite some constructs, such as interestingly, while financial literacy doesn't appear to have an indirect effect, it shows that financial literacy directly influences investment intention to use a P2P mobile lending application. These results indicate that younger generations' perceptions of fintech are closely related to complex considerations. Their willingness to use P2P lending apps depends on convenience and efficiency and on perceived performance, social impact, financial risk, and safety associated with such platforms.

Furthermore, the direct role of financial literacy in shaping investment intentions underscores the need for comprehensive financial education and awareness programs targeting this population. This study sheds light on the complex dynamics behind millennial investment decisions in the P2P mobile lending space. The convergence of technology and finance is constantly creating new frontiers and looking to the future; stakeholders must leverage these insights to foster an ecosystem that meets this generation's unique needs and perceptions. Financial institutions and fintech platforms can lay the foundations of a prosperous and inclusive financial landscape for millennials and future generations by strengthening the factors that drive investment readiness and addressing underlying issues.

However, this study is not without limitations. The study's limitations encompassed the constrained sample size of 136 respondents due to the relatively brief duration of questionnaire dissemination. The utilization of snowball sampling potentially skewed the distribution and diversity of user experiences and perspectives within the sample. Additionally, the research focused exclusively on the millennial generation in the Greater Jakarta area and relied solely on quantitative methodology. Moreover, the selection of variables for examination was influenced by the limited availability of relevant literature during the study. Looking forward, suggestions for future research were proposed. Extending the duration of questionnaire dissemination was recommended to enhance sample diversity. Diversifying sampling methods, such as employing random or purposive sampling, could provide a more comprehensive representation of user experiences. Broadening the study's population coverage beyond the millennial generation in the Greater Jakarta area would yield a more inclusive perspective. An integrated approach, involving both qualitative and quantitative methods through mixed method research, was suggested to gain deeper insights. Additionally, exploring a wider range of literature was encouraged to select more comprehensive and pertinent variables for analysis in future studies because the study's findings may evolve with the dynamic nature of fintech, necessitating further research to keep up with these changes.

In conclusion, the comprehensive understanding gained from this study serves as a foundation to inform strategies aimed at promoting adoption and enhancing financial literacy among millennials. By acknowledging the vital factors and considering the insights derived here, stakeholders can collectively work towards a financially inclusive future.

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